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# Remnant-internal Relativization

## 2.1 Introduction

In the syntactic literature, the notion of a phrase is used to refer to a group of words that behave syntactically (and semantically) as a single unit. More often than not, the elements that make up a phrase are continuous, that is, they involve words that appear next to one another. However, phrases may also surface in a discontinuous manner, split up into two or more parts. This can be observed in different phrase types (e.g. noun phrases, prepositional phrases) and different linguistic environments, as shown in (105)–(108), from Croatian, French, Russian, and Dutch, respectively.

(105) Knjige mi je Marija zanimljive preporučila.  
books me has M. interesting recommended  
'Mary has recommended interesting books to me.' (Fanselow and Ćavar 2002: 66)

(106) Combien as-tu lu de livres?  
how.many have-you read of books  
'How many books have you read?' (Butler and Mathieu 2004: 2)

(107) v kakoj on poedet gorod?  
to which he go.FUT town  
'To which town will he go?' (Fanselow and Féry 2006: 70)

(108) Wat heb je voor boeken gekocht?  
what have you for books bought  
'Which kind of books have you bought?' (Mark de Vries, p.c.)

Phrasal discontinuity has been documented in various studies (Corver 1990; Devine and Stephens 1999; Fanselow and Ćavar 2002; Butler and Mathieu 2004; Fanselow and Féry 2006; Kariaeva 2009; Ledgeway forthcoming; among others) and has been approached from the syntactic, semantic, pragmatic, and prosodic points of view. Of particular interest here is the idea, put forth by Fanselow and

Ćavar (2002: 69), that discontinuous noun phrases arise only in the context of operator movement. This generalization accounts for the typical cases reported in the literature, which involve focus/topic movement (see (105), from Croatian) and interrogative *wh*-movement (see (106)–(108), from French, Russian, and Dutch, respectively).

However, Fanselow and Ćavar’s generalization also predicts that discontinuous noun phrases may also surface in relative clauses. In the present chapter, I show that this prediction is correct: in earlier stages of Portuguese (and Latin), discontinuous noun phrases may arise in RRCs, a phenomenon that I dub *remnant-internal relativization*. In this configuration, an element that is thematically dependent on the head noun (either as a complement or as a modifier) does not appear adjacent to it but rather in a position internal to the relative clause, as illustrated schematically in (109). Example a., which involves adjacency between the head noun and its modifier/complement, displays the regular word order (in head-initial relative clauses); example b., which does not involve adjacency between these elements, displays remnant-internal relativization.

- (109) a. (D) N modifier/complement [<sub>CP-rel</sub>...]  
b. (D) N [<sub>CP-rel</sub>...modifier/complement...]

Some concrete instances of remnant-internal relativization are given in (110)–(111), from Latin and earlier stages of Portuguese, respectively. These examples display phrasal discontinuity between the head noun and the adjectival modifier (see (110)) and the head noun and its PP complement (see (111)).

- (110) Inter jocos quos inconditos jaciunt  
amidst jests which rude utter.3PL  
'Amidst the rude jests which they utter' (1st c. BC–1st c. AD, from Zumpt 1832: 237)
- (111) que muyto conforto tomava com os tres paos do leito, por  
because much comfort had.3SG with the three sticks of.the bed for  
a senificança que deles lhe dissera o bom homem da barca  
the meaning that of.them him.CL told the good man of.the boat  
'because he felt very good about the three sticks of the bed because of the  
meaning that the good man of the boat said they had' (13th c. [transmitted by  
a 16th-c. MS], Martins, Pereira, and Cardoso 2013–15)

This chapter has three specific aims: (1) to provide a comprehensive description of remnant-internal relativization, showing that it fits in with the more general phenomenon of phrasal discontinuity; (2) to demonstrate that remnant-internal

relativization can be added to the arguments adduced in the literature in favor of the raising analysis of RRCs; and (3) to provide a tentative explanation for the contrasting properties of remnant-internal relativization in earlier stages of Portuguese and CEP. The empirical data are mainly drawn from Portuguese and Latin, but other languages are considered (e.g. French and Italian).

The remainder of chapter is organized as follows. Before discussing the syntax of remnant-internal relativization, I provide some background information regarding noun phrase discontinuity (see §2.2). With these preliminaries in mind, I focus on the study of remnant-internal relativization (see §2.3), presenting an analysis of the phenomenon in terms of a version of the copy theory of movement on the PF side proposed by Bošković and Nunes (2007) (based on previous work by Bošković 2001, 2002, 2004a,b, and Nunes 1999, 2004) (see §2.4). In §2.5, I show that CEP contrasts with earlier stages of Portuguese with respect to the properties of remnant-internal relativization, offering a tentative explanation for the observed contrast. Finally, §2.6 summarizes the chapter.

## 2.2 Noun phrase discontinuity

This section is devoted to the phenomenon of noun phrase discontinuity. It starts by introducing the core properties of discontinuous noun phrases (see §2.2.1). Then, it provides an overview of empirical data from Latin and earlier stages of Portuguese (see §2.2.2). Finally, it outlines the competing analyses available in the literature to account for noun phrase discontinuity (see §2.2.3).

### 2.2.1 Core properties

The term *discontinuous noun phrase* (or split noun phrase)<sup>1</sup> is used in the book to cover any interrupted sequence of elements in a noun phrase that would normally surface in a continuous manner. On the basis of Fanselow and Ćavar (2002) and Fanselow and Féry (2006), I identified five core properties of discontinuous noun phrases, which are listed in (1)–(4).

(1) *Order of the split parts* Discontinuous noun phrases can retain the order of elements found in the continuous counterpart (*simple splits* or *pull-splits*) or can invert this order (*inverted splits*) (Fanselow and Ćavar 2002: 68). This is illustrated in (112b) and (112c), from Ukrainian:

<sup>1</sup> Other terms used in literature on discontinuous noun phrases are: *partial fronting*, *incomplete category fronting*, *left branch extraction*, and *hyperbaton*.

- (112) a. Marija maje bahato krisel.  
M. has.got many chairs.GEN.PL  
'Mary has got many chairs.'
- b. Bahato maje Marija krisel [simple split or pull-split]
- c. Krisel Marija maje bahato [inverted split] (Fanselow and Féry 2006: 5)

(2) *Prosody* The contrast between simple and inverted splits tends to correlate with a prosodic distinction: simple splits tend to be cohesive (i.e. the two parts of the split are integrated into a single intonation phrase), whereas inverted splits tend to be non-cohesive (i.e. the two parts of the split are separated into two intonation phrases) (Fanselow and Féry 2006).

(3) *Number of the split parts* Discontinuous noun phrases can stretch across more than two discontinuous (or split) parts. A case of tripartite discontinuity is given in (113), from Ukrainian:

- (113) a. Ivan kupyv duže velyku mašynu.  
I.NOM bought very big.F.SG.ACC car.F.SG.ACC  
'John bought a very big car.'
- b. Duže Ivan velyku kupyv mašynu.  
very I.NOM big.F.SG.ACC bought car.F.SG.ACC  
'Ivan bought a VERY BIG car.' (Kariaeva 2009: 207)

(4) *Syntactic environment* Discontinuous noun phrases arise in the context of operator movement only (Fanselow and Ćavar 2002: 69),<sup>2</sup> namely in interrogative wh-movement, as in (106) (repeated here as (114)), or in focus/topic movement, as in (105) (repeated here as (115)).

- (114) Combien as-tu lu de livres?  
how.many have-you read of books  
'How many books have you read?' (Butler and Mathieu 2004: 2)

<sup>2</sup> There is no consensus in the literature regarding the relation that can be established between the parts of the discontinuous noun phrases. While for Fanselow and Ćavar (2002: 69), the parts of the splits necessarily establish an operator-variable relation, for Kariaeva (2009) they can simply stand in an agreement relation, as in the sentence below, from Ukrainian:

Ivan červonu kupyv mašynu  
I.NOM red.F.SG.ACC bought car.F.SG.ACC  
'Ivan bought a RED car.' (Kariaeva 2009: 70)

- (115) Knijge mi je Marija zanimljive preporucila.  
books me has M. interesting recommended  
'Mary has recommended interesting books to me.' (Fanselow and Čavar  
2002: 66)

On the areal distribution of discontinuous noun phrases, studies of other languages and cross-linguistic systematizations have yielded evidence for the idea that discontinuous phrases are frequently found in the world's languages, although they are quite uncommon in Western European languages (Fanselow and Féry 2006). This situation changes radically when other European languages are considered. As Fanselow and Féry (2006: 9) put it: "In Europe, the situation changes dramatically when one crosses the river Rhine or the Isonzo: one enters 'split country', which extends to the Pacific Ocean." In this area, discontinuous noun phrases are reported to occur, for instance, in the "Eastern" Germanic languages (Dutch, German, Swedish), Romanian, all Slavic languages, the Baltic languages Lithuanian and Latvian, the Finno-Ugric languages, Albanian, Ancient and Modern Greek, and the Altaic languages.

### 2.2.2 Empirical evidence from Latin and earlier stages of Portuguese

Pinkster (2005) and Devine and Stephens (2006), among others, report that discontinuous noun phrases are frequently attested from the earliest Latin texts until Late Latin.<sup>3</sup> This is illustrated, for instance, in the contrast given in (116): in (116a) the phrase *legiones novas* 'two legions' is continuous, whereas in (116b) the phrase *duas legiones novas* 'two new legions' is split into two parts.

- (116) a. Facite hoc meum consilium legiones novas non improbare.  
suppose.IMP this my policy legions new not reject.INF  
'Suppose that the new legions do not reject my policy.' (1st c. BC, from  
Devine and Stephens 2006: 531)
- b. Caesar duas legiones in citiore Gallia novas conscripsit.  
Caesar two legions into Hither Gaul new enrolled  
'Caesar enrolled two new legions in Hither Gaul.' (1st c. BC, from Devine  
and Stephens 2006: 531)

According to Devine and Stephens (2006), the discontinuous noun phrase in (116b) arises in the context of scrambling: *duas legiones* 'two legions' has been scrambled,

<sup>3</sup> In Latin, the operation of "splitting" arises not only in noun phrases but also in such constituents as prepositional phrases and conjuncts. Given the limited scope of this study, I will focus only on the occurrence of discontinuous noun phrases, paying special attention to those involving discontinuity between the noun and a post-nominal modifier or complement.

leaving the modifier *novas* ‘new’ in a focus position. The same phenomenon can be found in sentences involving topicalization, as in (117); here, the noun *vinaceos* ‘dregs’ has raised to a topic position to the left of the frequency adverb *cotidie* ‘daily’, stranding the adjective *recentis* ‘fresh’.

- (117) Vinaceos cotidie recentis succernito.  
dregs daily fresh sift.IMP.FUT.2SG  
‘Sift the fresh dregs daily.’ (2nd c. BC, from Devine and Stephens 2006: 531)

Interestingly, Devine and Stephens (2006) also report the occurrence of discontinuous noun phrases in interrogative *wh*-contexts. Consider, for instance, example (118), where the *wh*-expression *quod supplicium* ‘what punishment’ is split into two parts: the *wh*-pronoun occurs in the left periphery of the clause, and the noun *supplicium* ‘punishment’ appears in the rightmost sentential position.

- (118) quod tandem excogitabitur in eum supplicium...?  
what then be.thought.up.FUT in him punishment  
‘what punishment, I ask you, will be thought up for the man...?’ (1st c. BC, from Devine and Stephens 2006: 584)

Although discontinuous noun phrases are frequently attested from the earliest until Late Latin texts, this situation changed quite drastically in the development from Latin to Romance languages. Western European Romance languages are often characterized as not allowing discontinuous noun phrases or by allowing them only in a very restricted way (Pinkster 2005; Fanselow and Féry 2006; Ledgeway forthcoming).

Importantly, some exceptions to this generalization have been reported in the literature. Pinkster (2005) refers to the occurrence of discontinuous noun phrases in Old French (see (119)). Butler and Mathieu (2004) take the French construction in (120) (repeated from (106))<sup>4</sup> as involving a discontinuous noun phrase.

- (119) la hautece i sera tote de mon empire  
the high-ranking.people the be.FUT all of my empire  
‘all the high-ranking people of my empire will be there’ (13th c., from Pinkster 2005: 5)

- (120) Combien as-tu lu de livres?<sup>5</sup>  
how.many have-you read of books  
‘How many books have you read?’ (Butler and Mathieu 2004: 2)

<sup>4</sup> For a different analysis of the French construction in (120), see Fanselow and Féry (2006).

<sup>5</sup> The canonical word order of the sentence in (120) is: *Combien de livres as-tu lus?*

Similar facts have been documented for earlier stages of Portuguese. Martins (2004) shows that discontinuous noun phrases are attested in earlier stages of Portuguese.<sup>6</sup> Some of the examples cited in her paper are given in (121)–(123).

- (121) Noticia fecit pelagio romeu de fiadores.  
*notitia* made P. R. of guarantors  
'Pelagio Romeu made a *notitia* of guarantors.' (12th c., from Martins 2004: 501)
- (122) Boscadas as rrazoões dos que livros fezerom desta estoria  
found the reasons of.the that books did of.this story  
'Found the reasons of the ones that made books of this story...(Once the reasons of the ones that wrote this story are found...)' (15th c., from Martins 2004: 503)
- (123) Em que nos mostra esta rregla que fame ham da.  
in that us.CL shows this rule that hunger have of.the  
palavra de Deus aquelas que desejam de a ouujr.  
word of God those that want DE.PREP it.CL listen.INF  
'This rule shows us that those who want to listen to God's word have hunger for it.' (15th c., from Martins 2004: 503)

In (121)–(123) the discontinuous noun phrases correspond to the sequence: head noun...PP, but this is not necessarily so. The head noun in the first split part may be associated with other elements, such as an adjective (see *ma* 'bad' in (124)) or a determiner (see (125)). Moreover, the constituent in the second split part can be a PP, as in (121)–(124), or an adjective, as in (125).

- (124) diz que se deus o matar de fome que ma bocado  
says that if god him.CL kills of hunger that bad piece  
a deus de comer dele  
have god to eat.INF of.him  
'he says that if God kills him by hunger, God will eat a bad piece of him (= God will go through a hard time with him)' (17th c., P.S.)
- (125) Outros fauores se lhe tem feito extraordinarios.  
other favors SE.CL him.CL has done extraordinary  
'Other extraordinary favors have been done for him.' (17th c., Coelho 1987: 192)

<sup>6</sup> To be more precise, Martins (2004) also reports the possibility of finding discontinuous noun phrases in CEP under some restricted constructions. I return to this issue in §2.5.

Just as was observed for Latin, discontinuous noun phrases in earlier stages of Portuguese can also arise in interrogative *wh*-movement contexts, as illustrated in (126)–(127).

- (126) a. que origem lhe        hemos de        dar        mais nobre?  
          what origin him.CL have.1PL DE.PREP give.INF more noble  
          ‘what more noble origin shall we give him?’ (18th c., TYC)
- b. que susto ou que dano nos        pode vir        maior?  
          what fright or what damage us.CL can come.INF bigger  
          ‘what bigger fright or damage could be done to us?’ (18th c., TYC)
- (127) a. Quantas castas há de nomes?  
          how.many types has of nouns  
          ‘How many types of nouns are there?’ (18th c., TYC)
- b. Quantas figuras há de Dicção?  
          how.many figures has of diction  
          ‘How many figures of diction are there?’ (18th c., TYC)

### 2.2.3 Competing analyses

Much of the debate on the syntax of discontinuous noun phrases has centered on the contrast between movement and base-generation analyses. The main assumptions underlying these proposals are outlined in §§2.2.3.1 and 2.2.3.2, respectively.

2.2.3.1 *Movement analyses* The movement analyses of discontinuous noun phrases can be grouped together into four main types: (A) simple movement analyses; (B) regeneration; (C) remnant movement; and (D) distributed deletion. These types are listed and discussed in turn in the following subsections.<sup>7</sup>

#### A. Simple movement analyses

Simple movement analyses posit that discontinuous noun phrases are derived from extraction of an element *X* out of a constituent *Y* (van Riemsdijk 1989, among others). In the early period of generative syntax, these movement-based approaches faced a serious problem because they seem to go against the generalization that movement can only apply to maximal or minimal projections. Relevant empirical evidence comes from sentences as in (128), from German, which show that any segment of *keine interessanten neuen Bücher* can be extracted. Under the

<sup>7</sup> In the present section I closely follow Fanselow and Cavar’s (2002) criticism of movement-based analyses.



assumption that noun phrases involve only one maximal projection (NP), the part of the discontinuous noun phrase that undergoes movement in (128c–d) only forms a submaximal N'-projection and therefore should not be able to undergo movement.

- (128) a. Sie hat keine interessanten neuen Bücher gekannt.  
 she has no interesting new books known  
 'She did not know any interesting new books.'
- b. [Bücher]<sub>i</sub> that sie [keine interessanten neuen t<sub>i</sub>] gekannt.
- c. [Neue Bücher]<sub>i</sub> hat sie [keine interessanten t<sub>i</sub>] gekannt.
- d. [Interessanten neue Bücher]<sub>i</sub> hat sie [keine t<sub>i</sub>] gekannt.
- e. [Keine interessanten neue Bücher]<sub>i</sub> hat sie t<sub>i</sub> gekannt. (Fanselow and Ćavar 2002: 70)

Research in the late 1980s and the 1990s on the structure of the noun phrase and its similarities with the structure of clauses (Abney 1987) provides a new way of looking at the movement analysis of discontinuous noun phrases. One important development is the proposal that discontinuous noun phrases may involve the movement of different functional projections of the noun phrase. Under this view, the elaborate syntactic structure of the noun phrase in (128) would look like (129), and the problem mentioned above could easily be solved: discontinuous noun phrases involve the leftward movement of different functional projections within the noun phrase.

- (129) [<sub>DP</sub> [<sub>D</sub> keine] [<sub>AGR-A1-P</sub> [<sub>AP</sub> interessanten] [[<sub>AGR-A1</sub> e] [<sub>AGR-A2-P</sub> [<sub>AP</sub> neuen] [[<sub>AGR-A2</sub> e] [<sub>Nom-P</sub> Bücher]]]]]]] (Fanselow and Ćavar 2002: 70)

Despite this welcome development, other problems for the simple movement analyses are reported in the literature, namely (1) the movement of non-constituents; (2) imperfect splits; (3) morphological adjustments; and (4) movement across islands (see Fanselow and Ćavar 2002 for an overview).

The movement of non-constituents is a problem in accounting for simple (or pull) splits, as in (130), from Croatian. Simple movement analyses cannot generate sentences like (130) because there is no constituent that includes P+Det but excludes the noun that could be moved to the left to form a discontinuous noun phrase.

- (130) Na kakav je Ivan krov skocio?  
 on what.kind has I. roof jumped  
 'On what kind of roof has Ivan jumped?' (Fanselow and Ćavar 2002: 71)

Another problem faced by the simple movement analyses concerns the existence of imperfect splits, that is, discontinuous noun phrases that have no well-formed

source in a movement account. This is the case of preposition doubling exemplified in (131), from German, where the preposition heading the PP appears in both parts of an inverted split.

- (131) In Schlössern habe ich noch in keinen gewohnt  
 in castles have I yet in no lived  
 ‘I have not yet lived in any castles.’ (Fanselow and Čavar 2002: 69)

The same phenomenon can be observed in the so-called determiner spreading found in Modern Greek. In this construction, the determiner may show up only in the first part of the discontinuous noun phrase (see (132a)) or in both parts (see (132b)), depending on the dialect/register (Mathieu and Sitaridou 2005).

- (132) a. To KOKINO agorase forema.  
 the.ACC.N.SG red.ACC.N.SG bought dress.ACC.N.SG  
 b. To KOKINO agorase to forema.  
 the-ACC.N.SG red-ACC.N.SG bought the.ACC.N.SG dress.ACC.N.SG  
 ‘She bought the RED dress (not the blue one).’ (Mathieu and Sitaridou 2005: 240)

It is widely recognized in the literature that the phenomena of preposition doubling and determiner spreading are a problem for the simple movement account because there is not enough space in a single continuous phrase for the material occurring in the two discontinuous parts.

A third problem with the simple movement analysis concerns the so-called morphological adjustments (Fanselow and Féry 2006). This term refers to a surprising property of discontinuous noun phrases: the parts of a discontinuous noun phrase can take morphologically different shapes than in their continuous counterpart (see (133)–(134), from German).

- (133) a. Er hat kein Geld.  
 he has no.WEAK money  
 ‘He has no money.’  
 b. Er hat keines  
 he has no.STRONG (Fanselow and Féry 2006: 55)
- (134) a. Er hat kein Geld.  
 he has no.WEAK money  
 b. Geld hat er keines  
 money has he no.STRONG (Fanselow and Féry 2006: 55)

In German, the morphological shapes of quantifiers and adjectives are dependent on the presence of a noun. If a noun is present, as in (133a), the negative quantifier *kein* bears a weak inflection; if a noun is not present, as in (133b), it obligatorily carries a

strong inflection. As can be seen in (134b), when a split noun phrase is involved, the quantifier *kein* obligatorily bears a strong inflection. This seems to militate against a simple movement approach in that the two parts inflect as if they were independent noun phrases.

A fourth problem is that discontinuous noun phrases are insensitive to some island constraints (Fanselow and Ćavar 2002). For instance, in German, subjects (of non-unaccusative verbs, at least) are generally islands for extraction (see (135a)), but they can nevertheless be split up (see (135b)).

- (135) a. \*An Maria haben mir keine Briefe gefallen.  
to M. have me no letters pleased  
'No letters to Mary have pleased me.'
- b. Briefe an Maria gefallen mir keine  
letters to M. please me no  
'As for letters to Mary, they do not please me.' (Fanselow and Ćavar 2002: 72)

Different solutions have been proposed in the literature to circumvent these problems, namely: (1) regeneration; (2) remnant movement; and (3) distributed deletion. As becomes clear in §2.2.3.1B–D, some of these approaches are better equipped than others to handle the different problems. This can be explained, at least to some extent, by the fact that some of them were originally conceived as solutions to different, very specific phenomena.

## B. Regeneration

Van Riemsdijk (1989) proposes to account for some of the properties of discontinuous noun phrases by means of a process he refers to as *regeneration*. The core of his proposal is that the movement of  $X'$  projections is not precluded in principle. Hence, what makes  $X'$  movement rare is not a restriction on Move  $\alpha$ , but rather a well-formedness condition that applies to the S-structure, which disallows any  $X'$  not dominated by its maximal projection node. Some languages simply ban this configuration at the S-structure level, whereas other languages may resort to a mechanism of repair that allows the regeneration of the missing structure and, in some cases, even the relexicalization of the regenerated structures, as illustrated in (136).

- (136) a. Regeneration:  $[_{CP} [_{N'}]_i] [_{C'} \dots] \Rightarrow [_{CP} [_{NP} [_{N'}]_i] [_{C'} \dots]$   
b. Relexicalization:  $[_{CP} [_{NP} \text{determiner } [_{N'}]] [_{C'} \dots]$

This approach straightforwardly explains two of the problematic properties of discontinuous noun phrases mentioned above: the possibility of moving  $X'$  projections is linked to the availability of regeneration (see (136a)), whereas the existence of imperfect splits (e.g. determiner spreading) is correlated with the process of

relexicalization (see (136b)). As Hoof (2005) notes, this approach is also able to derive morphological adjustments by assuming that the Spell Out of the strong/weak inflection is not caused by a specific lexical-grammatical feature but is instead postponed until the movement of the first part of the split takes place.

However, the regeneration analysis also has its flaws. First, it fails to account for the movement of non-constituents (as in (130)) and for movement across islands. Second, the mechanism of regeneration has been criticized on independent grounds for introducing unnecessary complications to the movement analysis (Fanselow and Ćavar 2002).

### C. Remnant movement

An alternative approach to the syntax of discontinuous noun phrases that deserves special attention is the remnant movement analysis. The normal instantiation of remnant movement starts with the movement of an element X out of a constituent. Then, the whole constituent, which contains the trace of X, rises to its designated position, as is depicted in (137).

(137) [<sub>YP</sub>...Y...t<sub>i</sub>]<sub>j</sub>...X<sub>i</sub> t<sub>j</sub>

Androutsopoulou (1997) proposes an analysis along these lines for the discontinuous adjectival construction in Modern Greek (see (138b)).

(138) a. *Idha to forema (to) kokino.*  
saw-1SG the dress the red  
'I saw the red dress.'

b. *To KOKINO idha (to) forema*  
the red saw.1SG the dress  
'I saw the RED dress.' (Androutsopoulou 1997, cited in Butler and Mathieu 2004: 174)

Under this approach, the nominal first rises to the specifier position of a Clitic Voice Phrase, which functions as the clause internal topic position and then the whole complex containing the trace of the nominal moves to the specifier of FocP in the left periphery of the clause. For other attempts to explain discontinuous constructions in terms of remnant movement, see Sekerina (1999) for Russian; Franks and Progovac (1994) and Bašić (2004) for Serbo-Croatian.

A welcome result of the remnant movement analysis is that it straightforwardly explains why a non-constituent appears to undergo movement. However, this approach faces serious problems in explaining other properties of discontinuous noun phrases, namely, the repetition of phonetic material in imperfect splits, the occurrence of morphological adjustments, and the possibility of having discontinuous noun phrases that disregard standard islands for movement (see Fanselow and Ćavar 2002 for further details).

#### D. Distributed deletion

Assuming the copy theory of movement (Chomsky 1995), according to which moved elements leave copies behind that are subsequently deleted, Fanselow and Ćavar (2002) argue that discontinuous noun phrases are best analyzed in terms of distributed deletion. According to this proposal, splits do not involve the extraction of an element from a constituent. Instead, a complete noun phrase is copied to the left and the splitting results from the fact that the deletion operation may partially affect both the upstairs and the downstairs copies of the moved constituent.

In a nutshell, the deletion operation works as follows. First, the relevant noun phrase undergoes leftward movement, leaving a copy behind. The copies are then each deleted at PF, as illustrated in (139). If the lower copy is completely deleted, a continuous noun phrase shows up (see (139c)); if one element is deleted in the higher copy and the other is deleted in the lower copy, a discontinuous noun phrase emerges (see (139d)). See Fanselow and Ćavar (2002) for further details.<sup>8</sup>

- (139) a. hat er keine Bücher gelesen  
has he no books read  
(copying the noun phrase ⇒)
- b. keine Bücher hat er keine Bücher gelesen  
(full deletion of lower copy (continuous noun phrase) ⇒)
- c. keine Bücher hat er ~~keine Bücher~~ gelesen  
(partial deletion in both copies—discontinuous noun phrase ⇒)
- d. ~~keine~~ Bücher hat er keine ~~Bücher~~ gelesen.  
(Fanselow and Ćavar 2002: 84)

According to Fanselow and Ćavar (2002), it is the pragmatic structure that determines the occurrence of (dis)continuous noun phrases. Continuous noun phrases emerge when the noun phrase is linked only to one feature. This is the case of the continuous noun phrase in (139c), which is associated with a +TOP feature. On the other hand, discontinuous noun phrases emerge when the noun phrase is linked at least to two different pragmatic features that cannot be checked in the same structural position. This is the case of (139d), where the first part of the split bears a +TOP feature, whereas the second part bears a +FOC feature (which, under Fanselow and Ćavar's proposal, is checked in a specific lower focus position).

In more concrete terms, what this means is that discontinuous noun phrases involve two instances of movement, schematically represented in (140). The heads  $H^p$  and  $H^q$  have two different semantic or pragmatic features (p, q) and attract a phrase bearing the corresponding feature.

<sup>8</sup> It is worth noting here that the partial deletion of copies (also known as *scattered deletion*) has been independently argued for in the literature. For further details, see Bošković and Nunes (2007), Bošković (2001), Nunes (1999), and Wilder (1995), among others. I return to this issue in §2.4.1.

- (140) a. [H<sup>P</sup>...[H<sup>q</sup>...[<sub>XP</sub> a<sup>P</sup> [b c]<sup>q</sup>]]]  
 b. [[<sub>XP</sub> a<sup>P</sup> [b c]<sup>q</sup>] [H<sup>P</sup>...[[<sub>XP</sub> a<sup>P</sup> [b c]<sup>q</sup>] [H<sup>q</sup>...[<sub>XP</sub> a<sup>P</sup> [b c]<sup>q</sup>]]]]] (Fanselow and Ćavar 2002: 85)

Assuming that the phonetic realization of copies is regulated by the Spell Out Principle in (141), the structure of split topicalization in (139d) would then look like (142) (where *q* corresponds to a +TOP feature and *p* to a +FOC feature).

- (141) Spell Out Principle:  
 Suppose C = <C<sub>1</sub>, C<sub>2</sub>> is formed because a strong feature of H has attracted XP and suppose that H checks the operator features f<sub>1</sub>...f<sub>k</sub> of XP. Then the categories bearing f<sub>1</sub>...f<sub>k</sub> must be spelt out in C<sub>1</sub>.

- (142) [[<sub>XP</sub> a<sup>P</sup> [b]<sup>q</sup>] [H<sup>q</sup>...[[<sub>XP</sub> a<sup>P</sup> {b}<sup>q</sup>] [H<sup>P</sup>...[<sub>XP</sub> a<sup>P</sup> {b}<sup>q</sup>]]]]]

Distributed deletion has many advantages over the movement-based approaches considered thus far. First, it explains the apparent movement of non-constituents illustrated in (143) (repeated from (130)). Under distributed deletion, it is the whole PP (*na kakav krov*) that undergoes leftward movement; hence, what looks like the movement of non-constituents is in fact the result of partial phonological deletion of different copies.

- (143) Na kakav je Ivan krov skocio?  
 on what.kind has I. roof jumped  
 ‘On what kind of roof has Ivan jumped?’ (Fanselow and Ćavar 2002: 71)

Second, imperfect splits, such as the preposition doubling exemplified in (144) (repeated from (131)), can be derived by assuming that it is the whole PP that undergoes movement, leaving a copy behind. Then, if the language tolerates multiple realizations of the same element, the deletion process removes portions of the phrases in the copy relation.

- (144) In Schlössern habe ich noch in keinen gewohnt.  
 in castles have I yet in no lived  
 ‘I have not yet lived in any castles.’ (Fanselow and Ćavar 2002: 69)

Third, morphological adjustments as in (145) (repeated from (134)) can be derived from distributed deletion if one assumes that the morphological shape of the determiner or adjective is determined after copying and deletion.

- (145) a. Er hat kein Geld.  
 he has no.WEAK money  
 b. Geld hat er keines  
 money has he no.STRONG (Fanselow and Féry 2006: 55)

According to Fanselow and Ćavar (2002), the morphemes are merged into a syntactic representation as abstract entities and, when spelled out, they must meet the lexical and morphological well-formedness conditions for DPs. This explains why the quantifier *kein* bears a strong inflection in (145b), but not in (145a). Each part of the discontinuous noun phrase is dominated by the DP node and therefore must obey the well-formedness conditions for noun phrases in German.<sup>9</sup> In (145a), the negative quantifier carries a weak inflection because the noun phrase *kein Geld* ‘no money’ contains a noun; in (145b) the quantifier in the second split part carries a strong inflection because, after copying and deletion, the noun phrase does not contain a noun.

Finally, discontinuous noun phrase formation does not respect islands because it does not involve extraction out of a noun phrase; it is the whole constituent that undergoes leftward movement.

As this brief discussion shows, the deletion analysis is better equipped to handle the problems raised above than are the other movement-based approaches. This fact follows from the less constrained nature of the movement (not involving extraction of the noun phrase) and from the mechanism of partial deletion. However, it should be noted that distributed deletion is subject to the problem of overgeneration. Some authors, including Bošković (2005) and Kariaeva (2009), point out that an item can, in principle, be spelled out in any location where the copy of a constituent appears. Therefore, additional conditions have to be imposed on the deletion operation in order to constrain the application of the distributed deletion, blocking derivations such as (146a,b).

- (146) a. \*The ~~students~~ were arrested ~~the~~ students.  
b. \*~~The~~ students were arrested the ~~students~~.  
c. The students were arrested ~~the~~ ~~students~~. (Bošković 2005: 14)

2.2.3.2 *Base-generation analyses* Base-generation analyses claim that the parts of a discontinuous noun phrase are merged independently of each other in different slots of the sentence (Hale 1983; Jelinek 1984; Fanselow 1988). Along with this hypothesis, a number of different proposals have been made in the literature.

In the original version developed by Hale (1983) and Jelinek (1984) for Australian languages like Warlpiri, none of the parts of a discontinuous noun phrase figure as an argument in the sentence. Rather, the true argument is the (possibly phonologically empty) pronominal clitic on the predicate, while the discontinuous noun phrase parts are adjunct modifiers of this argument position.

<sup>9</sup> As already mentioned, these conditions dictate that: (1) if a noun is present, the negative quantifier *kein* bears weak inflection; (2) if a noun is not present, the negative quantifier must carry strong inflection.

In Fanselow's (1988) account of split topicalization in German, one part of the discontinuous noun phrase is merged as a verbal argument, while the other part might originate as a modifying adjunct and move to the topic position later or be generated there directly.

Under Kariaeva's (2009) approach to discontinuous constituents with an adjectival part in Ukrainian and Greek, the adjectival modifier is base-generated in the location in which it is spelled out, either as an adjunct inside the noun phrase (deriving a continuous noun phrase) or as an adjunct inside the VP (deriving a discontinuous noun phrase).

The advantages of a base-generation analysis are clear. First, the problem of the movement of a non-constituent simply does not arise because discontinuity is not derived from movement. Secondly, imperfect splits, such as preposition doubling, can be derived by assuming that a preposition shows up in two PPs generated independently of each other. Finally, morphological adjustments do not constitute a problem given that the different parts of the split can be generated with different morphologies.

However, the base-generation analysis also faces serious difficulties. The first difficulty concerns the fact that discontinuous noun phrases are sensitive to some island effects. As Ott (2009) notes, if it is true that discontinuous noun phrases are insensitive to certain island constraints (as is the case of the subjects of transitive verbs), it is also true that they respect other island types, such as the Complex-NP Constraint (see (147)), the Adjunct-Island Condition (see (148)), and the Coordinate Structure Constraint (see (149)).

- (147) \*Bücher<sub>i</sub> habe ich [NP eine Geschichte dass sie [keine t<sub>i</sub>] liest] gehört.  
books have I a story that she no reads heard  
'I have heard a story that she does not read any books.' (Ott 2009: 66)
- (148) \*Bücher<sub>i</sub> ist sie schon oft nachhause gegangen.  
books is she already often home went  
[bevor sie [welche t<sub>i</sub>] gelesen hat]  
before she some read has  
'She often went home before reading some books.' (Ott 2009: 67)
- (149) \*Bücher hat sie bisher [nur wenige t<sub>i</sub> und Zeitschriften] gelesen  
books has she so.far only few and magazines read  
'So far, she has only read few books and magazines' (Ott 2009: 67)

An additional argument that militates against the base-generation analysis is the preservation of the noun-phrase internal order (van Riemsdijk 1989, cited in Ott 2009). In German, the adjective ordering illustrated in (150a) is unmarked, whereas the order in (150b) is only acceptable with a strong focal stress on the proposed



adjective. Crucially, if the noun phrase *schnelle amerikanische Autos* is split-topicalized, the order among the adjectives must be preserved (see (151)). As Ott (2009) concludes, this means that in some sense the two parts of the split are merged together and then split apart.

- (150) a. Hans mag schnelle amerikanische Autos.  
 H. likes fast American cars  
 ‘Hans likes American fast cars.’  
 b. ??Hans mag amerikanische schnelle Autos.  
 H. likes American fast cars (Ott 2009: 67)
- (151) a. [Amerikanische Autos]<sub>i</sub> mag Hans nur [schnelle t<sub>i</sub>].  
 American cars likes H. only fast  
 ‘Hans only likes American fast cars.’  
 b. ??[Schnelle Autos]<sub>i</sub> mag Hans nur [amerikanische t<sub>i</sub>]  
 fast cars likes Hans only American (Ott 2009: 67)

Besides the objections already raised in the literature, additional objections can be brought against the base-generation analysis. First, under this approach, discontinuous noun phrases are not derived from continuous noun phrases. Instead, continuous and discontinuous noun phrases involve two different derivations, a fact that can be seen as a drawback for those who are committed to a transformational view of grammar. Secondly, it is standardly assumed (at least in transformational-generative approaches to grammar) that topicalization, focalization, and questions involve the movement of the fronted/preposed element. This constituent is typically the first part of the discontinuous phrase; hence it seems intuitively unnatural to assume that this first part of the split is base-generated in the Spell Out position. Thirdly, if the parts of the split can be merged independently of each other, the question arises of how to constrain the merge positions of the fragments. At least for some languages, it seems clear that the parts of the split cannot be freely merged. Finally, under base-generation analysis, it is not clear how to derive the semantic dependency (and, in some cases, the selectional relation) established between the discontinuous parts.

### 2.3 Remnant-internal relativization

To my knowledge, the term *remnant-internal relativization* has not been previously introduced in the literature. It is proposed here to describe RRCs where an element that is thematically dependent on the head noun (either as a complement or as a modifier) does not appear adjacent to it but rather in a relative clause internal position. This is illustrated schematically in (152) (repeated from (109)).

- (152) a. (D) N modifier/complement [CP-rel...]  
b. (D) N [CP-rel...modifier/complement...]

The fact that relative clauses may generate discontinuous noun phrases has scarcely been noted in the literature. Pinkster (2005) reports that noun phrase discontinuity may arise in relativization constructions, as in (153), from Latin:

- (153) mittit rogatum vasa ea quae pulcherrima apud eum viderat.  
sent.3SG ask-PTCP vessels the which most.beautiful at him see.PPRF  
'he sent to ask for the loan of the most beautiful vessels he had seen at his house.' (1st c. BC, from Pinkster 2005: 2; glosses mine)

Some Latin grammars also mention this possibility: "The relative sometimes takes an adjective after it, which properly belongs to the antecedent" (Zumpt 1832: 237), and "The Relative Clause frequently attracts into itself an Adjective belonging to the antecedent, especially if that Adjective is a Superlative" (Hale and Buck 1966: 157).

The lack of more studies reporting remnant-internal relativization may in part explain why the theoretical impact of this phenomenon remains unexplored. I only found one vague allusion to this fact in a footnote of Fanselow and Féry (2006):

In Old Occitan, relative clause formation leads to discontinuity (see Pinkster 2005). Depending on one's theory of relative clause formation, this construction (exemplified below) would also involve a discontinuous noun phrase.

la justicia que grant áig a mandar (Old Occitan)  
the legal.power which great I.have to dispose

'The great legal power which I have at my disposal' (Fanselow and Féry 2006: 7; underlining mine)

### 2.3.1 Core properties

On the basis of the empirical data of earlier stages of Portuguese inspected thus far, remnant-internal relativization can be characterized in terms of six core properties, displayed in (i)–(vi).

(i) *Syntactic type of relative clause* Remnant-internal relativization involves post-nominal RRCs, that is, relative clauses with the *head + relative clause* order.

(ii) *Number of the split parts* Remnant-internal relativization involves bipartite discontinuity, that is, two discontinuous parts.

(iii) *Order of the split parts* Remnant-internal relativization involves simple (or pull-)splits, that is, splits that retain the order of elements found in the continuous counterpart (Fanselow and Ćavar 2002). This is illustrated in (154).<sup>10</sup>

- (154) a. os livros que eu compus da philosophia  
the books that I wrote of.the philosophy  
'the books of philosophy that I wrote' (15th c., from Martins 2004: 503)
- b. os livros da philosophia que eu compus  
the books of.the philosophy that I wrote

(iv) *Elements in the first split part* In the first split part, the head noun may appear alone (see (155)) or associated with other elements, such as a definite article (see (154a), (156)), an indefinite article (see (157)), or an adjectival modifier (see (158)). A quantifier used as a pronoun may also appear alone in the first split part (cf. *qualquer* 'any' in (159)).

- (155) Casos que Adamastor contou futuros  
cases.M.PL that A. told future  
'(the) future events that Adamastor foresaw' (16th c., from Lausberg 1967/1972: §331)

- (156) que muyto conforto tomava com os tres paos do leito,  
because much comfort had.3SG with the three sticks of.the bed  
por a senifança que deles lhe dissera o bom homem  
for the meaning that of.them him.CL told the good man  
da barca.  
of.the boat  
'because he felt very good about the three sticks of the bed because of the meaning that the good man of the boat said that they had' (13th c. [transmitted by a 16th-c. MS], Martins, Pereira, and Cardoso, 2013–15)

- (157) e pasarā huū rrio que perhy core dagoa doce  
and crossed.3PL a river that through.there flows of.water sweet  
'and they crossed a river of sweet water that flows through there' (15th c., from Martins 2004: 503)

<sup>10</sup> The sequence given in (154b) is not attested in Old Portuguese texts with the exact words that parallel the example (154a). However, because the construction is well attested in all periods of the history of Portuguese, I constructed the example in (154b) to make the contrast clearer.

(158) da qual coisa ellas dizem que som hisentas e que nũa  
from.the which thing they say that are free and that never  
a pagarõ per príuelegio antigo que tẽem do papa  
it.CL paid.3PL by privilege old that have.3PL from.the pope  
'as for it, they say that they never paid it because they have an old privilege  
from the pope' (15th c., Martins 2001: 483)

(159) e qualquer que de nos primeiro morer  
and any that of us first die.SBJV  
'and whoever of us first die' (13th c., Martins 2001: 344)

(v) *Elements in the second split part* The second split part can be an adjectival modifier (see (155)) or a PP. The PP can be either modifier (see (157)) or complement of the noun (as in (160) and (161)).<sup>11</sup>

(160) eram sobrinhas da molher que faleseo de lamsarote rodrigues  
were.3PL nieces of.the wife that died of L. R.  
'they were nieces of the wife of Lamsarote Rodrigues who died' (17th c.,  
Coelho 1987: 124)

(161) como eu me encontro num estado miseravel pella falta que  
as I myself.CL am in.a state miserable by.the lack that  
há do vinho  
has of.the wine  
'as I am in a miserable state by the lack of wine that is there (= because of the  
wine shortage)' (19th c., P.S.)

(vi) *Position of the second split part* The second split part may surface in the rightmost position of the clause (see (157)–(161)) or in a non-final position, following the relativizer, as in (156), (159), and (162)–(165).

(162) e esto por prool e verdade de hũa Licença  
and this by favor and truth of a license  
que do dito senhor pera ello tenho  
that from.the mentioned man for that have.1SG  
'and (I wrote this document) under the benefit and truth of a license  
from the aforementioned man that I have to (make) it' (16th c., Martins  
2001: 557)

<sup>11</sup> In (160), *molher* 'wife' is a relational name, and in (161), *falta* 'lack' is a deverbal noun derived from the verb *faltar* 'to lack.'

- (163) e o deradeiro que delas ficar posa amte  
and the last that of.them stay.SBJV can.SBJV before  
de sua morte nomear a terceira  
of his death appoint.INF the third  
'and the last of them that stays alive can appoint the third (person) before his  
death' (16th c., Martins 2001: 547)
- (164) Nas bombas que de fogo estão queimando  
in.the bombs that of fire are burning.GER  
'(the Cyclops' art is shown) in the bombs of fire that (they) are burning' (16th  
c., Pimpão 2000: 73)
- (165) quando alevantarão Hum por seu capitão, que peregrino  
when chose.3PL a by their captain that foreigner  
Fingio.3SG na cerva espirito divino  
pretended in.the doe spirit divine  
'when they choose for captain a foreigner who pretended that there was  
divine spirit in his doe' (16th c., from Dias 1933/1970: §462)

### 2.3.2 Information structure

It has been observed in the literature that the members of discontinuous noun phrases differ in their information structure status, a property that Predolac (2009) refers to as *split information structure*.

The same seems to be true of the instances of remnant-internal relativization attested in earlier stages of Portuguese. Indeed, in neutral declarative sentences displaying broad information focus, remnant-internal relativization emerges when the modifier/complement is assigned emphatic/contrastive focus, in the sense of Zimmermann (2007) (see §1.3.3.1).

This interpretation is available if the second split part appears in either a non-final or a final clausal position. When the modifier/complement appears in a non-final position, as in (166), it is interpreted as an identificational focus (in the sense of É. Kiss 1998). For instance, in (166) *do dito senhor* 'of the aforementioned man' is interpreted as an identificational focus as it presupposes a set of relevant entities for which the predicate can hold and exhaustively identifies the proper subset of this set for which the predicate actually holds. Example (166) can thus be paraphrased as in (167).

- (166) e esto por prool e verdade de hũa Licença  
and this by favor and truth of a license  
que do dito senhor pera ello tenho  
that from.the mentioned man for that have.1SG  
'and (I wrote this document) under the benefit and truth of a license from the  
aforementioned man that I have to (make) it' (16th c., Martins 2001: 557)

- (167) Of a set of relevant licenses it is true for the license from the aforementioned man (and no other) that I have it.

If the second split part surfaces in the rightmost position, various meaning facets of emphatic/contrastive focus related to different syntactic environments may be available. The notion of contrastiveness may be expressed in overtly contrastive statements, as in (168). In this case, the focused constituent (*livros da philosophia* ‘(books) of philosophy’ explicitly contrasts with (*obras minhas que som fundadas sobre bem falar* ‘(writings of mine) on the art of speaking’. It is clear, then, that the paragraph context explicitly indicates the existence of a contextually salient set of alternatives.

- (168) Por a qual cousa aficadamente te amoesto, meu Ciceram, que nom soamente aquelas obras minhas que som fundadas sobre bem falar, mas ainda os livros que eu compus da philosophia, the books that I wrote of the philosophy que som ja iguaaes a elas, tu os leas com boa deligencia. ‘This is why I strongly urge you, my dear Cicero, to read with care not only my writings on the art of speaking well, but also the books that I wrote on philosophy, which are now about as extensive.’ (15th c., Piel 1948: 8)

However, the emphatic/contrastive focus in the rightmost position can also be interpreted as an identificational focus. The exhaustive interpretation associated with *das suas qujntãas e casaaes* ‘of their farms and hamlets’ in (169) is evident upon the paraphrase in (170).

- (169) E aos prazos que as Egreias e Moesteiros and to the contracts that the churches and monasteries qujserem ffazer das suas qujntãas e casaaes want.SBJV make.INF of the their farms and hamlets ‘(and give authority) to the contracts that the churches and the monasteries may make on their farms and hamlets’ (15th c., Martins 2001: 265)

- (170) Of the set of the relevant things that a church or a monastery may grant, legal authority should be given to the contracts made on their farms and hamlets, and nothing else.

Moreover, the emphatic/contrastive focus may simply signal the speaker-oriented emphasis, that is, the relative weight that the speaker/writer wants to attach to a particular element in the sentence (Enkvist 1980: 135). In this sense, it adds a surplus value to the interpretation, “not at the level of the proposition, but of speech modality or a metalinguistic level, where information stemming from the speaker coordinates becomes relevant” (Remberger 2010: 5). A case in point is provided in (171), where the writer emphasizes the sort of “shortage” that leads him to such a miserable state without referring (implicitly or explicitly) to any other type of “shortage”.

- (171) como eu me encontro num estado miseravel pella falta que  
as I myself.CL am in.a state miserable by.the lack that  
há do vinho  
has of.the wine  
'as I am in a miserable state by the lack of wine that is there (= because of the  
wine shortage)' (19th c. MS, Portugal, District Archive of Bragança)

### 2.3.3 Word order

There is a clear impact of information structure on the word order patterns found in remnant-internal relativization. As observed in §2.3.1, the second split part may surface: (1) in the rightmost position of the clause, as in (172) (partially repeated from (168)); or (2) in a non-final position, following the relativizer, as in (173) (partially repeated from (166)). Moreover, §2.3 shows that the second split part is interpreted as an emphatic/contrastive focus in both word order patterns.

- (172) os livros que eu compus da philosophia  
the books that I wrote of.the philosophy
- (173) de hũa Licença que do dito senhor pera ello tenho  
of a license that from.the mentioned man for that have.1SG

Adopting the system of focus and prosody interaction presented in §1.3.3.2, I assume that in earlier stages of Portuguese, just like in CEP, the emphatic/contrastive focus in the rightmost position (see (172)) is assigned by the Nuclear Stress Rule (Zubizarreta 1998).

As for the non-final position of the second split part (see (173)), I take earlier stages of Portuguese to be like CEP in that the emphatic/contrastive focus can be marked syntactically through focus movement to a designated focus position in the left periphery of dependent and non-dependent clauses (see §1.3.3.1). Concretely, taking as point of departure the Rizzi's (1997) left peripheral template in (174) (repeated from (9) in Ch. 1), I assume, in line with Bianchi (1999), that the complementizer introducing remnant-internal relatives (*que* 'that') is spelled out in Force and that there is a Focus projection (FocP) below Force that hosts interrogative and focalized phrases in its specifier.

- (174) [<sub>ForceP</sub> [<sub>TopP\*</sub> [<sub>FocP</sub> [<sub>TopP\*</sub> [<sub>FinP</sub> [<sub>IP</sub>]]]]]]]]

Evidence for the focus movement of the second split part comes from the syntactic tests provided by Costa and Martins (2011) to distinguish contrastive focus fronting from topicalization (see §1.3.3.1). Under this proposal, a sentence like (175) (partially repeated from (156)) involves contrastive focus fronting because it displays:

(1) subject-verb inversion; and (2) a proclisis configuration (cf. *lhe dissera* lit. 'to.him-CL told'). Note, additionally, that *deles* 'them' in (175) surfaces to the left of the proclitic *lhe* 'him', which possibly indicates that the emphatic/contrastive focus surfaces in a IP-above position.

(175) Por a senifcança que deles lhe dissera o bom homem  
for the meaning that of.them him.CL told-PPRF the good man  
da barca  
of.the boat

(176) It was the meaning of the three sticks that the good man of the boat had told him (and not the meaning of anything else).

Summing up, I submit that earlier stages of Portuguese pattern with CEP in that an emphatic/contrastive focus in non-corrective contexts must either move to a dedicated left peripheral focus position (see (173), (175)) or be clause-final (see (172)), just like narrow information focus. I elaborate on this proposal in §2.4.2.2A.

#### 2.3.4 Competing analyses

In §1.3.2.4 I outline the contrast between the two main analyses put forward in the literature to account for RRCs: the *adjunction analysis* (Ross 1967; Chomsky 1977; Jackendoff 1977) and the *raising analysis* (Schachter 1973; Vergnaud 1974, 1985; Kayne 1994). The basic difference between these analyses is that the head noun is generated in the matrix clause in the adjunction analysis (see (177a)), but it is raised from within the relative clause in the raising analysis (see (177b)).<sup>12</sup>

- (177) a. The book [ $\emptyset_i$  I read  $t_i$ ] (*adjunction analysis*)  
b. The [book $_i$  I read  $t_i$ ] (*raising analysis*)

Moreover, in §2.2.3, I offer an overview for the two main analyses that have been proposed in the literature to account for noun phrase discontinuity: the *movement analysis* and the *base-generation analysis*.

Assuming that remnant-internal relativization involves both an RRC and a discontinuous noun phrase, there are four logically possible ways to combine the competing analyses. In §§2.3.4.1–4 I examine the four hypotheses and show that the combination of the *raising analysis of RRCs* and the *movement analysis of discontinuous noun phrases* best captures the properties of remnant-internal relativization in earlier stages of Portuguese.

<sup>12</sup> I refer the reader to §1.3.2.4 for a detailed presentation of the adjunction and raising analyses.



2.3.4.1 *Adjunction analysis of restrictives + movement analysis of discontinuous noun phrases* Under the adjunction analysis, the antecedent is base-generated in a relative clause external position. In order to combine the adjunction analysis with the movement analysis of discontinuous noun phrases, it is necessary to postulate that the head noun and its modifier/complement are base-generated in a relative clause-external position and that the discontinuous noun phrase is derived via the rightward movement of the modifier/complement (which ends up right-adjoined to the DP node), as in (178).

(178) [DP [NP [NP head t<sub>modifier/complement</sub>] [CP RRC]] modifier/complement]

A concrete example is given in (179), where the PP *da philosophia* ‘of philosophy’ is taken to undergo rightward movement to a position right-adjoined to the DP.

(179) [DP os [NP [NP livros t<sub>k</sub>] [CP Op<sub>j</sub> [C' que [IP eu<sub>i</sub> [T' compus<sub>i</sub>[VP t<sub>i</sub>[V' t<sub>i</sub> t<sub>j</sub>]]]]]]]]]  
 the books that I wrote  
 [PP da philosophia]<sub>k</sub>  
 of.the philosophy

Although the combination of the adjunction analysis of RRCs and the movement analysis of discontinuous noun phrases accounts for the sentences with the modifier/complement in the rightmost position, it fails to account for the contexts involving a non-final modifier/argument, as in (180) (repeated from (159)).

(180) e qualquer que de nos primeiro morer  
 and any that of us first die-SBJV  
 ‘and whoever of us first die’ (13th c., Martins 2001: 344)

The pattern in (180) could be interpreted as resulting from rightward movement of the PP *de nos* ‘of us’, placing it between the relativizer *que* ‘that’ and the adverb *primeiro* ‘first’. Apart from several problems that this derivation raises, the strongest objection is that it would involve lowering to a non-c-commanding position (Fiengo 1977) and hence should be rejected in view of such requirements as the Proper Binding Condition or the Empty Category Principle.

2.3.4.2 *Adjunction analysis of restrictives + base-generation analysis of discontinuous noun phrases* Under this scenario the head noun and its modifier/complement are generated separately in two different syntactic positions: the head noun is merged CP-externally, whereas the modifier/complement is merged CP-internally.

The basic assumption underlying this proposal is that adjuncts/arguments may not have their source inside the noun phrase with which they are associated (Baker 2003; Koster 1987; among others).

Baker (2003) argues that adjectives can be generated in any syntactic position (such as VP) as long as that position permits free adjunction. Koster (1987: 197) claims that PPs introduced by *of* do not necessarily have their source inside a noun phrase. According to the author, if this were always the case, (181a) would have an ungrammatical source, as shown in (181b).

- (181) a. *Of the students in the class*, I like [Mary  $t_j$ ] better than anyone else.  
b. \*I like [Mary of the students in the class] better than anyone else. (Koster 1987: 197)

There are at least three objections that can be raised against analyzing remnant-internal relativization along these lines. First, in contrast to Koster's example (see (181)), when remnant-internal relativization is involved, the head and the PP could have a grammatical source, as shown in (182b) (repeated from (154)).

- (182) a. os livros que eu compus da philosophia  
the books that I wrote of.the philosophy  
'the books of philosophy that I wrote' (15th c., from Martins 2004: 503)  
b. os livros da philosophia que eu compus  
the books of.the philosophy that I wrote

Second, the idea that the second split parts function as event modifiers (being adjoined to the VP) rather than noun modifiers is not plausible. Although some modifiers can be related to entities and events, not all have this ability. For instance, in (182), if the book of philosophy was written by me, it is the book that is of philosophy and not the event of writing. Thus, the modifier is clearly interpreted in relation to the noun (and not in relation to the event).

Finally, it seems reasonable to assume that the semantic dependency between the head and its modifier/complement requires these elements to be in a structural relation at some point at the derivation. This cannot be achieved, however, under the combination of the adjunction analysis of RRCs and the base-generation analysis of discontinuous noun phrases, because a modifier/complement merged in a relative clause internal position cannot be structurally related to a head in a relative clause external position.

#### 2.3.4.3 Raising analysis of RRCs + movement analysis of discontinuous noun phrases

This combination offers a natural explanation of why the head noun and the modifier/complement can split. In a nutshell, the head and its modifier/complement

are merged in a position internal to the relative clause and head movement may optionally involve pied-piping.<sup>13</sup> If so, the head and its modifier/complement appear consecutively (see (183a)); if it does not, the modifier/complement is stranded and the noun phrase splits into two parts (see (183b)).

- (183) a. [<sub>DP</sub> os [<sub>CP</sub> [livros da filosofaphia]<sub>k</sub> [<sub>C'</sub> que [<sub>IP</sub> eu<sub>j</sub> [<sub>I'</sub> compus<sub>i</sub> the books of.the philosophy that I wrote [<sub>VP</sub> t<sub>j</sub> [<sub>V'</sub> t<sub>i</sub> t<sub>k</sub>]]]]]]]]]  
 b. [<sub>DP</sub> os [<sub>CP</sub> livros<sub>k</sub> [<sub>C'</sub> que [<sub>IP</sub> eu<sub>j</sub> [<sub>I'</sub> compus<sub>i</sub> [<sub>VP</sub> t<sub>j</sub> [<sub>V'</sub> t<sub>i</sub> [t<sub>k</sub> da the books that I wrote of.the filosofaphia]]]]]]]]]  
 philosophy

Although this simple story needs to be qualified, it offers us a good starting point for a more elaborate analysis of remnant-internal relativization.

*2.3.4.4 Raising analysis of RRCs + base-generation analysis of discontinuous noun phrases* The base-generation approaches assume that the members of the discontinuous noun do not map onto a phrasal constituent at any point of the derivation. There are four logical ways of deriving remnant-internal relativization along these lines:<sup>14</sup> (1) the two parts of the discontinuous phrase are merged in the Spell Out position; (2) the two parts of the split are not merged in the Spell Out position; (3) only the first part of the split is merged in the Spell Out position; or (4) only the second part of the split is merged in the Spell Out position.

Hypotheses (1) and (3) are incompatible with the raising analysis of RRCs. While the raising analysis of RRCs requires the head to be base-generated in the relativization site, the base-generation analyses of discontinuous noun phrases in (1) and (3) require the head to be generated in [Spec, CP].

Hypotheses (2) and (4) are at first sight compatible with the raising analysis of RRCs as they assume that the Spell Out position of the head differs from its base position. There are, however, good reasons to doubt that these hypotheses are on the right track. As already discussed in §2.3.4.2, in order to be interpreted in relation to the head, the modifier/complement has to be in a structural relation with the head at

<sup>13</sup> The notion of pied-piping was first introduced by Ross (1967). The term refers to a phenomenon whereby a particular movement operation, designated to displace an element X, in fact displaces a larger phrase in which X is embedded. This is the case of (183a), where the movement operation designated to displace the head *livros* 'books', in fact displaces the larger constituent *livros da filosofaphia* 'books of philosophy.'

<sup>14</sup> The discussion is confined to bipartite remnant-internal relativization, which is the only type attested in the data inspected from earlier stages of Portuguese.

some point of the derivation, and this requirement cannot be fulfilled if the head and the modifier/complement are not merged together.

### 2.3.5 Remaining problems

On the basis of this brief sketch, I conclude that the combination of the raising analysis of RRCs and the movement analysis of discontinuous noun phrases is much better equipped to handle remnant-internal relativization in general than the other theories are.

However, as already mentioned, the simple movement approach to remnant-internal relativization needs to be improved because, as it stands, it cannot derive some of the properties of remnant-internal relativization.

First, the simple movement approach cannot derive some “complex” first split parts. As already mentioned in §2.3.1, the head in the first split part may contain just the head or be associated with other elements, such as an adjectival modifier (see (184), partially repeated from (158)).

(184) per príuelegio antigo que têm do \_\_\_\_\_ papa  
by privilege old that have.3P from.the pope

This property is not surprising at all. In Latin and in earlier stages of Portuguese, simple discontinuous noun phrases also allow for it. Take, for instance, (185)–(186) (partially repeated from (116b), (124), and (125)); here the first split part involves a head combined with other elements, such as a quantifier (185), an adjective (186a), and a determiner (187).

(185) Caesar duas legiones in citeriore Gallia novas conscripsit  
Caesar two legions into Hither Gaul new enrolled

(186) que ma bocado a deus de comer dele  
that bad piece have god to eat.INF of.him

(187) Outros fauores se lhe tem feito extraordinarios.  
other favours SE.CL him.CL has done extraordinary

These complex first split parts are problematic for simple movement approaches because they seem to involve non-constituent movement. Consider, for instance, the sentence in (184). Assuming that the PP originates within the DP in a structure like [<sub>DP</sub> D [<sub>NP</sub> N PP]] and that the adjectival modifier also originates within the DP as a specifier of a functional projection (Cinque 1994, among others), the problem that arises is that there is no constituent that includes the head and the adjective but excludes the PP and that can undergo leftward movement, displaying remnant-internal relativization.

Secondly, the simple movement analysis is not able to derive the non-final position of the modifier/complement in sentences like (188) (partially repeated from (162)).

(188) de hũa Licença que do dito senhor pera ello tenho  
of a license that from.the mentioned man for that have.1SG

In (188) the PP *do dito senhor* ‘from the aforementioned man’ does not appear in the final sentential position, but instead in the embedded clause initial position, after the relativizer. If remnant-internal relativization is taken to involve head movement to [Spec, CP] and the stranding of the modifier/complement, it remains a mystery why, in sentences like (188), the PP is not placed in the rightmost clausal position.

#### 2.4 Analysis of remnant-internal relativization

Building on Fanselow and Ćavar’s (2002) proposal for discontinuous phrases (see §2.2.3.1D), I show that the drawbacks of the simple movement analyses can be circumvented if remnant-internal relativization is taken as an effect of phonological deletion. Moreover, I claim that this hypothesis gains strength when considered in the light of the insights of Bošković and Nunes (2007) on the copy theory of movement.

Before focusing on remnant-internal relativization, §2.4.1 presents the basics of the copy theory of movement (in the PF side). With this background in mind, §2.4.2 provides a step-by-step analysis of remnant-internal relativization in earlier stages of Portuguese.

##### 2.4.1 *On the copy theory of movement in the Phonological Form side*

This section presents the basics of the copy theory of movement (in the PF side) proposed by Bošković and Nunes (2007), which is based on previous work by Bošković (2001, 2002, 2004a,b) and Nunes (1999, 2004). It also summarizes a concrete analysis developed within this framework, namely Stjepanović’s (2007) analysis of post-verbal subjects in Serbo-Croatian. In presenting these approaches, particular attention is given to the theoretical devices used to account for the syntax-phonology interaction.

**2.4.1.1 *Bošković and Nunes (2007)*** Following Chomsky’s (1995) approach to movement, where the raising of elements leaves copies behind that are subsequently deleted, Bošković and Nunes (2007) (based on previous work by Bošković 2001,

2002, 2004a,b, and Nunes 1999, 2004) argue that *traces* (i.e. copies that are structurally lower in the syntactic representation) may be phonetically realized.

The basic idea is that PF has a preference for pronouncing the highest copy of a chain, but a lower copy may be pronounced to avoid a PF violation. Technically, this statement requires further clarification.

The first point in need of clarification concerns the preference for deleting lower copies. The explanation Nunes (1999, 2004) provides for this fact is based on an economy principle that prefers fewer applications of deletion in later computations of the phonological component. As J. Nunes (2004: 33) puts it:<sup>15</sup>

Exploring the null hypothesis regarding the copy theory of movement, the above proposal thus takes the position that both heads of chains and traces should in principle be subject to phonetic realization. According to the logic of the proposal, there is nothing intrinsic to lower copies that prevents them from being pronounced. If Chain Reduction proceeds in such a way that only a trace survives, the derivation may eventually converge at PF. The fact that in most cases such a derivation yields unacceptable sentences is taken to follow from *economy* considerations, rather than convergence at PF. Since the highest chain link is engaged in more checking relations, it will require fewer applications of F[ormal]F[eature]-Elimination than lower chain links, thereby being the optimal candidate to survive Chain Reduction and be phonetically realized, all things being equal.

A second point needing clarification is why the deletion of a lower copy in PF is just a preference and not the only option. The reason is clear: a lower copy can be produced to avoid a PF violation. Some of the PF factors that have been considered to induce the pronunciation of lower copies are stress assignment processes, intonational requirements, and morphological restrictions on identical elements.

However, PF constraints may also block full copy deletion. In this case, a last-resort mechanism is admitted on the PF side: the so-called *scattered deletion*. It consists of the deletion of different pieces of different copies, as represented in (189).

(189) [X ¥]<sup>i</sup>...[X Y]<sup>i</sup>

Scattered deletion has been successfully applied to a range of languages and phenomena, namely to cliticization in Bulgarian and Macedonian (Bošković 2001), participle–auxiliary order in Bulgarian (Lambova 2004), and split phrases (Fanselow and Ćavar 2002).

<sup>15</sup> In the excerpt transcribed, *Chain Reduction* is a term that refers to the deletion of constituents of a non-trivial chain.

2.4.1.2 *Stjepanović (2007)* Stjepanović (2007) shows that the copy theory of movement proposed by Bošković and Nunes (2007) provides a principled account of several patterns of word order in Serbo-Croatian, including the postverbal subject position.

Serbo-Croatian is characterized by great freedom of word order. Depending on the information structure involved, sentences containing a new information focus can exhibit the following word orders: SVO, SOV, OSV, and OVS. For the sake of illustration, consider the OVS word order in (190b), which can be produced as an answer to the question in (190a).

- (190) a. [Who is catching the mouse?]  
 b. Miša hvata mačka  
     mouse catches cat  
     ‘A cat is catching a mouse.’ (Stjepanović 2007: 235)

Stjepanović (2007) shows that in sentences with the neutral intonation pattern, the constituent bearing new information focus (such as *mačka* ‘cat’ in (190b)) follows elements that represent old information. In order to explain the final sentential position of focalized elements, she proposes that: (1) the subject moves in overt syntax even in the cases where it surfaces post-verbally; (2) the subject surfaces post-verbally because a lower copy of the chain is pronounced in PF.

The factor that Stjepanović takes to induce the pronunciation of the lower copy is sentential stress assignment. This implies that in the output of syntax sentences have a focus structure whereby each element is associated with an [F]-feature. For example, (190b) would have the syntactic output in (191) (from Stjepanović 2007: 236).

- (191) [<sub>Ag<sub>r</sub>SP</sub> miša [<sub>Ag<sub>r</sub>SP</sub> mačka [<sub>TP</sub> mačka hvata [<sub>Ag<sub>r</sub>OP</sub> miša hvata [<sub>V<sub>1</sub></sub> mačka  
                   -F                  +F                  +F          -F                  -F          -F          +F  
                   hvata [<sub>V<sub>2</sub></sub> hvata miša]]]]]]]]  
                   -F                  -F          -F

Stjepanović additionally assumes that in Serbo-Croatian the NSR<sup>16</sup> applies just after Spell Out, assigning prominence to the rightmost/lowest sentential constituent (Zubizarreta 1998, 1999). If the element that receives the nuclear stress has an [+F]-feature, no problem arises. On the contrary, if the rightmost element is [-F], a conflict situation emerges between the NSR and the FPR (see n. 16). To resolve this

<sup>16</sup> I refer the reader to §1.3.3.1 for the presentation of Zubizarreta’s (1998, 1999) view of the relationship between prosodic prominence and focus; it is in this context that the Nuclear Stress Rule (NSR) and the Focus Prominence Rule (FPR) should be understood.

conflict, Serbo-Croatian renders defocalized [-F] elements extrametrical for the application of the NSR.

In summary, post-verbal subjects in Serbo-Croatian (as in (190b)) are a result of lower copy pronunciation. This is due to the requirements on sentential stress assignment, which force the copy associated with the nuclear stress to be pronounced. If this PF requirement is not satisfied, the derivation does not converge.

#### 2.4.2 *The derivation of remnant-internal relativization*

I propose an analysis of remnant-internal relativization based on three central claims: (1) remnant-internal relativization constructions and regular relative constructions are derived from a continuous noun phrase; (2) remnant-internal relativization has the function of focus-marking the second split part (with emphatic/contrastive focus); and (3) non-adjacency between the head and its modifier/complement is determined by conditions of the phonological component (and not of syntactic movement per se).

On the basis of the modifier/complement position, it is possible to identify three distributional patterns that need to be derived from the present analysis.<sup>17</sup>

Pattern I corresponds to RRCs where the head and its modifier/complement are adjacent, as in (192).

(192) os livros da philosophia que eu compus  
the books of.the philosophy that I wrote

Pattern II comprises instances of remnant-internal relativization with a modifier/complement in the rightmost sentential position, as in (193).

(193) os livros que eu compus da philosophia  
the books that I wrote of.the philosophy

Pattern III corresponds to instances of remnant-internal relativization with a modifier/complement in a non-final position, following the relativizer, as in (194).

(194) os livros que da philosophia eu compus  
the books that of.the philosophy I wrote

The derivation of each pattern is presented in §§2.4.2.1–3.

<sup>17</sup> As already mentioned, only the example (193) is attested in earlier stages of Portuguese. Patterns I and II are well attested in the diachrony of Portuguese, but not with the exact words that parallel (193).



2.4.2.1 *Pattern I* In order to derive Pattern I, I take the head and its modifier/complement to be merged together in the relativization site. The noun phrase is then copied and merged in [Spec, CP] (or [Spec, Force]), checking the wh-feature on C (or Force) (see (195)).<sup>18</sup>

- (195) [os [livros da filosofaphia]<sup>1</sup> [que eu compus [livros da filosofaphia]<sup>1</sup>]]  
 the books of.the philosophy that I wrote books of.the philosophy

In line with Nunes (2004 and subsequent work), I consider that the syntactic object in (195) cannot be linearized because it is not in accordance with Kayne's (1994) LCA (see §1.3.1.3). The LCA dictates that at PF, an element cannot asymmetrically c-command and be asymmetrically c-commanded by the same element in a structure. Because the two instances of *os livros da filosofaphia* 'the books of philosophy' are non-distinct, the verb *compus* 'wrote' is required to precede and be preceded by the same element. This induces a violation of asymmetry, canceling the derivation.

As shown in (196), the deletion of copies may yield outputs with different applications of deletion: one application of deletion in (196a–b); two in (196c–f); and three in (196g–h).

- (196) a. [os [livros da filosofaphia]<sup>1</sup> [que eu compus [~~livros da filosofaphia~~]<sup>1</sup>]]  
 b. [os [~~livros da filosofaphia~~]<sup>1</sup> [que eu compus [livros da filosofaphia]<sup>1</sup>]]  
 c. [os [livros da filosofaphia]<sup>1</sup> [que eu compus [~~livros da filosofaphia~~]<sup>1</sup>]]  
 d. [os [~~livros da filosofaphia~~]<sup>1</sup> [que eu compus [~~livros da filosofaphia~~]<sup>1</sup>]]  
 e. [os [~~livros da filosofaphia~~]<sup>1</sup> [que eu compus [livros da filosofaphia]<sup>1</sup>]]  
 f. [os [livros da filosofaphia]<sup>1</sup> [que eu compus [~~livros da filosofaphia~~]<sup>1</sup>]]  
 g. [os [~~livros da filosofaphia~~]<sup>1</sup> [que eu compus [~~livros da filosofaphia~~]<sup>1</sup>]]  
 h. [os [~~livros da filosofaphia~~]<sup>1</sup> [que eu compus [livros da filosofaphia]<sup>1</sup>]]

If there are no convergence problems resulting from these reductions, the derivations are eligible for economy comparison, and the derivations yielding (196c,d) are excluded for employing more operations of deletion than necessary. That is, economy principles ensure that deletion applies as few times as possible.

An economy-based explanation is also available to cancel the derivation in (196b). The formal features associated with the higher copy have already been rendered invisible for PF upon checking; hence the deletion of the lower copy employs fewer applications of deletion in later computations of the phonological component. Therefore, all else being equal, (196a) is the most economical way of deriving (195).

<sup>18</sup> In this case, the C (or Force) also carries an EPP-feature. However, I postpone the implementation of the EPP until §2.4.2.2B.

Under these conditions alone, remnant-internal relativization would never be derived. The most economical derivation in (196a) would always be preferred and, as a result, Pattern I would be the only option.

*2.4.2.2 Pattern II* However, as in any economy approach, if the most economical option does not lead to convergence, a less economical option may be chosen, as is the case of Pattern II. According to the mainstream version of the copy theory of movement adopted here, lower copies can be pronounced if there is an independent well-formedness PF requirement that precludes the pronunciation of a higher copy. The same line of reasoning applies to scattered deletion: if full deletion does not satisfy PF requirements, deletion may apply within different chain links.

In the light of these assumptions, the derivation yielding the Pattern II can also be a legitimate outcome. In this case, the phonological system resorts to scattered deletion, with part of the noun phrase pronounced in the higher copy and part in the lower one, as in (197).

(197) [os [livros da *philosophia*]<sup>1</sup> [que eu compus [livros da *philosophia*]<sup>1</sup>]]  
the books of.the philosophy that I wrote books of.the philosophy

I submit that this is the method to which the computational system resorts in order to accommodate the PF requirements in (198) (to be detailed in turn).

(198) *PF requirement I*

In non-corrective contexts, emphatic stress must be rightmost.

(199) *PF requirement II*

The EPP feature on C (or Force) dictates that the relative head must be pronounced in the higher copy.

#### A. PF requirement I

Sticking to the principle that synchrony can inform historical analyses, I presume that earlier stages of Portuguese are like CEP in that (narrow) information focus always appears in the rightmost position of the sentence<sup>19</sup> (J. Costa 1998 for CEP, and Martins 2002 for earlier stages of Portuguese).

Moreover, I assume that earlier stages of Portuguese pattern with CEP in that an emphatic/contrastive focus in non-corrective contexts (see §1.3.3.2, n. 41) must either move to a dedicated left peripheral focus position (see (194)) or be clause-final (just

<sup>19</sup> Recall from §1.3.3.2 that this is due to the fact that the (narrow) information-focused constituent bears a nuclear neutral stress assigned via the NSR (Zubizarreta 1998, 1999).

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like narrow information focus); its location in a non-final position leads to ungrammaticality (see (200b)–(201b)).<sup>20</sup>

- (200) a. Comi   prego   no       prato   raspado.  
 ate.1SG   steak   in.the   dish   scraped  
 ‘I ate scraped steak in the dish.’  
 b. \*Comi   prego   RASPADO   no       prato.  
 ate.1SG   steak   scraped   in.the   dish
- (201) a. Paguei   de multa   cem            euros.  
 paid.1SG   of fine    one.hundred   euros  
 ‘I paid a fine of one hundred euros.’  
 b. \*Paguei   CEM            EUROS   de multa.<sup>21</sup>  
 paid.1SG   one.hundred   euros   of fine

The contrast between examples a and b is not surprising under the system developed thus far. As already mentioned, if emphatic/contrastive focus is assigned by prosodic prominence alone, it is freely assigned in corrective contexts but not in non-corrective ones.<sup>22</sup> In the latter case, which corresponds to examples (200a)–(201a), the nuclear stress always targets the rightmost constituent (being assigned by the NSR).

Then the question arises as to how the ambiguity between (narrow) information focus and emphatic/contrastive focus in the rightmost sentential position is resolved in CEP. Following Frota (1998, 2002, and much related work), I propose that this ambiguity is eliminated by differences in peak alignment (or choice of pitch accent) (see Hualde 2002 for a brief overview). As Frota demonstrates, declarative sentences with emphatic/contrastive focus in the last word are systematically distinguished from neutral declaratives. If the last word carries a neutral prosodic/information focus, it is

<sup>20</sup> Examples (200) and (201) are adapted from Martins (2004). Making use of the notational conventions in Zubizarreta (1999), the emphatic/contrastive focus identified by the E/CSR rule is indicated by small caps, whereas the (rightmost) emphatic/contrastive focus identified by the NSR is underlined.

<sup>21</sup> The example (201b) would be possible in CEP if *de multa* ‘of fine’ were understood as a kind of afterthought, involving a prosodic contour with a pause between *cem euros* ‘one hundred euros’ and *de multa* ‘of fine’.

<sup>22</sup> Remarkably, the idea that emphatic stress assignment may be constrained by construction-specific conditions is not new. Culicover and Winkler (2008) propose a solution along these lines to account for the comparative inversion structure (CI) in (ia). They show that CI is a focus construction that prosodically marks its subject, places it at the right edge of the intonational phrase and requires a contrastive focus reading. To account for these properties, they argue that the subject is in [Spec, IP] in (ib) but not in (ia). This difference follows from the markedness constraint in (ii), which applies mandatorily in CI.

- (i) a. Sandy is much smarter than is the professor.  
 b. Sandy is much smarter than the professor is. (Culicover and Winkler 2008: 1)
- (ii) *Right Edge Alignment Constraint of Contrastive Focus in CI*  
 Each contrastively focused constituent is right-aligned in ip [intonational phrase]. (Culicover and Winkler 2008: 22)

pronounced with a falling contour through the last stressed syllable from a preceding peak (H+L\*). In contrast, if an emphatic/contrastive focus is intended, the last word is pronounced with a circumflex contour (rise followed by fall), with a peak over the stressed syllable. Frota (1998) illustrates this difference with the one-word utterance *casaram* ‘they got married’. As depicted in (202),<sup>23</sup> neutral and emphatic contrastive foci are distinguished by different intonational contours.

- (202) a. Neutral focus    b. Emphatic/contrastive focus



The PF facts just discussed nicely illuminate our general understanding of remnant-internal relativization, providing us with the tools to handle the Pattern in (197) (repeated here as (203)).

- (203) [os [livros ~~da~~ *philosophia*]<sup>i</sup> [que eu compus [~~livros~~ da  
 the books of.the philosophy that I wrote books of.the  
*philosophia*]<sup>i</sup>]]  
 philosophy

First, recall from §2.3.2 that remnant-internal relativization emerges in non-corrective contexts where the second split part is assigned emphatic/contrastive focus. In this case, emphatic/contrastive focus is marked prosodically via the NSR (the neutral focus and the emphatic/contrastive focus being distinguished by different intonational contours).

Adopting Stjepanović’s (2007) view of the relation between PF deletion and stress assignment, the deletion of the higher copy of *da philosophia* ‘of philosophy’ in (203) can be explained by assuming that the output of syntax (see (195)) has the focus structure in (204).

- (204) [os [livros da *philosophia*]<sup>i</sup> [que eu compus  
 -F -F -F -F -F -F -F  
 [livros da *philosophia*]<sup>i</sup>]]  
 -F +F +F

In earlier stages of Portuguese, just like in CEP, the NSR applies just after Spell Out, assigning prominence to the rightmost/lowest sentential constituent (i.e. to *philosophia* in (204)). Since the element that receives the nuclear stress has an [+F]-feature, the FPR does not conflict with the NSR. As a result, the higher copy of *da philosophia*

<sup>23</sup> For ease of reproduction, the contour presented in (202) is from Hualde (2002: 4).

is deleted, and the lower one is pronounced. Recall that a lower copy must be pronounced if it carries the nuclear stress. If this PF requirement is not satisfied, the derivation does not converge.

Remarkably, the present approach also explains why the modifier/complement in Pattern I cannot be pronounced in the lower copy (see (205), repeated from (203)).

- (205) [os [livros da filosofia]<sup>i</sup> [que eu compus [~~livros~~—da  
 the books of the philosophy that I wrote books of the  
 filosofia]<sup>i</sup>]]  
 philosophy

Assuming that in the output of syntax in (195) has the focus structure in (206) and that in earlier stages of Portuguese (just like in CEP) the NSR applies just after Spell Out, assigning prominence to the rightmost/lowest sentential constituent, it is clear that a conflict situation arises between the NSR and the FPR because the rightmost element is [-F].

- (206) [os [livros da filosofia]<sup>i</sup> [que eu compus  
 -F -F -F -F -F -F +F  
 [livros da filosofia]<sup>i</sup>]]  
 -F -F -F

To resolve this conflict, CEP renders defocalized [-F] elements extrametrical for the application of the NSR, and *compus* ‘wrote’ is assigned the neutral nuclear stress.<sup>24</sup> Because there is no PF requirement precluding the pronunciation of the higher copy of *da filosofia* ‘of philosophy’, the most economical option in (205) is derived (with deletion of the lower copy).

### B. PF requirement II

The question that remains to be answered now is why the head noun is not pronounced in the lower copy as well; in other words, why the more economical option of full copy deletion is not allowed and the last-resort mechanism of scattered deletion is used instead.

<sup>24</sup> According to Zubizarreta (1998), languages vary in the way they resolve the conflict between the FPR and the NSR. As already mentioned in §1.3.3.2, in languages such as English and French defocalized [-F] elements are treated as extrametrical in the sense that they are skipped by the NSR. Other languages (such as Spanish, Italian, and CEP) employ prosodically motivated movement (p-movement), which moves the post-focal [-F] elements out of the rightmost clausal position. If the hypothesis put forth in this analysis proves correct, it means that these two mechanisms are not necessarily incompatible; instead, they may coexist in the same language as different ways of resolving the conflict between the FPR and the NSR. Under this view, CEP differs from French and English in two aspects: (1) allowing p-movement of defocalized [-F] constituents and (2) requiring extrametrical material to be deleted in PF.

Adopting as my point of departure Chomsky's (2000) view on EPP, I assume that core functional categories, such as *v*, *I*, and *C*, can have an EPP feature requiring that their specifier position be filled. This is the case of the relative *C* (or Force) in CEP and in earlier stages of Portuguese. In this language, there are no head-internal relative clauses, a fact that clearly indicates that the relative *C* (or Force) must have its specifier position filled.

However, I depart from Chomsky's (2000) syntactic view on EPP. I rather adopt a phonological approach to the EPP, in the line of what has been expressed one way or another by Holmberg (2000), Ndayiragije (2000), Bobaljik (2002), Bošković and Nunes (2007), and Landau (2007), among others.

Following Landau (2007), I assume that the EPP-feature (therefore [P]) can be characterized according to two main properties. First, [P] is a selectional feature that governs PF configurations, imposing the PF requirement in (207).

(207) A [P]-bearing head needs to have its specifier filled with phonological material.

Importantly, the [P]-feature does not “care” about the phonological material that is used to satisfy it; it only requires that some phonological visible element be found in the specifier of a [P]-bearing head. If this requirement is not satisfied, there is a PF (selectional) violation, causing the derivation to crash.

Secondly, the [P] feature does not trigger movement on its own, being always parasitic on some other feature (e.g. Case or [wh]) that is independently checked. Under this view, the PF interface works as a filter, eliminating representations that do not satisfy PF requirements.

The approach to EPP just outlined constitutes a good basis for explaining why the head is pronounced in the higher copy in Pattern II (see (208), repeated from (193)). Because the relative *C* (or Force) has a [P]-feature, failure to pronounce the head noun in [Spec, CP] (or [Spec, ForceP]) would represent a PF violation.

(208) [os [livros da ~~philosophia~~<sup>i</sup>] [que eu compus [livros da  
the books of the philosophy that I wrote books of the  
philosophia]<sup>i</sup>]]  
philosophy

2.4.2.3 *Pattern III* To account for remnant-internal relativization with the second split part in a non-final position (as in (209), repeated from (194)), I propose a remnant movement approach interpreted in terms of the copy theory of movement (Bošković and Nunes 2007: 65).

- (209) os livros que da philosophia eu compus  
the books that of.the philosophy I wrote

Under this view, two main steps are involved in the derivation: (1) the (emphatic/contrastive) focused constituent *da philosophia* ‘of philosophy’ in (209) is copied and merged in [Spec, FocP], checking the [foc] feature on Foc;<sup>25</sup> (2) the noun phrase (containing a copy of the moved modifier/complement) is copied and merged in [Spec, ForceP], checking the wh-feature on Force, as depicted in (210).<sup>26</sup>

- (210) [os [livros da philosophia]<sup>i</sup> [que [da philosophia]<sup>j</sup> eu compus [livros [da philosophia]<sup>j</sup>]<sup>i</sup>]]

The particular configuration dictated by remnant movement requires PF deletion to apply to two different chains: the PP chain formed by the movement of *da philosophia* ‘of philosophy’ and the noun phrase chain formed by the movement of *livros da philosophia* ‘books of philosophy’. Note that if the lower copy of these two chains were deleted (see (211)), the resulting structure would not be linearized due to the presence of more than one copy of *da philosophia* ‘of philosophy’.

- (211) [os [livros da philosophia]<sup>i</sup> [que [da philosophia]<sup>j</sup> eu compus [~~livros~~ [~~da philosophia~~]<sup>j</sup>]<sup>i</sup>]]

Adopting the *representational* hypothesis proposed in Nunes (2004), I assume that Spell Out sends the whole structure in (210) to the phonological component. Chain Reduction inspects the PP chain and instructs the phonological component to delete the occurrence of *da philosophia* ‘of philosophy’ that is a sister of *livro* ‘book’. As there are two elements that satisfy this instruction, Chain Reduction<sup>27</sup> ends up deleting the two copies that satisfy this instruction, as represented in (212) (Bošković and Nunes 2007 for more technical details).

- (212) [os [livros ~~da philosophia~~]<sup>i</sup> [que [da philosophia]<sup>j</sup> eu compus [livros [~~da philosophia~~]<sup>j</sup>]<sup>i</sup>]]

As for the noun phrase chain formed by the movement of *livros da philosophia* ‘books of philosophy’, I take the relative C (or Force) to be equipped with a wh-feature and a [P]-feature. The wh-feature must be checked before Spell Out, whereas

<sup>25</sup> From a typological point of view, the internal movement of head-related elements is not surprising. Basílico (1996) shows that in some languages internally headed relative clauses display movement of the head to a sentence-internal position.

<sup>26</sup> For simplicity, I am abstracting away other syntactic movements involved in this sentence.

<sup>27</sup> See n. 15 for a clarification of the term *Chain Reduction*.

the [P]-feature must be satisfied in PF. Given that the wh-feature can be checked in the lower copy of the chain through Agree, it is the [P]-feature that requires the higher pronunciation of the head noun.

- (213) [os [livros ~~da~~ filosofaphia]<sup>i</sup> [que [da filosofaphia]<sup>j</sup> eu compus [livros [da filosofaphia]<sup>j</sup>]<sup>i</sup>]]

## 2.5 Diachronic path of remnant-internal relativization

In the discussion of remnant-internal relativization in earlier stages of Portuguese, the reader might have wondered whether remnant-internal relativization is still possible in CEP and, if so, whether there is any contrast with the patterns found in the diachrony of Portuguese.

In fact, remnant-internal relativization with the modifier/complement in the rightmost position is possible in CEP (see examples a in (214)–(217)). However, the occurrence of the modifier/complement in the left periphery of the relative clause leads to ungrammaticality, as illustrated in examples b in (214)–(217).

- (214) a. uma filha que eu tenho pequena  
 a daughter that I have young  
 lit. ‘a young daughter that I have’ (Martins 2004: 502)
- b. \*uma filha que pequena eu tenho  
 a daughter that young I have
- (215) a. uns touros que aqui tinha agrestes  
 some bulls that here had.1SG wild  
 lit. ‘some wild bulls that I had here’ (from the TV-show *Liga dos Últimos*)
- b. \*uns touros que agrestes aqui tinha  
 some bulls that wild here had.1SG
- (216) a. uma casa que eu comprei de cinco assoalhadas  
 a house that I bought of five rooms  
 lit. ‘a house with five rooms that I bought’
- b. \*uma casa que de cinco assoalhadas eu comprei  
 a house that of five rooms I bought
- (217) a. um rapaz que eu conheço de Leiria  
 a boy that I know from L.  
 lit. ‘a boy from Leiria that I know’
- b. \*um rapaz que de Leiria eu conheço  
 a boy that of L. I know



At least two hypotheses are worth pursuing to explain the empirical contrasts observed in the history of Portuguese: (1) the reduction of the left-peripheral space of embedded clauses constrained the patterns of discontinuity in remnant-internal relativization; (2) the restrictions on movement inside the DP blocked the extraction of the complement/modifier to the left periphery of the relative clause.

The first hypothesis is tentatively proposed by Cardoso (2010) to account for the data in (214)–(217). Under this view, the diachronic contrast could be explained in terms of a grammatical change involving the loss of a left-peripheral position dedicated to contrastive focus in relative clauses and possibly other types of subordinate clauses. However, recent findings on the syntax of focus in Romance languages and the inspection of a wider range of empirical data from Portuguese suggest that this hypothesis may not be on the right track.

In fact, it has been claimed in the literature that there is a contraction of the left-peripheral clausal space in some Old Romance languages (Cruschina 2011; Poletto 2014; Batllori and Hernanz 2015; Martins, Pereira, and Pinto forthcoming). Assuming that the CP-domain can host two different kinds of foci (the lower dedicated to fronted-unmarked/information focus and the higher specialized for fronted-contrastive focus, see Benincà 2004), it is argued that the position dedicated to fronted-unmarked/information focus ceases to be available in the history of some Romance languages, namely Portuguese (from 13th to 14th c., see Martins, Pereira, and Pinto forthcoming), Italian (from Old to Modern Italian, see Poletto 2014), and Catalan (from Old to Modern Catalan, see Batllori and Hernanz 2015). Note, however, that in these languages the position that is lost is the one dedicated to fronted-information focus, it being assumed that the position dedicated to fronted-contrastive focus (which is targeted by the modifier/complement in remnant-internal relativization—Pattern III) remains active through the history of these languages.<sup>28</sup>

Moreover, recent research on focus-movement in CEP (Costa and Martins 2011) shows that the left-peripheral position dedicated to emphatic/contrastive focus is still active, both in main and embedded clauses (see §1.3.3.1). Although further in-depth research is required in this domain, namely regarding the different meaning facets of emphatic/contrastive fronted focus in CEP, the evidence available favors the idea that the diachronic contrast observed in the syntax of remnant-internal relativization should be explained by some other means.

The second hypothesis that is worth exploring relies on the assumption that a change took place within the DP layer that affected word order patterns in the history of Portuguese and, concomitantly, the patterns of discontinuity available.

<sup>28</sup> Note additionally that instances of remnant-internal relativization (Pattern III) are attested beyond the 13th c., as shown in examples provided in §2.3.1, which clearly indicates that Pattern III does not involve movement to the left-peripheral position dedicated to information-focus (Martins, Pereira, and Pinto forthcoming).

Concretely, I suggest, in the line of Poletto's (2014) analysis for Italian, that in earlier stages of Portuguese modifiers/complements belonging to the DP-internal structure could target the highest specifier position inside the DP,<sup>29</sup> an operation that seems to parallel other fronting phenomena found within the clausal domain.<sup>30</sup>

Evidence for this movement comes from contexts, already described in A. Costa (2004), where the modifier/complement precedes all other DP-internal elements: a noun in (218); a numeral and a noun in (219); and a definite determiner, a noun, and a modifier in (220). Note that the fronting operation to the highest specifier position within the DP is further confirmed by examples of incomplete PP-fronting, as (221), where the PP *dazeite* (lit. 'of.olive.oil') is fronted, leaving behind a relative clause that takes the noun (*azeite* 'olive.oil') as antecedent.

- (218) E elle ouve delle doo como devia  
 and he had of.him sorrow as should.3SG  
 'And he felt sorrow for him, as he should have.'
- (219) hũua leira que leua de semente de trigo dous alqueires  
 a piece.of.land that takes of sowing of wheat two bushels  
 'a piece of land that takes two bushels of wheat sowing' (16th c., Martins 2001: 294)
- (220) e dedes de cantos béés deus j der. a meyadade do  
 and give.2PL of all goods god there give.SBJV the half of.the  
 ffeyto e do que aj por ffazer  
 done and of.the that has to do.INF  
 'and you give us the half of all the goods that god there gives considering what has been done and what remains to be done' (13th c., Martins 2001: 373)
- (221) Renderom os oljuaes dazeijte vijnte e quatro quantaros  
 yielded the olive.groves of.olive.oil twenty and four q.  
 que uall a saseêta Reaes o cantaro  
 that is.worth A.PREP sixty r. the c.  
 'The olive groves yielded twenty four *quantaros* [metric unit for liquids] of olive oil that is worth sixty *reaes* [currency] per *cantaro* [metric unit for liquids].' (15th c., from J. Costa 2004b: 415)

<sup>29</sup> I am assuming the DP hypothesis (Abney 1987) and the idea that between the DP and the NP there are functional projections (e.g. for agreement checking). Given that the concrete details of the implementation are not relevant for the discussion, I adopt simple structures like (i)–(ii) to represent a PP and an AdjP in the highest specifier position in the DP:

- (i) [<sub>DP</sub> [PP] [<sub>D</sub>]...N **PP**]  
 (ii) [<sub>DP</sub> [AdjP] [<sub>D</sub>]...**AdjP** N]

<sup>30</sup> A hypothesis that is worth exploring in future research is that the fronting operations within the DP parallel the middle scrambling attested in earlier stages of Portuguese, which involve multiple specifier positions within the IP layer (Martins 2002).

Following Ledgeway (forthcoming) and Poletto (2014), a prediction arises: if an element targets the left edge of the DP, it can move further on outside the DP. This prediction is correct for earlier stages of Portuguese: as shown in examples (222) (repeated from (218)) and (223), the PP object *dele* (lit. ‘of.him’), which is the complement of the noun *do* (‘sorrow’) can occur in the highest specifier position within the DP (see (222)), but it can also target the left periphery of the clause (see (223)). Further examples of PP-fronting to the clausal left periphery are displayed in (224)–(226).<sup>31</sup>

- (222) E elle ouve delle do como devia.  
 and he had of.him sorrow as should.3SG  
 ‘And he had sorrow of him, as he should have.’ (13th c. [transmitted by a 15th-c. MS], Martins, Pereira, and Cardoso 2014–15)
- (223) tal mal treyto que nom ha homem que  
 so badly treated that not has man that  
 o visse que dele nom tivesse do  
 him.CL see.SBJV that of.him not have.SBJV sorrow  
 ‘(he was) so badly treated that every man who saw him would feel sorrow for him’  
 (13th c. [transmitted by a 16th-c. MS], Martins, Pereira, and Cardoso 2013–15)
- (224) per qualquer Respeito que seja posto que disto facam  
 by any obligation that be.SBJV imposed that of.this make  
 expressa memção  
 express mention  
 ‘by any imposed obligation that makes express mention of this’ (16th c., Martins 2001: 562)
- (225) Destas tres cousas uos direy eu as signjficanças.  
 of.these three things you.CL tell.FUT I the meanings  
 ‘I will tell you the meaning of these three things’ (13th c. [transmitted by a 15th-c. MS], Martins, Pereira, and Cardoso 2014–15)
- (226) Galvam, que desto ouve gram pesar, [...] disse aa donzella  
 G. who of.this had great grief told to.the damsel  
 ‘Galvam, who had great grief over this, told to the damsel’ (13th c. [transmitted by a 15th-c. MS], Martins, Pereira, and Cardoso 2014–15)

Importantly, the empirical data inspected thus far also suggest that adjectives (and the degree/quantificational markers associated to them) can also be fronted within the DP, as in (227)–(229). In this case, the fronting operation within the DP is

<sup>31</sup> As noted by Poletto (2014), the idea of having a preliminary internal movement that feeds the subsequent movement into the clausal left-periphery is already adopted for cases of extraction found in the Germanic languages (Corver 1990, among others).

confirmed in (229) by the non-adjacency between the adjective *ledo* ‘happy’ and its complement (*de ledices e prazeres e de dons conhecedores*),<sup>32</sup> which indicates that the adjective and the degree/quantificational marker have undergone leftward movement, leaving the complement of the adjective behind.

- (227) E depois fez ante eles muito fermoso milagro  
 and then made.3SG before them very beautiful miracle  
 ‘and then he performed a very beautiful miracle before them’ (13th c.  
 [transmitted by a 16th-c. MS], Martins, Pereira, and Cardoso 2013–15)
- (228) e fez fazer muj rrico moymento ao caualleiro  
 and made make.INF very rich tomb to.the knight  
 ‘and had a very rich tomb built to the knight’ (13th c. [transmitted by a 15th-c.  
 MS], Martins, Pereira, and Cardoso 2014–15)
- (229) no mundo nom auja mais ledo caualeyro de ledices e de  
 in.the world not had more pleased knight of joys and of  
prazeres e dons sabedores  
 pleasures and gifts wise  
 ‘in the world there was no knight more pleased with joys, pleasures, and wise gifts’  
 (13th c. [transmitted by a 15th-c. MS], Martins, Pereira, and Cardoso 2014–15)

Crucially, if the adjective and the degree/quantificational marker can target the highest position within the DP, these elements (or one of them) should be able to move further on outside the DP. This prediction is correct: example (230) shows that *muito* ‘very’ undergoes leftward movement to the clausal domain. According to Poletto (2014), this movement is allowed because first the adjectival expression *mujto gran* ‘very big’ targets the highest position within the DP and, from this position, *muito* ‘very’ moves further on and targets the left periphery of the clause.<sup>33</sup>

- (230) E el cavalgou e foi-se mui ledo para a oste  
 and he rode and went-SE-CL very joyful to the army  
 ca muito ouvera gram pavor de morte  
 because very had.3SG great fear of death  
 ‘and he rode to the army because he had very great fear of death’ (13th c.  
 [transmitted by a 15th-c. MS], Martins, Pereira, and Cardoso 2014–15)

<sup>32</sup> In earlier stages of Portuguese the adjective *ledo* ‘happy’ selects a complement introduced by the preposition *de* ‘of’. This can also be observed in the example below.

eu som mui ledo de vossa vinda  
 I am very joyful of your arrival  
 ‘I am very joyful at your arrival’ (13th c. [transmitted by a 15th-c. MS], Martins, Pereira, and Cardoso 2014–15)

<sup>33</sup> In example (231) the marker *muito* ‘very’ probably undergoes movement through the specifier position of the PP.

- (231) Estor caeo em terra [...] ca mujto era de gram força  
E. fell in ground, because very was of great strength  
o caualeiro que o ferio.  
the knight that him.CL wounded  
'Estor fell to the ground because the knight that wounded him had very great strength.' (13th c. [transmitted by a 15th-c. MS], Martins, Pereira, and Cardoso 2014–15)

Interpreted in this manner, the configuration of remnant-internal relativization with the modifier/complement in the left periphery of the relative clause (Pattern III) ceases to be available in the history of Portuguese possibly because the first step movement of the complement/modifier to the highest specifier position within the DP is blocked. In the absence of raising to the highest specifier position within the DP, the other potential higher movements become illicit.

Future research will have to develop the technical details of the analysis. Nevertheless, some ideas have been put forward in the literature to derive similar diachronic contrasts: (1) the highest specifier position within the DP ceases to be available because this position starts to be targeted by other DP-internal elements, namely the lexical head (Poletto 2014); (2) the concept of antilocality, according to which movement must result in raising outside the immediate minimal domain or phrase, thereby crossing at least one phrasal XP boundary, is parameterized across languages (Ledgeway forthcoming) and within the same language.

## 2.6 Conclusion

The term *remnant-internal relativization* is proposed in this chapter to describe RRCs where the head noun and some modifier/complement related to it appear discontinuously.

On the basis of empirical data from earlier stages of Portuguese, two distributional patterns of remnant-internal relativization are identified: (i) remnant-internal relativization (with a modifier/complement in the rightmost clausal position), as in (232); (ii) remnant-internal relativization (with a modifier/complement in the left periphery of the RRC), as in (233).

- (232) os livros que eu compus da philosophia  
the books that I wrote of.the philosophy  
(233) os livros que da philosophia eu compus  
the books that of.the philosophy I wrote

From a theoretical point of view, I show that the phenomenon of remnant-internal relativization provides important new evidence for the raising analysis of RRCs. In particular, I demonstrate that the adjunction analysis of RRCs cannot account for the

properties of remnant-internal relativization, considering two main arguments. First, if the head and its modifier/complement were base-generated together in a relative clause external position, the pattern in (233) could not be derived, as it would require lowering of the modifier/complement to a non-c-commanding position. Secondly, if the head and its modifier/complement were generated separately (the head being CP-external and the modifier/complement being CP-internal), the semantic dependency between the head and its modifier/complement, which requires that these elements be in a structural relation at some point of the derivation, would not be satisfied.

My proposal is that remnant-internal relativization is derived by the combination of the raising analysis of RRCs with a movement analysis of discontinuous noun phrases. Concretely, I analyze remnant-internal relativization in terms of the copy theory of movement on the PF side, deriving the contrast between regular and remnant-internal relativization from the deletion operations that take place in the PF side of the grammar.

Abstracting away from particular derivations, the global picture that emerges is that earlier stages of Portuguese (and CEP, in a more restricted way) had at their disposal constituent discontinuity as a way of syntactically marking emphatic/contrastive focus. Just like clefts, remnant-internal relativization (and, more generally, phrasal discontinuities) appears to constitute a syntactic environment capable of codifying emphatic/contrastive focus. Under this view, it is not surprising that emphatic/contrastive focus in remnant-internal relativization can be additionally marked by prosodic prominence (see (232)) or syntactic movement (see (233)). This squares up nicely with the observation that different focus marking devices may conspire to encode emphatic/contrastive focus.

From a diachronic perspective, I hypothesize that the loss of remnant-internal relativization with the modifier/complement in the left periphery of the RRCs is due to restrictions on movement that emerge inside the DP, which block the extraction of the modifier/complement to the left periphery of the RRC.