

Licensing Empty Nouns in French

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Licensing Empty Nouns in French

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*for Mente
for Tessa, Astrid and Jelmer*

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Theoretical Assumptions

0. Introduction

The theoretical framework for the analysis of empty noun constructions will be Chomsky's principles-and-parameters model. For details, the reader is referred to Chomsky (1981, 1982, 1986, 1992).¹

The analysis of empty noun constructions that I will propose in this study contributes in at least two ways to the theory of grammar. First, it defends Abney's (1987) DP hypothesis and especially Valois' (1990, 1991) claim that postnominal adjectives in the Romance languages are base-generated in a prenominal (functional) position. Second and most importantly, this study contributes to the discussion on empty nouns (see e.g. Chomsky 1982; Jaeggli & Safir 1986; Rizzi 1986).

In this chapter I will present the discussion in the generative literature of these two points, DP-structure (§1) and the licensing of empty pronouns (§2) as the theoretical background for my analysis of empty noun constructions in the chapters that will follow.

1. The DP-hypothesis

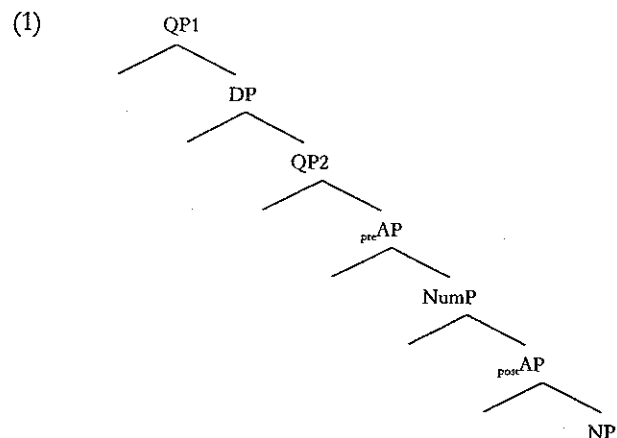
The analysis of the licensing of pronominal "heads" that I present in this study defends the DP-hypothesis (Abney 1987) and the idea that both prenominal and postnominal adjectives in Romance are generated within the functional system dominating NP (Valois 1990, 1991). Nowadays, the advantages of a DP-analysis above an NP-analysis are still not clear to every

¹ The DP-structures that I propose in this study are not always in accordance with Kayne's (1994) antisymmetry theory. The main goal of this dissertation is to explore how empty nouns are licensed. I will leave it for further research to examine how the antisymmetric DP-structures that I will assume can be transformed in symmetric structures.

linguist. One of the problems with a DP-analysis is that it seems that the determiner becomes the head of the noun phrase. For some linguists this is unacceptable. For them, the head of the noun phrase is the noun. These linguists defend the NP-hypothesis (Zwicky 1985; van Langendonck 1992). For others, the determiner is the head. Those linguists defend the DP-hypothesis (Hudson 1990; Hewson 1991).

For the linguists mentioned above, the noun phrase only has one head: for those who defend the NP-hypothesis it is the noun, for those who defend the DP-hypothesis it is the determiner. But in Abney's original view, there were two heads. Both the determiner and the noun were the head of the noun phrase, although in different ways. In Abney's view, the noun is the semantic head, whereas the determiner is the structural head. This is also Radford's (1993) view. Besides the determiner as a structural head, Radford distinguishes other functional heads that appear between DP and NP. He defends a multi-headed DP-hypothesis.² Payne (1993), in response, rejects Radford's multi-headed DP-hypothesis and defends the NP hypothesis. For him, there can only be one head, the noun. For Grimshaw (1991), N and D are of the same category ($[-V, +N]$), the difference being that N is lexical, whereas D is functional. The N-D system is a multiheaded extended projection.

In this study, I will share Abney's, Radford's and Grimshaw's insights and adopt a multi-headed DP-hypothesis. I assume that the NP is dominated by several functional projections:



² As a matter of fact, also Abney already tentatively proposed several other functional projections in between DP and NP, viz. AP and QP (see below).

The presence of DP as a functional projection of NP has been defended by Abney (1987) on the basis of the striking similarity between definite articles and pronouns in many languages. He claims that both are generated in D^0 , the difference being that determiners take an NP-complement, whereas pronouns do not. Pronouns are intransitive determiners. The DP-hypothesis has also been defended by Longobardi (1994a). Longobardi argues that D^0 always has to be filled, at least at LF, in order for the DP to be referential. He claims, among other things, that for this very reason proper names raise from N^0 to D^0 , via head-to-head movement. The DP-hypothesis has also been used to explain the postnominal position of the article in various languages (Romanian, Scandinavian): the noun raises to D^0 and left-adjoints to the determiner (Grosu 1988; Taraldsen 1990).

It has been claimed that, besides DP, NP has other functional projections. Ritter (1991) claims on the basis of Hebrew that there is a number phrase in between NP and DP. The noun, N^0 , raises to the head of NumP, because its number features have to be checked.

A third functional projection that has been distinguished is AP. Abney already tentatively proposed that there could be other functional projections dominating NP, such as AP. The adjective-as-a-functional head-hypothesis is adopted by among others Radford (1993) for English and Barbiers (1992) for Dutch. For French, Valois (1990, 1991) claims that both prenominal and postnominal adjectives are adjoined to NP and its functional projections. Adjectives cannot be heads, in his view, because the noun moves, via head movement, to Num^0 , so that the adjectives between become postnominal at S-structure. For Bernstein (1993a,b), most adjectives are adjoined to NP or functional projections of NP, but a small group are heads: adjectives that can only be used attributively, in a prenominal position, such as *simple* 'simple', *ancien* 'former' etc. In this study, I adopt Cinque's (1993) view. According to Cinque, all adjectives, both prenominal and postnominal, are generated within the Spec of several functional projections of NP.

A fourth functional projection of NP that has been distinguished in the literature and that I will make use of is QP (quantifier phrase). In the literature, two different QPs have been distinguished: QP dominating DP (Abney 1987; Bianchi 1992 and many others) and QP dominated by DP. Floating quantifiers are generated in the higher QP, whereas the other quantifiers are generated in the lower QP (see, among others, Abney 1987; Löbel 1989; Corver 1990).

In this study, the motivation for the existence of both AP and QP as functional projections dominating NP will come from the analysis of the licensing of pronominal NPs. I will claim that only if QP and AP are generated within the functional system dominating NP can they license pronominal NPs.

The analysis of null nominal constructions presented in this study will also defend the generation of “postnominal” adjectives within the functional system dominating NP. I will claim that, especially in French, (some of the) postnominal adjectives can license noun ellipsis and the quantitative pronoun *en*. Again, the AP containing the postnominal adjective has to be in the right structural position in order to license the pronominal NP. The AP must be generated within a functional projection of NP.

One of the problems for a multi-headed nominal phrase is Abney’s original assumptions that functional projections can only contain closed lexical classes and that functional elements lack descriptive content. Whereas determiners form a closed class and have little descriptive content, adjectives certainly do not form a closed class and do have descriptive content. In this respect, quantifiers take a position between that of determiners and adjectives. In this study, I will assume that categories forming non-closed classes and with descriptive content are indeed possible within the functional system dominating NP, at least in the Spec of functional projections. I will also call these functional projections themselves QP and AP, after the specifier that they contain, but it might also be possible to give them another name. In any case, their head is (phonologically) empty.³

This study will thus provide an argument for a multi-headed DP-hypothesis. It will be argued that a (functional) head-complement (NP) relation is necessary (but, as I will show in the next section, not sufficient) in order for pronominal NPs to be licensed.

2. The licensing of pronominal NPs

Since Chomsky (1982), the licensing of small *pro*, an empty category of the type [-anaphor, +pronominal], has generally been related to inflection. It was proposed that subject *pro* was only possible in languages with a “rich enough” inflectional system, i.e. the pro-drop languages, so that the inflection could provide the grammatical features of the “missing subject”.

The “licensing of *pro* by rich inflection” approach has been adopted by several linguists to explain noun ellipsis facts (Olsen 1987; Delsing 1992; Kester 1996). It was proposed that adjectival inflection could license ellipted

nouns. This claim was especially made for the Germanic languages, in which the noun can very easily be left out.

However, there are languages in which empty nouns do not seem to be licensed by inflection. In French for instance, the adjective can be inflected, but base-generated empty nouns do not seem to have anything to do with the inflection of the adjective. In (2), an empty noun is not possible, although the adjective is inflected:⁴

- (2) *Je préfère l’intelligente *pro*.
I prefer the intelligent FEM SG

This shows that in French, empty nouns are not licensed by the inflection of the adjective. I will claim the same for Italian and Spanish.

Lobeck (1991, 1993, 1995) claims that noun ellipsis in English can be licensed, not by inflection, because English adjectives are not inflected, but by features on the specifier, which “can be loosely defined as rich agreement” (Lobeck 1991, p. 91). Whereas Lobeck (1991) distinguishes three kinds of features: [+Kase] (possessive phrases, e.g. *John’s*), [+Number] (*these, those*) and [+Q] (quantifiers), Lobeck (1993, 1995) reduces them to two, [+possessive] and [+plural]. These features can be expressed in a morphological way, but do not necessarily have to. Cardinals (except for *one*) are [+plural] although this is not expressed in a morphological way. Because of the feature [+plural], cardinals license empty nouns in English.

In a note, Lobeck adds the feature [+partitive] to the features [+poss] and [+plural]. This feature serves to explain why the quantifiers *one* and *each* can license empty nouns, although they are [-plural].

In this dissertation, I will claim that the feature [+partitive] always plays an important role in the licensing of empty nouns. This implies that I will even replace Lobeck’s features [+poss] and [+plural] by the feature [+partitive]. I will take this feature to be simply a semantic feature, so that I will assume that morphology does not play any role in the licensing of empty nouns, at least not in Romance and English.⁵

Traditionally, a distinction is made between the formal licensing and the identification of *pro*. While the formal licensing of *pro* determines its structural position, its identification has to do with the recoverability of its

³ Another possibility is to distinguish [-lexical, +functional] categories from [+lexical, +functional] categories, as Cardinaletti & Giusti (1991) do. D is a [-lexical, +functional] category, N is [+lexical, -functional] and Q is [+lexical, +functional]. In Cardinaletti & Giusti’s system, only DP and QP are functional projections of NP, so that AP is [-lexical, -functional] in their view. In my system, AP would be [+lexical, +functional].

⁴ If sentence (2) is explicitly used in a contrastive manner, it becomes grammatical.

⁵ This analysis of noun ellipsis differs from the one I proposed in Sleeman (1993). In that paper, I proposed that the empty NP was a base-generated variable that was licensed by being operator-bound by a quantificational element (see Cinque 1990b). Subsequent research on the licensing of the quantificational pronoun *en*, however, changed my analysis of noun ellipsis.

feature content. According to Rizzi (1986), the formal licenser and the identifier of *pro* have to be the same element. The licenser is a Case-marking head (the type of licensing heads differ from one language to another). Small *pro* is identified by features of the licenser:

- (3) *Licensing of pro* (Rizzi 1986):
pro is Case-marked by X_y (where X is a governing head of the type y). Let X be the licensing head of an occurrence of *pro*; then *pro* has the grammatical feature specification of the features on X coindexed with it.

In (4), *pro* is formally licensed by the nominative assigning head INFL and its content is also determined by INFL:

- (4) *pro* verrà.
 will-come
 'He/she will come.'

In (5), *pro* is formally licensed by the Case assigning head V and its content is defined through coindexing with a slot in the theta-grid of V :

- (5) La buona musica riconcilia *pro* con se stessi.
 the good music reconciles with oneself
 'Good music reconciles people with themselves'.

In studies that deal with the licensing of empty nouns, the Case-marking requirement is generally replaced by a proper government requirement. It is proposed that empty nouns have to be properly governed by an element with the appropriate properties within the extended projections of NP (Bosque 1986; Contreras 1989; Cardinaletti & Giusti 1991; Lobeck 1991, 1993, 1995; Kester 1996). Inflection or *phi*-features generally are considered appropriate properties.

In this study I will claim that empty nouns have to be formally licensed by a proper governor with a partitive meaning. As for the identification of empty nouns, I will claim that a "specific" interpretation of the formal licenser plays an important role (see, among others, Enç 1991; Diesing 1992). I will show that this analysis can account for a wide range of data involving empty nouns in various languages and can also account for the use of quantitative pronouns (such as *en* in French), in languages which have one. Finally, I will show that the proposed analysis can also account for substantivization data (at least in French) involving the "conversion" of an adjective into a noun.

Noun Ellipsis

0. Introduction

Noun ellipsis is the omission of a noun that can be recovered from the linguistic or extra-linguistic context. An example is given in (1), in which *the third* is used instead of *the third book*, because *book* can be recovered from the linguistic context (*of this writer's books*):

- (1) Of this writer's books, I prefer the third.

In English, the possibility of leaving out a noun is very restricted. In most cases, the pronoun *one* has to be used:

- (2) *Of these tables, I prefer the small.
 (3) Of these tables, I prefer the small one.

Whereas in English, noun ellipsis is hardly possible, in other Germanic languages, such as German, Dutch or the Scandinavian languages, nouns can easily be left out. In most studies on noun ellipsis in these languages, it is noted that adjectival inflection plays a crucial role (see e.g. Olsen 1987 for German; Barbiers 1990 and Kester 1996 for Dutch; Delsing 1992 for the Scandinavian languages). In these languages, all inflected adjectives allow the ellipsis of the noun, while the non-inflected ones do not. This is illustrated by the following Dutch examples:

- (4) Zij heeft een zwarte auto, maar ik heb een groene *e*.
 she has a black car, but I have a green (one)
 (5) *Zij heeft een zwart hek, maar ik heb een groen *e*.
 she has a black fence, but I have a green (one)

In English, on the other hand, adjectives do not inflect. Because of the relation between noun ellipsis and adjectival inflection in the other Germanic languages, the quasi-absence of noun ellipsis in English is generally related to the lack of adjectival inflection (Lobeck 1991, 1993, 1995).

In most recent studies on noun ellipsis, it is assumed that the empty noun is of the small *pro* type (see e.g. Lobeck 1991, 1993, 1995; Kester 1996). According to Rizzi (1986), small *pro* is authorized if it is formally licensed by Case-marking and identified by the *phi*-features of the Case-marker. Although in Rizzi's paper, small *pro* is itself an argument (subject or object), whereas in the case of noun ellipsis the empty noun is part of an argument, Rizzi's theory is generally applied to noun ellipsis as well. The noun ellipsis data in the Germanic languages are generally accounted for by means of Rizzi's identification requirement. Adjectival inflection is somehow able to identify the empty noun of the small *pro* type.

However, although lack of adjectival inflection can thus account for the cases in English in which noun ellipsis is not possible, it cannot explain why noun ellipsis is possible in some cases, such as in (1). Furthermore, in French, adjectives inflect, but noun ellipsis is not always possible (Ronat 1977):

(In the morning an interesting lecture and some less interesting ones were given):

- (6) *Malheureusement je n'ai pas entendu l'intéressante.
unfortunately I neg have neg heard the interesting
'Unfortunately, I have not heard the interesting one.'

In contrast, non-inflecting adjectives do sometimes allow noun ellipsis in French, just as in the English example (1). Composed color adjectives, for instance, do not inflect, but allow noun ellipsis:

- (7) De ces robes, je préfère la vert foncé.
of these dresses, I prefer the green deep
'Of these dresses, I prefer the deep green one.'

This suggests that besides the inflection of the adjective arguably relevant for most Germanic languages, there is some other grammatical device which can license noun ellipsis.

It has been noted by some linguists (e.g. Barbaud 1976; Ronat 1977) that the adjectives that allow noun ellipsis in French are "classifying" adjectives.¹ "Classifying" adjectives include superlatives, as in (8):

- (8) De ces filles, Marie est la plus intelligente.
of these girls, Marie is the most intelligent (one)

Color adjectives, as in (9):

- (9) De ces robes, je préfère la bleue.
of these dresses, I prefer the blue (one)

Adjectives which Barbaud calls hierarchic adjectives: the ordinals, as in (10),

- (10) De ses livres, je préfère le premier.
of his books, I prefer the first (one)

précédent 'preceding', *suisant* 'following', *prochain* 'next', as in (11),

- (11) Je n'ai pas lu le précédent.
I neg have neg read the preceding
'I have not read the preceding one.'

and *même* 'same', *autre* 'other', *seul* 'only', as in (12)-(14):

- (12) J'ai pris les mêmes que toi.
I have taken the same (ones) as you
(13) Je prends l'autre.
I will take the other (one)
(14) De tous mes amis, ils sont les seuls à le savoir.
of all my friends, they are the only to it know
'Of all my friends, they are the only ones who know it.'

¹ The word *classifying* is somewhat misleading. In fact most adjectives classify. Still, they do not always allow noun ellipsis, as the ungrammatical sentence (6) shows. In §6 of this chapter and in chapter 4, I will try to give a more precise characterization of the class of adjectives that allow empty nouns than the notion "classifying" does.

Furthermore "classifying" adjectives include measuring adjectives such as *grand* 'big' and *petit* 'small'.^{2,3}

- (15) De ces chiens, je préfère le grand.
of these dogs, I prefer the big (one)

This suggests thus that in French the semantic properties of the adjective rather than its morphology plays a crucial role in the licensing of ellipted nouns.

In this chapter, I investigate what the adjectives that license noun ellipsis in French have in common semantically and how their semantic properties allow them to license ellipsis of the noun. Furthermore, I investigate whether the analysis proposed for French can be extended to English, where just as in French noun ellipsis is not licensed by adjectival inflection, and whether it can be extended to other Romance languages.

The chapter is organized as follows. First, in §1, I discuss licensing by adjectival inflection, which has been proposed for the Germanic languages. In §2 through §9, I discuss the licensing of noun ellipsis in French; in §2 through §5, I show that a DP-analysis can better account for the data than an NP-analysis. In §6, I discuss the semantic properties of the adjectives that can license ellipsis of the noun. In §7 and §8, I propose a licensing mechanism that, as will be shown in §9, can account for the French data. In §10 through §12 the analysis proposed for French is extended to English and to other Romance languages. In §13, I speculate on the difference with respect to the licensing of noun ellipsis between Romance and English on

² These cases have to be distinguished from cases such as *le malade* 'the ill' with an inherently "human" interpretation (see chapter 5).

³ Anne Zribi-Hertz has pointed out to me that even adjectives that normally do not allow noun ellipsis (cf. (6)) do allow it if the adjective is explicitly used in a discriminating way (the examples are hers):

- (i) Parmi les exposés présentés au colloque, je distinguerai trois catégories: les intéressants, les atroces et les incolores.
among the talks delivered at the colloquium, I will distinguish three categories: the interesting ones, the awful ones, and the colorless ones
- (ii) Parmi les tableaux exposés dans ce musée, je distinguerai trois catégories: les magnifiques, les bizarres et les affreux.
among the paintings exhibited in this museum, I will distinguish three categories: the magnificent ones, the strange ones, and the awful ones

The reason for this is that in (i) and (ii), the context that the adjectives are used in, i.e. the opposition with other adjectives, makes the adjectives "classifying".

the one hand and Germanic languages different from English on the other. Finally, in §14, I summarize the results.

1. Dutch and other Germanic languages

In Dutch, German and the Scandinavian languages, attributive adjectives take an inflectional ending in most cases. In Dutch, for instance, the inflectional ending is schwa. The attributively used adjective in (16) takes this ending, whereas the predicatively used adjective in (17) does not:

- (16) Ik neem de oude auto.
I will take the old car
- (17) Deze auto is oud.
this car is old

All adjectives with this schwa morpheme allow ellipsis of the noun:

- (18) Ik neem de oude *e*.
I take the old (one)

Attributive adjectives do not always take a schwa morpheme. They do not take a schwa morpheme if they modify a neuter singular noun and are preceded by an indefinite determiner:

- (19) een oud huis
an old house

In this case, the adjective does not allow ellipsis of the noun:

- (20) *Ik heb liever een oud.
I have preferably an old
'I prefer an old one.'

Even if they are used attributively, participial adjectives ending in *-en* do not take a schwa morpheme:

- (21) de verloren wedstrijden
the lost matches

These adjectives do not allow ellipsis of the noun either:

- (22) *Van die wedstrijden moeten de verloren overgespeeld worden.
 of those matches must the lost replayed be
 'The lost matches must be replayed.'

According to Muysken (1983) and Muysken & van Riemsdijk (1986), the inflectional marking on attributive adjectives in the Germanic languages is Case marking. This is not only true for German, which has unambiguous Case marking, but also for a language like Dutch, which has only the schwa ending. Muysken and Muysken & van Riemsdijk suggest that if the noun is absent, another element has to bear a Case-marker. The difference in grammaticality between (18) and (20) is then the consequence of the respective presence and absence of a Case marker on the adjective. The linguists support this idea with facts from German. Normally the German adjective *lila* 'lilac' remains uninflected, even in attributive use, see (23). However, in informal speech, *lila* can be inflected (24):

- (23) ein lila Kleid
 a lilac dress
 (24) ein lilanes Kleid
 a lilac dress

Interestingly, noun ellipsis is only possible with the inflected form of *lila*. This shows that if the noun is absent, another element must bear an inflectional ending:

- (25) *ein lila
 a lilac
 (26) ein lilanes
 a lilac (one)

However, the Case-marking requirement does not account for the fact that in the absence of a noun, it is an adjacent element, and not just an arbitrary one, which must bear an inflectional ending. Compare the Dutch examples (27)-(29):

- (27) *de gratis
 the free (ones)
 (28) *de mooie gratis
 the beautiful free (ones)
 (29) de gratis groene
 the free green (ones)

Example (27) shows that noun ellipsis is not possible because of the uninflected adjective. In (28), however, another adjective bears an inflectional ending, but the result is still ungrammatical. Example (29) shows that the element bearing an inflectional ending has to be adjacent to the ellipsed noun.

An account for the noun ellipsis data which does not present this problem is proposed by Kester (1996). Following Lobeck (1991, 1993, 1995), Kester assumes that the empty noun in the case of noun ellipsis is of the small *pro* type. Just as Lobeck, she relates the licensing of this kind of *pro* to the licensing of subject *pro* in pro-drop languages. Whereas for subject *pro* it has been claimed in the literature that it is licensed by verbal inflection (see e.g. Chomsky 1982), Kester proposes that in Dutch and other Germanic languages, ellipsed nouns of the small *pro* type can be licensed by adjectival inflection. She adopts a DP-analysis and assumes that adjectives are generated within the extended projections of NP. Since the licenser has to (properly) govern *pro* (Rizzi 1986; Lobeck 1991, 1993, 1995), Kester's approach can explain why (29) is grammatical and (28) is ruled out. In (28), the inflected adjective does not (properly) govern the ellipsed noun because of the intervening uninflected adjective in a lower functional projection.

Kester extends her analysis of Dutch to other Germanic languages, such as German and the Scandinavian languages. Since just as the Germanic adjectives, Romance adjectives can be inflected, the analysis also applies to Romance languages. Since in English, adjectives are uninflected, the prediction is that noun ellipsis is not possible in English.

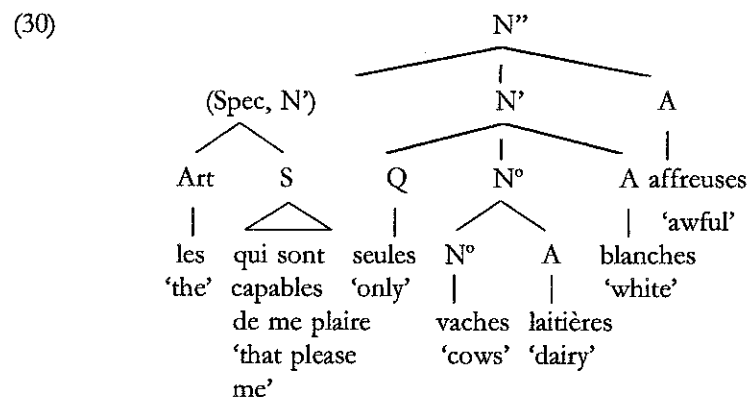
Below I argue that in Romance, noun ellipsis is not licensed by adjectival inflection. Furthermore, I show that noun ellipsis is sometimes possible in English. I relate the licensing of noun ellipsis in Romance to the licensing of noun ellipsis in English, a language without adjectival inflection.

I first discuss French. Subsequently, I extend my analysis of French to English, Italian and Spanish.

2. French

One of the best known studies that tries to explain why only a limited class of adjectives in French allow the ellipsis of the noun, is Ronat's (1977). In Ronat's opinion, relational adjectives are generated as an adjunction to N^0 ; quantifiers and adjectives that allow the ellipsis of the noun are dominated by N' ; all the other intransitive adjectives, i.e. adjectives not followed by a complement, are dominated by N'' , and determiners and restrictive relative clauses (from which Ronat derives transitive adjectives, i.e. adjectives followed by a complement) are generated in [Spec, NP] (a kind of

extraposition transformation within the NP moves the relative clause to a position to the right of the noun):⁴



Ronat tries to explain why only quantifiers and a restricted class of adjectives allow ellipsis of the noun in French by means of the following claim:

- (31) N' has to dominate something at S-structure.

If this "something" is not a noun then it has to be either a quantifier or an adjective. Ronat's assumption that quantifiers and the class of adjectives that allow noun ellipsis are dominated by N' accounts for the grammaticality of the following cases:

- (32) les _{N'}[deux *e*]
the two

- (33) la _{N'}[*e* verte]
the green (one)

⁴ Ronat mentions only three cases of noun ellipsis: with cardinal numbers, with *seul* and with color adjectives. Cardinal numbers and *seul* are quantifiers generated to the left of the noun, whereas color adjectives are adjectives generated to the right of the noun. In order to be able to account for the possibility of noun ellipsis with prenominal adjectives (the ordinals, *autre*, *même*, *précédent*, *suivant*, *prochain*, *grand*, *petit*, and the prenominal superlatives), Ronat would have to distinguish an adjective position to the left of the noun dominated by N'.

In the following cases, however, noun ellipsis is not possible because N' does not dominate anything:⁵

- (34) *_{NP}[le _{N'}[*e*]
the
(35) *le _{N'}[*e*] qui est susceptible de te plaire
the that is susceptible of you please
(36) *le _{N'}[*e*] susceptible de te plaire
the susceptible of you please
(37) *les _{N'}[*e*] magnifiques
the magnificent

There are two problems with Ronat's proposal, one conceptual and one empirical. The conceptual problem is that Ronat needs the ad hoc constraint (31) to exclude (34)-(37). The empirical problem is the ungrammaticality of (38) and (39). Although N' does dominate something in these cases, namely *deux* in (38) and *seul* in (39), the sentences are ungrammatical:

- (38) *Je n'ai pas entendu les _{N'}[deux *e*] intéressantes.
I neg have neg heard the two interesting
(39) *C'est le _{N'}[seul *e*] captivant que j'aie lu.
it is the only captivating that I have SUBJ read

The ungrammaticality of these sentences cannot be attributed to the fact that the combination of "something" dominated by N' with "something" dominated by N'' should not be possible, because (40) and (41) are grammatical:

- (40) Je n'ai pas entendu les _{N'}[deux *e*] que tu m'avais dit d'aller écouter.
I neg have neg heard the two that you me had told of go listen
'I did not hear the two that you had told me to attend.'

⁵ Since relational adjectives are dominated by N', constraint (31) would predict that they allow noun ellipsis, but, in general, they do not:

- (i) *De ces cartes, je préfère la postale.
of these cards, I prefer the postal

Ronat explains this by suggesting that adjunction to the empty N° is not possible.

- (41) De toutes ces robes, celle-ci est la _N[seule *e*] susceptible de me plaire.
 of all these dresses, this is the only susceptible of me please
 'Of all these dresses, this is the only one which pleases me'.

In this chapter, I propose a solution that will be an answer to both the conceptual and the empirical problem. Although I reject Ronat's N'-constraint, I retain her syntactic distinction between restrictive relative clauses and transitive adjectives on the one hand and intransitive adjectives on the other. In the next section, I repeat Ronat's arguments in favor of a syntactic distinction.

3. Transitive adjectives

Ronat (1974, 1977) shows that transitive adjectives, i.e. adjectives followed by a complement, behave like restrictive relative clauses and she proposes to relate them transformationally: she derives transitive adjectives from restrictive relative clauses by means of a deletion transformation. Intransitive adjectives are base-generated within the NP.⁶ Ronat shows that transitive adjectives and restrictive relative clauses differ from intransitive adjectives in at least the following respects (the examples are Ronat's):

1. Transitive adjectives and restrictive relative clauses can be combined with a noun preceded by *seul(e)(s)*, whereas intransitive adjectives cannot:

- (42) Les seuls livres susceptibles de te plaire sont là.
 the only books susceptible of you please are there
 'The only books which might please you are there.'
 (43) Les seuls livres que je connaisse sont là.
 the only books that I know are there
 (44) *Les seuls livres rouges sont là.
 the only books red are there

⁶ Also in English, transitive adjectives seem to be related to restrictive relative clauses; both types are generated in a postnominal position, whereas the intransitive adjectives are generated in a prenominal position (see Bolinger 1967):

- (i) a man proud of his country
 (ii) a man who is proud of his country
 (iii) a proud man

2. Nouns preceded by a possessive adjective are compatible neither with a transitive adjective nor a restrictive relative clause, but they are compatible with an intransitive adjective:

- (45) *Je te donnerai mes livres capables de te plaire.
 I you will give my books capable of you please
 (46) *Je te donnerai mes livres qui sont rouges.
 I you will give my books that are red
 (47) Je te donnerai mes livres rouges.
 I you will give my books red
 'I will give you my red books.'

3. In standard French, the quantitative pronoun *en* can only be extracted from an NP introduced by a plural indefinite article if the NP contains an intransitive adjective (in spoken French, however, (48) and (49) are accepted):

- (48) *J'en ai des capables de sauter au plafond.
 I of them have PL IND ART capable of jump to the ceiling
 (49) *J'en ai des qui sont capables de sauter au plafond.
 I of them have PL IND ART that are capable of jump to the ceiling
 (50) J'en ai des rouges.
 I of them have PL IND ART red
 'I have some red ones.'

4. Demonstrative pronouns may be followed by a transitive adjective or a restrictive relative clause, but not by an intransitive adjective:

- (51) Je ne t'ai envoyé rien que ceux capables de te plaire.
 I not you have sent anything but those capable of you please
 'I have only sent you the ones that might please you.'
 (52) ceux que j'ai vus
 those that I have seen
 (53) *Je ne t'ai envoyé rien que ceux rouges.
 I not you have sent nothing but those red
 'I have only sent you the red ones.'

5. Word order: intransitive adjectives cannot be preceded by a PP, transitive adjectives and restrictive relative clauses can:

- (54) le seul toit gris de Paris
the only roof gray of Paris
'the only gray roof in Paris'
- (55) *la seule porte de Paris grise
the only door of Paris gray
- (56) la seule porte de Paris susceptible d'être repeinte
the only door of Paris susceptible of be repainted
'the only door in Paris that might be repainted'
- (57) la seule porte de Paris qui soit grise
the only door of Paris that is gray
'the only gray door in Paris'

Although I adopt Ronat's idea that restrictive relative clauses and transitive adjectives are related, I will not derive the latter from the former by means of a deletion transformation. Nor will I generate restrictive relative clauses in the Spec of NP, to the left of N', and extrapose them to the right of the noun, as Ronat does.

In the seventies, the various positions of adjectives could be distinguished by means of rewriting rules. It was also possible to relate transitive adjectives to relative clauses by means of a deletion transformation. In the principles-and-parameters model (Chomsky 1981), however, rewriting rules were replaced by licensing mechanisms and syntactic transformations were reduced to move-alpha.

I assume that, just like restrictive relative clauses, transitive adjectives are licensed by means of predication (see e.g. Williams 1980; Rothstein 1983). Williams (1980) right-adjoins restrictive relative clauses to N'. It is more likely, however, that restrictive relative clauses are adjoined to NP (see Safir 1986 and references cited there), or to a maximal functional projection of NP. In that case, relative clauses would be more like other kinds of predication, in which there is also a maximal projection as the "subject".^{7,8}

⁷ CPs and APs are not the only possible predicative adjunctions to NP. Hulk and Verheugd (1992, 1994) claim that *de* + adjective, as in (i), is a predicative QP, with *de* as the head of QP, and an AP, as the complement of Q:

- (i) Je n'ai mangé que deux pizzas de chaudes.
I not have eaten but two pizzas of hot
'I have only eaten two hot pizzas.'

Besides a restrictive relative clause, a transitive adjective, or an adjective preceded by *de*, the predicate can be a present participle followed by a complement. I assume that these predicates are IPs (see also Drijkoningen 1987). The distribution of these IPs resembles that of restrictive relative clauses and transitive adjectives:

Apart from a position for the restrictive relative clauses and transitive adjectives, Ronat distinguishes three positions for intransitive adjectives and one for quantifiers. Although I accept the idea that several positions have to be distinguished, I will modify Ronat's proposals by making use of a more recent framework.

4. Quantifiers and intransitive adjectives

Basically, intransitive adjectives can be divided into two groups: prenominal and postnominal adjectives. Quantifiers only occur prenominally.

Ronat generates the postnominal intransitive adjectives to the right of the noun. But in accordance with recent assumptions in generative syntax, I assume that all intransitive adjectives are generated in the extended projections of NP (see, among others, Abney 1987; Valois 1990, 1991; Bernstein 1993a,b; Cinque 1993). A point of discussion in these studies, however, is the exact position of the adjectives: are they heads, specifiers or adjuncts? Abney proposes that adjectives are generated (in English) as the

- (ii) Le seul élève de Jean participant à la compétition est David.
the only pupil of John participating to the competition is David
'The only pupil of John's who is taking part in the competition is David.'

⁸ Although A° is the same in (i) and (ii), the APs are generated in different positions: the adjective in (i) is an intransitive adjective and is generated in one of the functional projections of NP, whereas the adjective in (ii) is a transitive adjective and therefore a predicate:

- (i) les hommes jaloux
the men jealous
'the jealous men'
- (ii) les hommes jaloux de leurs femmes
the men jealous of their wives

Sometimes the difference in adjective type (transitive or intransitive) is accompanied by a difference in meaning (see Ronat 1974). The intransitive adjective *susceptible*, for instance, means 'easily vexed', whereas its transitive counterpart means 'capable of'.

Sleeman and Verheugd (to appear) claim that the predicative use of transitive adjectives (and also of present participals and adjectives introduced by *de*, see the previous note) is caused by their having syntactic arguments. One of these arguments, in general the external one, is an empty operator. They assume that attributive adjectives, on the other hand, do not take syntactic arguments, so that they can modify the noun phrase directly. This means that in (i), the adjective is lexically intransitive. There can be no empty complement, because in that case the adjective would be a transitive adjective and therefore a DP-internal predicate.

head of the functional projection AP. Valois (1990, 1991) proposes that both in Germanic and in Romance languages all intransitive adjectives are generated in a prenominal position, in the same order in both types of languages, as adjuncts of NP and its functional (maximal) projections. The postnominal position at S-structure of adjectives in the Romance languages would be the result of N-movement to the head of NumP, a functional projection dominated by DP, which contains features that have to be checked by the noun (Ritter 1991). The prenominal position of adjectives would be the result of the adjective incorporating into the noun, which is on its way to NumP.

Bernstein (1993a) proposes that numerals and prenominal adjectives are generated in functional projections dominating NumP, whereas the adjectives that surface postnominally are generated in between NumP and NP. Most of the adjectives are adjuncts, but some of them are heads.

Cinque (1993) argues that all adjectives are generated in Spec-positions. Cinque presents several arguments in favor of this assumption, two of which will be presented here. The first argument is that adjectives generally appear in a strict order, such as in (58):

- (58) poss.> card.>ord.>qual.> size> shape> color> nat.
 (i) suoi due altri bei grandi quadri tondi grigi cinesi
 (the) his two other beautiful big paintings round gray Chinese
 'his two other beautiful big round gray Chinese paintings'

Since adjunctions are normally free, an adjunction hypothesis cannot easily account for this relatively fixed word order. A generation-in-Spec hypothesis, on the contrary, can produce the desired result more easily, since the word order can be made to follow from the hierarchical order of the functional projections in whose Specs the adjectives are generated. Hopefully, the rigid hierarchy of functional projections can be derived on independent grounds, possibly involving the kind of features realized on the head.

Cinque's second argument is that the generation-in-Spec hypothesis can explain why there is a limit on the combination of adjectives (apparently not exceeding six or seven): there is only a limited number of functional projections dominating NP in the Spec of which adjectives can be generated. The adjunction hypothesis cannot explain this restriction, because an unrestricted number of adjunctions to one and the same projection is possible in principle.

In this work, I adopt Cinque's position. My analysis of noun ellipsis in French will motivate Valois' claim that "postnominal" adjectives are generated in a pre-NP position. Since the noun has to move past these

adjectives to the head of NumP, they cannot be generated in a head position, because Travis' (1984) Head Movement Constraint would block the movement. The adjectives can then be either adjuncts or specifiers. My analysis of noun ellipsis will motivate their generation in the Spec of extended projections of NP, because I will propose that they must be able to properly govern NP. This is only possible if they are specifiers, in which case they can properly govern via Spec-Head agreement, but not if they are adjuncts.

Due to this and due to Cinque's arguments, I assume that intransitive adjectives in French are generated in the specifier of extended projections of NP. Furthermore, I adopt Bernstein's distinction between pre-NumP and post-NumP functional projections: the postnominal surface position of adjectives would be the result of the noun moving to the head of NumP, but the prenominal position of the other adjectives would not be the result of their incorporation with the noun in the course of its movement to the head of NumP, as in Valois' proposal.

Although in general I will assume that adjectives are generated in specifier positions, I will make one exception. I will assume that relational (denominal) adjectives are heads of an extended projection of NP. Since in Valois' theory the order of adjectives is the same at D-structure in Germanic and in Romance languages, relational adjectives have to be generated in a position immediately to the left of the NP, as the following Dutch example shows:

- (59) lege Parijse cafés
 empty Parisian bars

In the Romance languages, relational adjectives immediately follow NP at S-structure, as the following French example shows:

- (60) des cafés parisiens vides
 PL IND ART bars Parisian empty
 'empty Parisian bars'

However, this S-structure cannot be derived by simply moving the noun to the head of NumP, because in that case the relational adjective would not be adjacent to the noun at S-structure (cf. Lamarche 1991):

- (61) des NumP[Num[cafés], vides parisiens NP[N 4]]

I therefore assume that the relational adjective is generated as the head of a functional projection immediately dominating NP. The noun moves first

to this functional projection and incorporates with the adjective. Subsequently the complex formed by the noun and the relational adjective moves further to Num°, yielding the result shown in (60). As Ronat shows, relational adjectives cannot be combined with empty nouns, probably because they have to incorporate with a noun. Therefore, they will not play any role in this study.⁹

Apart from DP I distinguish at least 3 pre-NumP functional projections: one for the numerals, which are generated in [Spec, QP], one for the ordinals, *seul, autre, même, prochain, précédent* and *suivant*, which I will call *ord*AP, for ordering adjectival phrase; and one for the “prenominal” adjectives and “prenominal” superlatives, which I will call *pre*AP.¹⁰ Furthermore, I distinguish at least two post-NumP positions: one for the “postnominal” intransitive adjectives (among which the color adjectives) and “postnominal”

⁹ Grevisse (1988:307) notes that even relational adjectives sometimes allow noun ellipsis. This seems to be a rather marginal phenomenon, however, due to the fact that relational adjectives have to be interpreted in relation to a noun (see, e.g., Hietbrink 1990):

- (i) Elle allait désertier le règne végétal et sauter par-dessus le minéral.
she was going leave the kingdom vegetable and jump over the mineral
'She was going to leave the vegetable kingdom and go over to the mineral kingdom.'

¹⁰ Hulk (1982) shows that in spoken French, cardinals can be followed by *de*:

- (i) J'en ai une de casserole qu'elle est trouée.
I have one of pan that she is perforated
'I have a pan with a hole in it.'

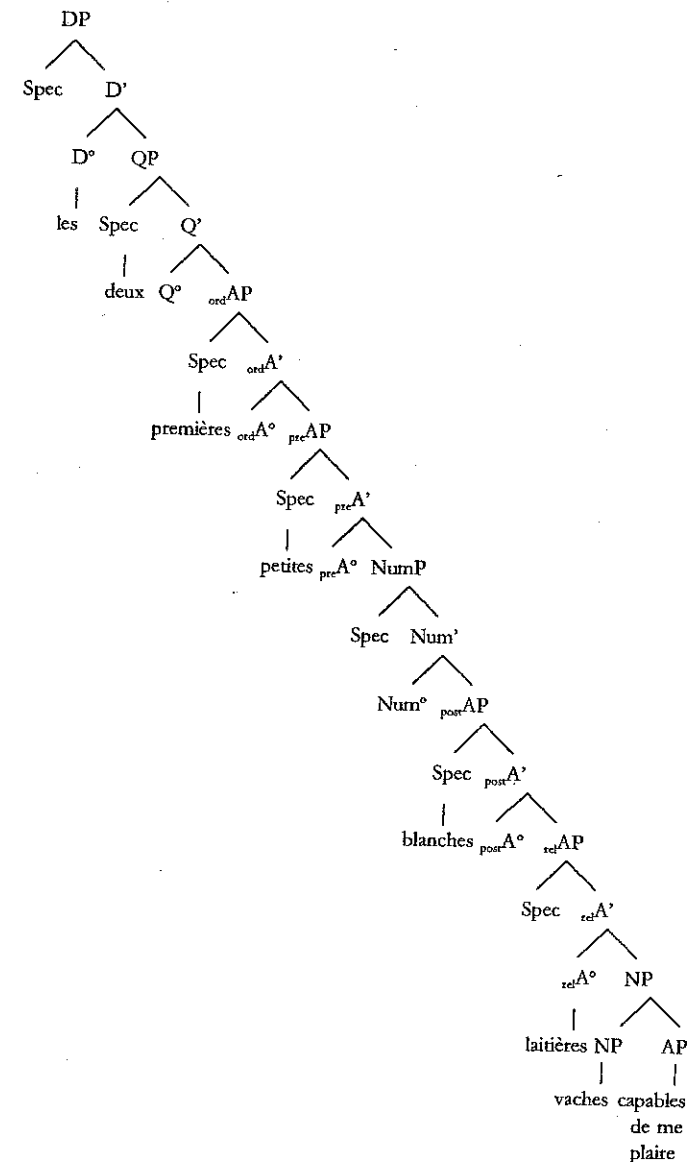
Hulk assumes, with Milner (1978), that in all varieties of French, cardinal numbers are followed by *de* at D-structure, which is deleted later in the derivation. Whether it is assumed that *de* is present at D-structure or not, the example shows that besides the generation of “postnominal” adjectives the generation of cardinal numbers in a specifier position, viz. the spec of QP, is also motivated. Corver 1990 and Hulk & Verheugd 1992, 1994 assume that *de* is the head of QP.

Another piece of evidence for Spec-positions might be provided by right-dislocated nouns introduced by *de*. I propose that, in these cases, the right-dislocated part, which is right-adjoined to NP (see also Hulk 1996), is a copy of the functional projection that contains the licenser of the ellipsed noun plus its complement, the NP. Whereas the head of this functional projection is spelled out in the right-dislocated part as *de*, the specifier is empty but bound by the licenser of the empty noun. Right-dislocation is possible in all cases of noun ellipsis (see Milner 1978; Azoulay-Vicente 1985):

- (ii) C'est *pre*AP[[la plus intelligente]_{NP} [*pro*]_{XP}[[e']_{X₀} [*de*]_{NP} [*fille*]]].
it is the most intelligent, of girl
'She is the most intelligent girl.'

superlatives, which I will call *post*AP, and one for the relational adjectives, which I will call *rel*AP. Combined with the proposal for transitive adjectives (see the previous section), this yields the following D-structure:

(62)



After incorporation of the noun with the relational adjective, the noun moves to Num°. This yields the following S-structure:

- (63) les deux premières petites vaches laitières blanches capables de me plaire
 the two first little cows dairy white capable of me please
 'the first two little dairy cows that please me'

The assumption of structure (62) leads us to the following observations with respect to the noun ellipsis facts presented in §2 of this chapter. Adjectives base-generated to the right of the noun (i.e. transitive adjectives) never allow noun ellipsis (cf. (36)), whereas some of the adjectives generated to the left of the noun do. Therefore I tentatively conclude that the possibility of noun ellipsis in French partly depends on the adjective being base-generated to the left of the noun. I will formalize this idea in §7. In that section, I will propose that empty nouns have to be properly governed by an element with a partitive meaning. Since government is to the right in French, and furthermore involves a head-complement relation, it follows that right-adjuncts cannot allow ellipsis of the noun.

After having discussed and revised Ronat's proposals with respect to the adjective and quantifier position in NP (see the representation in (62)), I now turn to the status of the empty noun.

5. The empty noun

In earlier accounts of noun ellipsis constructions in French, the empty nominal was represented as a subphrasal gap, an N° or an N' (see e.g. Ronat 1977; Hulk 1982, 1984).

Lobeck (1991), however, claims that at least in English an ellipted constituent has to be a maximal projection, not only in noun ellipsis cases, but also in other ellipsis cases. Thus in (64) the ellipted constituent is IP, in (65) it is VP and in (66) it is NP (the examples are Lobeck's):

- (64) Even though she doesn't know exactly $_{CP}[who \text{ } _{IP}[e]]$, Mary thinks that someone interesting is speaking tonight.
 (65) Because Mary $_{IP}[might \text{ not } _{VP}[e]]$, John will attend the rally.
 (66) Although John's friends were late for the rally, $_{DP}[Mary's \text{ } _{NP}[e]]$ came on time.

The structure that I have proposed for the French DP strongly suggests that in French the gap is also a maximal projection. Quantifiers and prenominal adjectives are generated in the specifier of extended projections of NP, whereas transitive adjectives are right-adjoined to NP.

A possible counterargument to the claim that in noun ellipsis constructions the gap is a maximal projection is that for example in (67) the complement PP seems to be dominated by N' , because it is a complement of the empty head of the NP. Therefore it seems that the gap is not maximal here:

- (67) Ce fut le premier bombardement de la partie sud de la ville,
 mais déjà le troisième de la partie nord.
 it was the first bombardment of the part south of the city, but
 already the third of the part north
 'It was the first bombardment of the southern part of the city,
 but already the third of the northern part.'

In my opinion this is only an apparent counterexample. In recent literature (e.g. Grimshaw 1990) it is proposed that only a certain type of noun (complex event nominal) has syntactic arguments, i.e. arguments dominated by N' . A property of complex event nominals is that they do not pluralize and cannot be combined with a demonstrative, an indefinite determiner, or with numerals. In the next section I will show that the adjectives that allow noun ellipsis have a partitive meaning and mean, roughly, the one or the ones from a given set (corresponding to a certain property). I therefore assume that, just as numerals, they cannot be combined with complex event nominals. The noun *bombardement* in (67) then has to be "treated as though it referred to an individual rather than an event" (Grimshaw 1990:55) and means: an instance or case of bombardment. The nominal behaves like a result nominal in this case. Grimshaw claims that result nominals, although they can have semantic arguments, do not have a syntactic argument structure. I assume therefore that in (67) the PP is not a complement dominated by N' but, as Grimshaw proposes, an (A-)adjunct to NP. As a result, the gap is a maximal projection.

Partitive constructions might also represent a possible counterargument to the claim that the gap is a maximal projection. Cardinaletti & Giusti (1991), however, claim that in partitive constructions the prepositional phrase is not dominated by N' or NP but is part of the QP projection. Under this analysis, the gap can be a maximal projection:

- (68) J'ai lu $_{QP}[trois \text{ } _{NP}[e] \text{ } _{PP}[de \text{ ses livres}]]$.
 I have read three of his books

I therefore assume that the gap in partitive constructions is a maximal projection which is licensed in exactly the same way as the gap in non-partitive constructions (see §8).

After having proposed a detailed structure for the French DP, I now turn to the licensing and identification of the empty nominal in noun ellipsis constructions. Two questions need to be answered:

1. Why are transitive adjectives unable to license noun ellipsis?
2. Why do only some intransitive adjectives (besides quantifiers) license noun ellipsis?

I have suggested in §4 of this chapter, that the fact that transitive adjectives do not license noun ellipsis has to do with their position within the DP: they are right-adjoined to NP. I formalize this idea in §7. As for the second question, in the next section I propose that the intransitive adjectives that license noun ellipsis have different semantic properties than other adjectives. I will propose that the fact that only elements with certain semantic properties allow noun ellipsis follows from licensing principles.

6. Partitivity

In §4 I proposed a DP-structure for French noun phrases with several functional projections above NP. Almost all of these functional projections of NP can contain elements that allow noun ellipsis in their Spec: cardinal numerals in [Spec, QP]; ordinals, *seul*, *autre*, *même*, *prochain*, *précédent* and *suivant* in [Spec, _{ord}AP]; *grand*, *petit* and the pronominal superlatives in [Spec, _{prc}AP], and the color adjectives and the postnominal superlatives in [Spec, _{post}AP].¹¹ The ability of an element to license noun ellipsis seems therefore not to be related to the functional projection in which it is generated; the

¹¹ According to Lamarche (1991), word order differences between the adjectives in French and in English, as in (i)-(iii), strongly suggest that the postnominal position of adjectives in the Romance languages cannot be the result of noun movement:

- | | |
|-------|---|
| (i) | a rusty white car |
| (ii) | *une voiture _i rouillée blanche t _i |
| (iii) | une voiture _i blanche rouillée t _i |

However, in my opinion, these problems can easily be solved. I propose that (ii) is ungrammatical because French has only one _{post}AP functional projection. The two adjectives in (ii) cannot both occupy this position. On the other hand, (iii) is grammatical because the adjective *rouillée* in (iii) is adjoined to the right of NP and functions thus as a predicate (see Cinque 1993 for a similar proposal). I propose that if [Spec, _{post}AP] is already occupied, adjectives may be generated as an adjunct of NP. The deverbal nature of *rouillée* favors its being used as a predicate adjoined to NP. That is why (iii) is grammatical, whereas (ii) is not.

elements that license noun ellipsis are generated in several functional projections of NP. Furthermore, adjectives that do not license noun ellipsis are also generated in some of the same functional projections. The adjective *intéressant* 'interesting', for instance, is generated in [Spec, _{post}AP], just as the color adjectives and the postnominal superlatives. But as we have seen in (6), *intéressant* does not license noun ellipsis.

If the possibility for an element to license noun ellipsis is not related to a special functional projection, then what makes it license noun ellipsis? I propose that the reason that some elements license noun ellipsis is that these elements have a partitive meaning. This is very clear in the case of the cardinals in [Spec, QP], of the ordinals in [Spec, _{ord}AP] and of the superlatives in [Spec, _{prc}AP] and [Spec, _{post}AP]. All of these types can be combined with a partitive PP:

- | | |
|------|--|
| (69) | J'ai lu trois de vos livres. I have read three of your books |
| (70) | Je préfère le troisième de vos livres. I prefer the third of your books |
| (71) | C'est le plus intéressant de vos livres. It is the most interesting of your books |

Notice that even without a partitive PP these elements still express a partitive meaning:

- | | |
|------|--|
| (72) | Tu as lu tous ses livres? Non, je n'ai lu que le troisième. you have read all his books? No, I not have read than the third 'Have you read all his books? No, I have only read the third.' |
|------|--|

But whereas cardinals, ordinals, and superlatives can be combined with a partitive PP ((69)-(71)), which shows that they have a partitive meaning, the adjectives *autre* and *même* for instance and the adjectives of quality that license ellipsis of the noun cannot be combined with a partitive PP:

- | | |
|------|--|
| (73) | *Je préfère l'autre de ces robes. I prefer the other of these dresses |
| (74) | *Je préfère la grande de ces filles. I prefer the tall of these girls |

Therefore *autre* and *même* and the adjectives of quality do not seem to license noun ellipsis by means of a partitive meaning.

However, *partitive* does not necessarily have to mean 'combinable with a partitive PP'. Enç (1991) associates partitivity with specificity. Specific DPs are always included within a set established in the domain of discourse. The ordinal in (70) and (72) is provided with specificity features. In both cases, there is a superset in the domain of discourse of which the DP containing the ordinal is a subset. In (70) it is the partitive PP which denotes the superset and in (72) the superset is denoted by the DP *tous ses livres* in the previously uttered sentence. Enç associates partitivity/specificity with a familiarity reading. The DP contains information that is mentioned in the domain of discourse and is therefore not new but rather familiar information. An example is given in (75). If a DP contains novel information, there is no specificity reading, as in (76) (see Heim 1982 for the distinction between novel and familiar information):

- (75) Several children entered my room. Two girls began to talk to me.
 (76) - What have you done today? - I have bought two books.

In (75), *two girls* has a specific interpretation. We are dealing with the inclusion of a set (*two girls*) in a superset present in the domain of discourse (*several children*). Therefore, the subset contains familiar information.

In this thesis, I claim that the licensing of empty nouns in French and in some other languages is only possible if the empty noun occurs within a specific DP. Nounless DPs have to be associated with another DP in the context, because the empty noun has to receive an interpretation. Therefore, specificity is required, because otherwise the empty noun cannot be interpreted.

However, whereas Enç associates partitivity with specificity, I make a distinction between these two notions. In this work, I use the notion *partitivity* in a way different from Enç's usage. In this work *partitive* will simply mean 'properly or improperly included within' (cf. Belletti 1988 where partitivity refers to nonspecifics). *Partitivity* will thus mean 'potentially but not necessarily specific', for reasons to be made clear in §8. Therefore, both in (75) and (76), *two* will be considered to be a partitive element, although the DP only has a specific interpretation in (75). In §8, we will see that even if the DP contains novel information (and is thus nonspecific), a subset is formed out of the superset denoting the kind.

Partitivity entails the inclusion in a set. I claim that proper or improper inclusion plays an important role in the licensing of empty nouns in French and several other languages. I will make a distinction between elements that always imply the inclusion in a set and elements that do not. The first group contains quantifiers, superlatives, ordinals, adjectives such as *seul*, *autre*, *même*,

précédent, *prochain*, and *suiuant* (in the next chapter I will add pronouns to this group). These elements do not themselves denote properties and can therefore only be used as attributes to form a subset. I will use the notion *D-partitivity* to refer to this group of elements. In this thesis, I show that D-partitives allow noun ellipsis in all Romance languages that will be discussed and in English.

I contrast D-partitives with N-partitives. I use the notion *N-partitivity* to refer to elements that denote a property themselves and can therefore be used as predicates. Since N-partitives denote a property, their attributive use results in the intersection of two properties: one denoted by the adjective and the other denoted by the noun. The intersection forms a subset of the kind denoted by the noun. N-partitives are adjectives of quality. In §4.7 I will show that superlatives are D-partitives and not N-partitives although they denote a quality.

I show that in most languages discussed here, N-partitives, which do not necessarily form a subset because they denote properties themselves, do not license or only marginally license empty nouns. I claim that French forms an exception. In French N-partitives can license empty nouns.

However, not all French N-partitives can license noun ellipsis. We have seen that only color adjectives and other "classifying" adjectives of quality (in a sense to be made precise in §4.4) can do so. Although N-partitives, i.e. adjectives of quality, are not partitive in the sense that quantifiers are, I propose that they are partitive in a more loosely defined sense. In §4.4, I will propose that the "classifying" adjectives of quality that license empty nouns have to express cognitively relevant, distinctive, notions such as colors and distinctions such as 'good'-'bad', 'big'-'small' or 'old'-'new' (but see footnote 3). Only these adjectives of quality universally serve to create subsets at a cognitive level. Their use is therefore almost naturally associated with the existence of a superset. This relates them to the D-partitives, the difference being that "classifying" adjectives of quality do not necessarily form subsets, but can also be used predicatively, whereas D-partitives necessarily form subsets. I propose that only adjectives of quality that express cognitively relevant distinctive notions are "partitive enough" to license empty nouns.

The discussion of the notion *partitivity* in this section has shown that my usage of this notion is quite different from Enç's. Both in Enç's usage and in my usage, *partitivity* means 'properly or improperly included in'. This is discussed in chapter 3 (§10). In that chapter I assume that both the pronouns *quelques-uns* 'some' and *tous* 'all' have a partitive meaning. The difference between these two pronouns is that *quelques-uns* denotes a set that is *properly* included in another set, whereas *tous* denotes a set that is identical to the superset. In the latter case there is *improper* inclusion. But whereas in

Enç's usage partitives always have a "specific" interpretation, I use the notion even for "non-specific" cases. This will become clear in §8 of this chapter and in chapter 4, where I discuss the quantitative pronoun *en*. I will claim that *en* is used instead of an empty noun if the partitive element which governs this empty noun has a "non-specific" interpretation. My usage of the notion *partitivity* differs in another respect from Enç's. Whereas in Enç's usage partitives are D-partitives, i.e. inherent partitives, whose function it is to form a subset of a DP (or an NP), in my usage they can also be N-partitives, i.e. accidental partitives, which can create a subset of a set denoted by a noun, but which do not necessarily have this function. A relatively small number of adjectives of quality in French are N-partitives. All other adjectives of quality are neither D-partitives nor N-partitives. Therefore they cannot license noun ellipsis. These distinctions are schematized in table 2.1:

table 2.1

partitives

| | |
|-----------------------|--|
| <i>D-partitives</i> | cardinals, superlatives, ordinals, <i>seul, autre, même, précédent, prochain, suivant</i> , pronouns |
| <i>N-partitives</i> | color adjectives, <i>grand, petit, ...</i> |
| <i>non-partitives</i> | all other adjectives of quality |

I have proposed that elements that license ellipsis of the noun always have a partitive reading (D-partitivity or N-partitivity). In the next two sections, I will formalize the idea that numerals and a restricted class of adjectives allow noun ellipsis because of their partitive meaning.

7. Licensing of the empty noun

We have seen in §5 that according to Lobeck (1991), the ellipted element in English ellipsis cases is a maximal projection. Lobeck argues that the ellipted element is a base-generated empty pronominal, viz. *pro*. Lobeck shows that just as overt pronominals ellipted elements have the following properties:

- (77) *Ellipsis:*
- ellipsis can occur in either a coordinate or subordinate clause separate from that containing its antecedent;
 - ellipsis can occur across "utterance boundaries";
 - ellipsis obeys the backwards anaphora constraint, which means that the ellipted constituents can precede, but not command, their antecedents;
 - ellipsis can not only have a syntactic antecedent, but also a pragmatic antecedent.

Lobeck illustrates these properties with four pairs of sentences, one containing an ellipted element and one an overt pronoun.

Property *a* is illustrated by sentences (78)-(79):

- (78) We liked some wines from France but/although most *e* were too dry.
 (79) Sue eats fish and/because she hates meat.

Sentences (80)-(81) show that both ellipsis and overt pronouns occur across utterance boundaries:

- (80) A: John caught a big fish.
 B: Yes, but Mary's *e* was bigger.
 (81) A: Does Sue eat fish?
 B: Yes, but she hates it.

In (82)-(83) it is shown that both ellipsis and overt pronouns obey the backwards anaphora constraint:

- (82) a. Although most *e* were too dry, we liked some wines from France.
 b. *Most *e* were too dry, although we liked some wines from France.
 (83) a. Because she doesn't like meat, Sue eats fish.
 b. *She doesn't like meat because Sue hates killing animals.

Property *d* is illustrated by (84)-(85): both ellipsis and overt pronouns can have a pragmatic antecedent:

- (84) (Sarah and Geoff have two sons, Charlie and Sam. The two boys are playing with their new toys. Charlie's breaks.)
 Sarah: Sam's *e* better not do that.
 Geoff: Some *e* are just poorly made, I guess.
- (85) (John walks into the kitchen and finds milk spilled all over the floor and two guilty-looking kids. John.)
 A: All right, who did it?
 B: He did it.
 C: No, I didn't. She did it.

Lobeck claims that the ellipted element, *pro*, is licensed by being properly governed by the head of a functional projection dominating the ellipted constituent. The head can either be a [+Kase] head (which licenses a specifier in its projection at the same time, see Fukui & Speas 1986), a [+Q] head, or a [+Num] head. The head of the DP in (66), repeated here as (86), is a [+Kase] head; *three* in (87) is [+Q], and *these* in (88) is [+Num]:

- (86) Although John's friends were late for the rally, _{DP}[Mary's _{NP}[*e*]] came on time.
- (87) I have taken three _{NP}[*e*].
- (88) I prefer these _{NP}[*e*].

Lobeck formulates the following constraint to account for the English ellipsis facts:

- (89) PROPER GOVERNMENT OF ELLIPTED CATEGORIES (Lobeck 1991):
 [*e*] must be canonically governed by a functional head specified as [+Kase], [+Q], or [+Number].

Since this constraint is rather stipulative and since the governors form a heterogeneous set of elements, Lobeck (1993) tries to give a more unified and a less ad hoc account for noun ellipsis:

- (90) LICENSING AND IDENTIFICATION OF EMPTY NOMINALS
 An empty nonarbitrary pronominal must be governed by an X° specified for "strong" agreement.

Lobeck (1993, 1995) replaces the features [+Q] and [+Number] by [+Plural] and the feature [+Kase] by [+Poss], because the licenser must be specified for "strong" agreement, i.e. must bear features which can be realized in a morphological way (such as by inflection). However, these features may also be expressed in another way. Cardinals, for instance, express plurality.

Lobeck defines agreement as follows:

- (91) AGREEMENT
 A head Y is specified for agreement iff Y shares features with another head or phrase that it governs.

Lobeck's approach to ellipsis resembles proposals that have been made in the literature for the Germanic languages (see §1), in that in both cases the licensing of ellipsis is related to the licensing of empty subjects in pro-drop languages. In both cases morphology plays an important role.

However, I have shown that noun ellipsis in French does not seem to be licensed by inflection morphemes. In the previous section, I proposed that noun ellipsis in French is licensed by elements with a partitive interpretation.

It must be noted that the mere presence of a partitive element within the DP is not sufficient to license ellipsis of the noun. In the following example there is a partitive element, viz. the ordinal, but nevertheless the sentence is ungrammatical:

- (92) *C'est la troisième intéressante *pro*.
 it is the third interesting

Clearly what is required is that the partitive element be adjacent to the empty noun. Therefore I adopt the proper government requirement in (89) but propose that at least in French, the feature [+partitive] licenses noun ellipsis.

- (93) PROPER GOVERNMENT OF ELLIPTED NOUNS IN FRENCH
 [*e*] must be canonically governed by a functional head (or its specifier) specified as [+partitive].

Lobeck (1993: note 14) assumes that the feature [+partitive] is a "strong" agreement feature. She adds it to the already proposed list of features to account for the ungrammaticality of (94). Although both *a* and *one* bear the feature [-plural], which cannot license empty nouns, *one* bears the feature [+partitive], whereas *a* does not:

- (94) **a* of the men
- (95) *one* of the men

Although the feature [+partitive] may be morphologically realized in some languages, often on nouns (see §4.3), I assume that this possible morphological realization of the feature [+partitive] is not what causes

licensing of empty nouns. In the previous section, I argued that partitivity plays an important role in the licensing of noun ellipsis, since an antecedent has to be recovered from the discourse. Partitivity is a semantic feature rather than a morphological feature. In this and the following chapter I propose that partitivity licenses all cases of noun ellipsis, even those cases for which Lobeck claims that the features [+plural] (*these*) and [+poss] (*Mary's*) play an important role.¹²

In §4 I assumed that in French, quantifiers and intransitive adjectives are generated in the Specifier position of extended projections of NP. Although the specifier cannot properly govern NP from this position, Spec-Head Agreement will make the empty head of the functional projection able to properly govern the NP. Therefore, it is not necessary to assume that quantifiers or adjectives are the head of extended projections of NP. That Spec-Head agreement can provide a head with properties which it did not have before, is also proposed by Rizzi (1990) for CP and NP. In these cases, the head becomes a proper governor through Spec-Head agreement.

In §4, I showed that licensors of NPs can be the specifier of almost all extended projections of NP. Why do intervening (empty) functional projections not block proper government? A first possibility is that besides Spec-Head agreement, there is Head-Head agreement, so that the specifier of a higher functional projection can license the empty NP although there are intervening empty functional projections. A second possibility is that intervening functional projections do not have a blocking effect when (and only when) they are empty. An alternative possibility is that functional projections are projected only if they are required to host lexical material (or lexical features) (cf. Chomsky 1992). I will not decide on this matter here. What should be noted, however, is that I assume NP *pro* to be licensed in

¹² Note that at first sight there seems to be no French equivalent of (88):

- (i) *Je préfère ces.
I prefer these.

I propose however that the equivalent of (88) is (ii), with *ceux* as the pronominal form of *ces*:

- (ii) Je préfère ceux-ci.
I prefer these here
'I prefer these ones.'

In chapter 3 I propose that in (ii), NP also dominates an empty pronominal licensed by the demonstrative (see also Corblin 1990), which is in the Spec of an extended projection of NP (cf. Grosu 1992).

its base-position. It would in principle be possible to assume that the head, N^0 , raises to the empty head of the functional projection containing the licenser in its Spec. But in §5 I argued that NP *pro* is a maximal projection (NP). Furthermore, I propose in this thesis that NP *pro* is the empty variant of the quantitative pronoun *en*. In chapter 3, I propose that *en* is moved as a maximal projection out of DP. Although I assume that NP *pro* is not moved, its assimilation to *en* suggests that it is not moved via head-movement in order to be licensed. Therefore I assume that it is licensed in its base-position.

In Lobeck's system Spec-Head Agreement also plays an important role. She defines "strong" agreement as follows:

- (96) STRONG AGREEMENT
An X^0 is specified for strong agreement iff
- (i) the X^0 , or a phrase or head coindexed with it, is specified for agreement and
 - (ii) agreement is morphologically realized on X^0 or on the phrase or head coindexed with it.

An example of Spec-Head agreement in Lobeck's system is genitive phrases in [Spec, DP]. While D^0 contains the feature [+Poss] ((i)), agreement is morphologically realized in [Spec, DP] by means of the genitive marker '*'*' ((ii)). An X^0 can thus be specified for strong agreement although agreement is morphologically realized on its sister. In the same vein, I assume that specifiers in extended projections of NP can formally license the complement of the head with which they are coindexed through Spec-Head agreement.

According to (90), empty nominals are both formally licensed and identified by a governing head specified for "strong" agreement in Lobeck's system. I propose that elements with a partitive meaning can formally license noun ellipsis but do not necessarily identify the empty noun. In the next section, I discuss the identification of NP *pro*.

8. Specificity

Cardinaletti & Giusti (1991) make use of Rizzi's (1986) theory on the licensing of small *pro* in order to account for noun ellipsis data in Italian. Rizzi claims that *pro* not only has to be formally licensed, but also has to be identified. He states that the formal licenser of *pro* is also its identifier. A well-known example is subject *pro*, as in the Italian example (97), which has

to be identified by AGR by means of the features person and number, because this increases its recoverability from the context:

- (97) *pro* parla italiano.
speaks Italian
'He/she speaks Italian.'

According to Cardinaletti & Giusti, the difference in grammaticality between (98) and (99) is due to the fact that in (98) the ellipted noun can be identified by AGR via the quantifier, whereas in (99) AGR cannot identify *pro*:

- (98) Trois *pro* arriveront demain.
three will arrive tomorrow
(99) *J'ai lu trois *pro*.
I have seen three

Cardinaletti & Giusti propose that as well as AGR, a partitive PP can also identify subphrasal *pro*, thus departing from Rizzi's statement that the formal licenser has to be the identifier. This explains why (100) is grammatical, even though the DP is in object position, so that *pro* cannot be identified by AGR:

- (100) J'ai lu trois *pro* de ses livres.
I have read three of his books

In the previous section, I proposed that NP *pro* in French is formally licensed by a properly governing element with a partitive meaning. In this section, I will claim that NP *pro* has to be identified by a partitive element with a "specific" meaning. I will claim that the difference in grammaticality between (98) and (100) on the one hand, and (99) on the other, has to do with the specific or nonspecific interpretation of the nounless DP.

Just as small *pro* in (97) is the empty counterpart of nominative third person singular pronouns, I propose that NP *pro* is the empty counterpart of the quantitative pronoun, which is *en* in French. I proposed that NP *pro* is licensed by the feature [+partitive]. In chapter 4, I do the same with respect to *en*. The formal licensing and identification of NP *pro* thus consists in providing the empty pronoun with feature content. It is identified as a partitive pronoun.

In this manner I make a distinction between syntactic identification and interpretation. A local element identifies NP *pro* as an (empty) partitive pronoun and a discourse antecedent provides it with a semantic content.

This also happens in the case of subject *pro*, as in (97). The verbal inflection identifies the empty subject as a third person singular pronoun and a discourse antecedent provides it with a semantic content. By requiring that NP *pro* has to be identified by a local element (i.e. an element with specificity features), I depart from Chao (1987), for whom discourse interpretation is sufficient.

Just as overt pronouns, empty pronouns refer to a noun in the context. Being a pronoun, NP *pro* has to refer to a noun in the context, just like *en*. Linking to a noun in the context is only possible if the nounless DP has a "specific" meaning. In chapter 3, I propose that *en* is inherently specific (i.e. anaphoric). I propose that NP *pro* is not inherently specific in French, but, being the empty counterpart of NP *en*, has to be licensed by an element with a "specific" partitive meaning.

Enç (1991) identifies linking with specificity. She notes that DPs can be definite or indefinite and specific or non-specific. Elaborating on Heim's (1982) theory of definiteness, Enç assumes that all DPs carry a pair of indices. The first index represents the referent of the DP. The second index represents a referent in the domain of discourse of which the referent of the DP is a subset:

- (101) Every $[DP \alpha]_{\langle i,j \rangle}$ is interpreted as $\alpha(x_i)$ and
 $x_i \subseteq x_j$ if $DP_{\langle i,j \rangle}$ is plural,
 $\{x_i\} \subseteq x_j$ if $DP_{\langle i,j \rangle}$ is singular.

The indices themselves bear a definiteness feature. The feature on the first index determines the definiteness of the DP. The definiteness feature on the second index determines the specificity of the DP by constraining the relation of the referent of the DP (x_i) to a discourse referent x_j that is already in the domain of discourse prior to the utterance of the DP. If the index j is indefinite, a new referent x_j is introduced into the domain of discourse and this referent will have x_i , the referent of the DP, as its subset. Enç notes that the properties of the novel superset in this case are presumably just those recovered from the head noun of the DP.

Definiteness and specificity of DPs are related phenomena. Heim's Familiarity Condition states that all definites must be familiar, in the sense that the discourse referents they are mapped onto must have been previously introduced into the discourse. In other words, definites must have antecedents. Therefore, if the index i is definite, the index j is also definite. For example this is the case in (102):

- (102) Yesterday I bought two books. Today I read the books.

Indefinites can be either specific or nonspecific. An indefinite DP such as *two books* in (103) can be either specific or nonspecific:

- (103) I have read two books.

In both cases the feature on the index *i* is indefinite. But whereas in the specific reading the feature on the index *j* is definite, it is indefinite in the non-specific reading. In the first case there is a discourse referent (x_i) in the previously uttered domain of discourse. In the second case, a new referent (x_j) is introduced into the domain of discourse (*books*), and the referent of the DP (x_i) is a subset of this referent.

Specificity (or presuppositionality in Diesing's 1992 terms) thus means that the referent of a denoting DP is linked to a previously established discourse referent.

Partitives such as *two of the books* refer to groups that are subgroups of the referent of the DP contained in the partitive PP (*books*). Enç notes that this can be ensured by requiring that the second index of the partitive DP be identical to the first index of the definite DP contained in it. Therefore, partitives are necessarily specific. Partitives involve noun ellipsis. The content of the empty noun is recovered from the discourse referent, i.e. the partitive PP.

Above we have seen that indefinite DPs can in principle have a specific and a non-specific reading. I have proposed that a specific reading is necessary for the nounless DP to be linked to an antecedent. Enç (1991) demonstrates that, in Turkish, an accusative Case morpheme on a DP in object position shows that the DP has a specific reading. While (104) has a specific reading, (105) has a non-specific reading:

- (104) İki kız-i taniyordum.
two girl-Acc I-knew
'I knew two of the girls.'
- (105) İki kız taniyordum.
two girl I-knew
'I knew two girls.'

Diesing (1992) shows that scrambling in Germanic languages has the same effect. The following examples from Dutch show that the scrambled DP gets a specific interpretation, whereas the non-scrambled DP has a non-specific interpretation:

- (106) Ik heb drie artikelen in de trein gelezen.
I have three papers in the train read.
'I read three papers SPEC in the train.'
- (107) Ik heb in de trein drie artikelen gelezen.
I have in the train three papers read.
'I read three papers NON-SPEC in the train.'

This is as predicted by Diesing's mapping hypothesis, according to which material within VP gets a non-specific interpretation, whereas material outside VP gets a specific interpretation. The scrambled DP vacates the VP, whereas the non-scrambled DP remains within the VP.

Although French does not have any special morpheme (or scrambling) which indicates that a DP is specific, it has other devices. First, we have seen that a partitive PP necessarily provides a partitive element with a specific reading. Second, according to Enç, definite DPs do necessarily have a specific interpretation. Third, subject DPs tend to have a specific interpretation, in accordance with the mapping hypothesis (Diesing 1992).

In all three cases, NP *pro* is possible. NP *pro* is possible in a subject DP, as in (98), in combination with a partitive PP, as in (100), and in a definite DP, as in (108):

- (108) Je préfère le troisième *pro*.
I prefer the third

Indefinite (non-partitive) object DPs, on the other hand, in general have a non-specific interpretation (Diesing 1992). I propose that this is the reason for the ungrammaticality of (99). Since the DP does not have a specific interpretation, NP *pro* cannot be linked to an antecedent. In chapter 3, I propose that the use of the overt pronoun *en* makes the DP specific. We will see in chapter 4 that the use of *en* can therefore make (99) grammatical, since specificity makes linking to an antecedent possible.

It should be noted that in Enç's theory supersets are always DPs. What I would like to propose, however, is that in the case of nounless DPs simple nouns referring to kinds can also be considered to be supersets. This is what happens in (109):

- (109) Je n'aime pas ces robes vertes. Je prends la bleue.
I neg like neg these dresses green. I take the blue
'I do not like the green dresses. I will take the blue one.'

In this case the superset is not formed by the DP *ces robes vertes*, but simply by the noun denoting a kind: *robes*. This is also possible with cardinals:

- (110) Several students came in. Two stayed outside.

The superset of the nounless DPs in (109) or (110) could also be whole DPs instead of simple nouns:

- (111) - Laquelle de ces robes prends-tu? - Je prends la bleue.
which (one) of these dresses take you? I take the blue.
'Which dress will you take? I will take the blue one.'
(112) Four students came to my house. Two stayed outside.

But there are also adjectives which only allow a simple noun - and not a DP - as the superset:

- (113) Je n'aime pas ces robes-ci. Je préfère l'autre.
I neg love neg these dresses-here. I prefer the other
'I do not like these dresses. I prefer the other one.'
(114) *De ces robes, je préfère l'autre.
of these dresses, I prefer the other

In fact, we could say that noun ellipsis always implies the inclusion of a subset in a previously established set denoting a kind. Even if the superset is a DP, as in (111) and (112), the empty noun refers to the noun within the DP. In this case, however, the nounless DP denotes a set which is included in the DP that denotes the superset, just as in the case of DPs containing a partitive PP. In (109), (110), and (113), on the other hand, the nounless DP denotes a subset that is distinct from the subset denoted by a DP in the domain of discourse. The noun denoting a kind forms the superset of these distinct subsets.

The account of noun ellipsis that I have given so far is more natural than Ronat's account. We do not need a special constraint, such as Ronat's N'-constraint, because the restrictions automatically follow from licensing and discourse interpretation considerations. Empty nouns have to be licensed and to be linked to a noun in the domain of discourse. Elements with a partitive meaning formally license NP *pro*. Specificity identifies NP *pro*.

In the next section, I show how this account of noun ellipsis can explain the data presented in §2.

9. Explanation of the data

The proposal developed in this chapter also has advantages above Ronat's from an empirical point of view, because it can account for the cases that

were a problem for Ronat, i.e. sentences (38)-(39), repeated here as (115)-(116):

- (115) *Je n'ai pas entendu les deux intéressantes *e*.
I neg have neg heard the two interesting
'I have not heard the two interesting ones.'
(116) *C'est le seul captivant *e* que j'aie lu.
it is the only captivating that I have read

Following Cinque (1993) I assume that all intransitive adjectives are generated in Spec-positions. The ungrammaticality of (115)-(116) is then the result of Relativized Minimality (Rizzi 1990): Proper Government of *pro* by the quantifier, or rather by the phonologically empty head of the functional projection via Spec-Head Agreement is blocked by the presence of an intervening functional head containing the intransitive adjective in its Spec. Although this functional head is phonologically empty, it is a potential head governor. Since I assume that Spec-Head Agreement can turn an empty functional head into a head governor, the intervening functional head is a potential head governor, despite the fact that the adjectives in (115) and (116) do not contain the feature [+ partitive]. For this reason, these sentences are unacceptable.

Sentences (117)-(121), on the other hand, are grammatical; in these sentences the adjective, being of the appropriate semantic type, licenses the empty noun. In (117) the ordinal licenses the empty noun:

- (117) Je préfère les deux premiers *e*.
I prefer the two first
'I prefer the first two.'

In (118) the adjective of quality is an N-partitive and can therefore license the empty noun. The color adjective in (119)-(120) is also an N-partitive:¹³

¹³ Although Relativized Minimality does not prevent the color adjective from licensing the empty noun in sentence (i), it is ungrammatical:

- (i) *Je préfère la rouillée verte *pro*.
I prefer the rusty green

It was proposed in footnote 10 that there is only one _{post}AP projection in French. Since both adjectives in (i) are postnominal adjectives, both have to be generated in the Spec of this functional projection. This explains the ungrammaticality of (i). However, if we reverse the order of the adjectives, the result improves:

- (118) Je préfère les deux grands *e*.
I prefer the two tall
'I prefer the two tall ones.'
- (119) Je prends la petite verte *e*.
I take the small green
'I will take the small green one.'
- (120) Ce sont les deux seules vertes *e* que nous ayons.
it are the two only green that we have
'These are the only two green ones that we have.'

In (121) the empty noun is licensed by the superlative:¹⁴

- (121) Paul et David sont les deux plus intelligents *e*.
Paul and David are the two most intelligent (ones)

- (ii) Je préfère la verte rouillée.
I prefer the green rusty
'I prefer the rusty green one.'

I propose that, in (ii), the adjectival participle is a right-adjunct, because [Spec, _{post}AP] is already filled. Sleeman & Verheugd (to appear) propose that participles can be DP-internal predicates, because they can have syntactic arguments (see footnote 8), e.g. an empty external argument, as in the case of *rouillé*. Sleeman & Verheugd propose that the external argument is an empty operator, which forces the participle to be generated in a predicative position. Therefore, the structure of the DP in (ii) is as shown in (iii). The color adjective licenses the ellipsis of the noun:

- (iii) Je préfère _{DP}[la verte *pro* rouillée].

¹⁴ Note the absence of the definite article before the superlative in [Spec, _{post}AP] in (121). If there is an overt noun, "postnominal" superlatives have to be introduced by a definite article:

- (i) Paul et David sont les garçons les plus intelligents.
Paul and David are the boys the most intelligent
'Paul and David are the most intelligent boys.'
- (ii) *Paul et David sont les garçons plus intelligents.
Paul and David are the boys most intelligent

In (i) and (ii), the overt noun has moved to the head of NumP. I propose that (ii) is ungrammatical because the superlative has to be licensed by the determiner. In (ii), this relation is blocked because of the presence of the noun in the intervening NumP. In (121), there is no noun which can block the binding relation. Therefore (121) is grammatical, although the superlative is not introduced by a definite article.

The proposal given here can also account for the other, unproblematic cases mentioned in §2. Sentences (122) and (123) are grammatical because *verte* and *deux* bear the feature [+partitive], which enables them to license ellipsis of the noun:

- (122) Je prends la verte *e*.
I take the green
'I will take the green one.'
- (123) Je prends les deux *e*.
I take the two
'I will take both.'

As for (124) I will assume in chapter 3 that definite determiners license empty nouns. However, in that case they are pronouns that have to cliticize. This explains the ungrammaticality of (124):

- (124) *Je prends le *e*.
I take the

In §3 it was proposed that transitive adjectives and restrictive relative clauses are licensed as predicates, and are right-adjoined to NP.¹⁵ Since they are generated to the right of NP, Relativized Minimality does not prevent the quantifier from properly governing the empty category. This explains the grammaticality of ((40)-(41)), repeated here as ((125)-(126)):¹⁶

¹⁵ Chomsky (1986) assumes that adjunction to the maximal projection of a lexical category makes the XP opaque. This means that if the predicate is adjoined to NP, *pro* cannot be properly governed. If the predicate is right-adjoined to DP, this problem does not arise. However, Chomsky's remark concerns adjunction by movement. It is not clear if base-generated adjuncts can also make XP opaque. Therefore, I will not decide whether predicates are adjoined to NP or DP.

¹⁶ According to Kayne's antisymmetry theory (Kayne 1994), right-adjunction is not possible. A solution that has been proposed, especially for D-adjuncts, is that they are generated to the left of NP (Grosu 1988, Piccolo 1991), as the specifier of NP or an extended projection of NP. This kind of solution is not possible, however, within the theory of the licensing of empty nouns that I present in this study because the intervening PP would prevent the quantifier from properly governing *pro*.

- (i) *Je n'ai lu que les deux premiers de Zola *pro*.
I not have read than the two first of Zola

I therefore simply assume that predicates are right-adjoined to NP (or maybe DP, see the previous footnote):

- (125) Je n'ai pas entendu les deux *e* que tu m'avais dit d'aller écouter.
I neg have neg heard the two that you me had told of go listen
'I did not hear the two that you had told me to attend.'
- (126) De toutes ces robes, celle-ci est la seule *e* susceptible de me plaire.
of all these dresses, this is the only susceptible of me please
'Of all these dresses, this one is the only one that pleases me.'

Thus, all of the data presented in §2 can be accounted for by means of the licensing mechanism proposed in the previous sections.

In the next section, we turn to noun ellipsis facts in other Romance and Germanic languages in order to try to establish whether the analysis proposed for French can be applied to these languages as well.

10. English

I have proposed that in French, noun ellipsis is licensed by a [+partitive] element that properly governs the empty noun, i.e. by a quantifier or an adjective with a partitive meaning. The gap qualifies as small *pro*, which is licensed by being properly governed by a [+partitive] element.

But what about other languages? Is French unique in having noun ellipsis licensed in this way or are there other languages which can be compared to French? In this section and the following ones, I examine whether the licensing mechanism proposed for French can be applied to other languages. First, I discuss English.

Instead of an overt noun the overt pronoun *one* may be used:¹⁷

- (ii) Je n'ai lu que les deux premiers *pro* de Zola.

I leave it to further research to find a solution for the problem of this kind of right-adjunct within Kayne's framework.

¹⁷ Kester (1996) generates this prop word *one* not within NP, but within one of the lower extended projections of NP. The NP is empty and is licensed by *one*. This idea fits nicely into my analysis of noun ellipsis because the prop word *one* has the same general meaning as the numeral *one*, although they are generated in different positions and furthermore the prop word can be pluralized whereas the numeral cannot. Therefore, it is not surprising that English uses *one* as a prop word, since *one*, as a D-partitive, is extremely capable of licensing the ellipsis of the noun. This analysis can explain why in (i) *one* is not used whereas in (ii) it is. In (i), the prop word *one* is not a "better" licenser of the empty noun than the cardinal *three* is. In (ii), on the other hand, the cardinal cannot license the empty noun. Since *one*

- (127) I only attended the interesting one.

Because of this overt pronoun it appears at first glance that English has no noun ellipsis at all; in (127), the pronoun cannot be left out:

- (128) *I only attended the interesting.

This is not entirely true, however. In English, noun ellipsis is at least possible with D-partitives. In the D-partitivity cases (see §6), noun ellipsis is commonly accepted (see, e.g. Halliday & Hasan 1976):

- (129) I will take these four.
(130) This is the third (one).
(131) Of these boys, I prefer the eldest (one).
(132) I like your dress. I will buy the same (one) as you.
(133) Take this piece. I will take the other (one).
(134) Examples like the following (ones) are not as good.

With most adjectives of quality, however, noun ellipsis is not permitted, unless *one* is used instead of the noun:¹⁸

- (135) I will take the small *(one).

Color adjectives are an exception. With this class of adjectives, *one* may be left out (136), although this can be done less easily than with D-partitives. Color adjectives are clearly antonymic. This might be the reason for the acceptability of (136) without *one* (example taken from Halliday & Hasan 1976):

- (136) The green (one) suits you very well.

is a 'better' licenser than the adjective is, it is used:

- (i) I have read three (*ones).
(ii) I have read three good *(ones).

¹⁸ Halliday & Hasan (1976) give some examples where adjectives of quality are not followed by *one*. In these examples, there is a sharp contrast, which makes the adjectives "classifying" (cf. footnote 3):

- (i) Which last longer, the curved rods or the straight rods? *The straight* are less likely to break.
(ii) I like strong tea. I suppose *weak* is better for you.

These facts confirm the analysis presented for French. I claimed above that in French the inflection of the adjective plays no role in the licensing of the empty noun. In English, even if the adjective is uninflected, it can still license the ellipsis of the noun. This supports the idea that inflection does not necessarily play a role in the licensing of noun ellipsis. More importantly, the English noun ellipsis facts confirm the analysis presented for French. In English the partitive meaning of the adjective also plays an important role in the licensing of the empty noun, and even more clearly than in French; in English only D-partitives and (more marginally) some other clearly antonymic adjectives allow ellipsis of the noun. Therefore, I suggest that an ellipted noun is also licensed by a properly governing element with a partitive meaning within an extended projection of NP in English.

I suggested above that NP *pro* not only has to be formally licensed, but also has to be linked to an antecedent. I proposed that linking is only possible if the nounless DP has a specific reading. Thus the fact that indefinite objects in general do not have a specific reading could account for the ungrammaticality of (99), repeated here as (137):

- (137) *J'ai lu trois *pro*.
I have read three

However, the problem arises that the English variant of (137) is grammatical:

- (138) I have read three *pro*.

In §8, I proposed that whereas NP *pro* in French is non-specific, its overt counterpart *en* is inherently specific (i.e. anaphoric). I suggest that the identification requirement for NP *pro* has to do with the fact that French has an overt variant of the empty pronoun which is used just in case the nounless DP has a non-specific reading. Since the English empty NP pronoun does not have an overt counterpart (the pronoun *one* is not its counterpart, cf. footnote 17), it might be the case that specificity is not required for its licensing (cf. §13).¹⁹ In §12, we will see that NP *pro* is also

¹⁹ If, in English, indefinite nounless DPs are possible in object position, the question arises why color adjectives are not possible in indefinite DPs in that position:

- (i) *I will take a green

possible in indefinite DPs in object position in Spanish. But first I discuss noun ellipsis in Italian.

11. Italian

In Italian two (syntactic) noun-ellipsis constructions are possible, the *il*-type and the *quello*-type:

- (139) Di questi ragazzi, preferisco il più grande.
of these boys, I prefer the most tall
'Of these boys, I prefer the tallest one.'
(140) Di questi ragazzi, preferisco quello più grande.
of these boys, I prefer the one more tall
'Of these boys, I prefer the tallest one.'

The *il*-type noun ellipsis construction corresponds to the English noun ellipsis cases. The D-partitive cases are perfectly grammatical. In (141) there is a cardinal and in (142) a superlative:

- (141) Tre sono sulla tavola.
three are on the table
(142) Preferisco il più intelligente.
I prefer the most intelligent (one)

In (143)-(145) we are dealing with hierarchic adjectives (*primo* 'first', *stesso* 'same', and *altro* 'other'), which are also D-partitives:

I propose that this is the case because the presence of a definite article increases a partitive interpretation of the adjective, meaning 'the one or the ones which a certain property as opposed to another subset'.

Huot (1981) observes that noun ellipsis in French is only possible with definite articles, but not with demonstrative or possessive adjectives. This might also have to do with the fact that definite articles which mean 'the one' or 'the ones' increase a partitive interpretation of the adjective:

- (i) Je prends l'autre.
I will take the other
(ii) *Je préfère cet autre.
I prefer that other
(iii) *C'est mon autre.
It is my other

- (143) Preferisco il primo.
I prefer the first (one)
- (144) Ho comprato lo stesso di mia sorella.
I have bought the same (one) as my sister
- (145) Ho preso l'altro.
I have taken the other (one)

The color adjectives and other adjectives of quality are only marginally acceptable or excluded, at least for a considerable number of native speakers. It has been pointed out to me by D. Delfitto that there are also speakers for whom roughly the same adjectives as in French allow ellipsis of the noun. In this section, I only discuss the variety of Italian in which (147) is an ungrammatical sentence. It is grammatical in the other variety of Italian (cf. Bernstein 1993a, who gives a similar example to show that in Italian, adjectives of quality cannot license the ellipsis of the noun).

- (146) ?Preferisco il verde.
I prefer the green (one)
- (147) ??Ho preso il piccolo.
I have taken the small (one)
- (148) *Leggerò soltanto l'interessante.
I will read only the interesting
- (149) *Preferisco l'intelligente.
I prefer the intelligent

These facts strongly suggest that the *il*-type noun ellipsis construction is licensed in exactly the same way as the noun ellipsis constructions in French and English, viz. by an element with a partitive meaning.

The *quello*-construction is possible with almost all adjectives of quality. The ungrammatical or marginally acceptable examples (146)-(149) become perfectly grammatical if the *quello*-construction is used:

- (150) Preferisco quello verde.
I prefer the green (one)
- (151) Ho preso quello piccolo.
I have taken the small (one)
- (152) Leggerò soltanto quello interessante.
I will read only the interesting
'I will only read the interesting one.'
- (153) Preferisco quello intelligente.
I prefer the intelligent (one)

Since there are no restrictions here, the *quello*-type of noun ellipsis does not seem to be licensed by partitivity. I assume, however, that in this construction it is not the adjective that licenses ellipsis of the noun, but *quello*, which I assume to be a pronoun in this construction:

- (154) Preferisco quello *pro* verde.

The Italian *quello*-construction may be assimilated with the French *celui* + adjective construction. In French, however, the demonstrative pronoun may only be combined with transitive adjectives and not with intransitive adjectives.²⁰

- (155) Je déteste ceux jaloux de leurs femmes.
I hate those jealous of their wives
'I hate those who are jealous of their wives.'
- (156) *Je préfère ceux intelligents.
I prefer those intelligent
'I prefer the intelligent ones.'

Italian does not have such a restriction. Both transitive and intransitive adjectives are possible in the *quello*-construction.

I assume that just as in the *celui* + adjective construction in French, the adjective in the Italian *quello*-construction is a DP-internal predicate, which is generated to the right of the empty noun. In this respect my analysis differs from Bernstein's (1993a), for whom the adjective in the *quello*-construction is an attribute, generated within the extended projections of NP. However, the phonological behavior of the Italian demonstrative pronoun *quello* suggests that a distinction has to be made between two adjectival positions, viz. an attributive and a DP-internal predicative position. Vanelli (1979) notes the following contrast:

²⁰ Sleeman & Verheugd (to appear) attribute the impossibility for intransitive adjectives in French to be used as adjuncts to an economy principle. They argue that transitive adjectives have argument structure which allows them to be adjoined, as a predicate, to NP. DP-internal intransitive adjectives, on the other hand, do not have argument structure, because nothing forces them to have arguments. Therefore, they can only be generated as attributes within the extended projections of NP. The grammaticality of (150)-(153) then suggests that such an economy principle is not operative in Italian.

- (157) Preferisco quello alto.
I prefer that high (one)
- (158) Preferisco quell'altro.
I prefer that other (one)

The masculine demonstrative adjective *quello* has several forms, whose usage depend on the initial phoneme of the following adjective or noun:

table 2.2

quello

| | <i>masc. sing.</i> | <i>masc. plur.</i> |
|------------------------------|--------------------|--------------------|
| <i>before consonant</i> | quel libri | quei libri |
| <i>before vowel</i> | quell'anno | quegli anni |
| <i>before s + cons. or x</i> | quello spazio | quegli zoccoli |

The pronominal forms are *quello* (masc. sing.) and *quelli* (masc. plur.). Although both adjectives in ((157)-(158)) have the initial vowel *a*, the demonstrative ends in *o* in (157), whereas there is elision of the *o* in (158). Brucart & Gràcia (1986) therefore assume that there is an empty noun between the demonstrative and the adjective in (157), but not in (158). This is also the solution I want to propose. I propose that in (157), *quello* is a pronoun, whereas in (158), *quell'* is a determiner. In the next chapter, I will propose that pronouns license an empty noun at the syntactic level. This means that the adjective in (157) is a predicate, which follows the empty noun, whereas the adjective in (158) is an attribute, which precedes the empty noun:

- (159) Preferisco quello *pro* alto.
I prefer the high one
- (160) Preferisco quell' altro *pro*.
I prefer that other one

If there is an overt noun, *alto* is an attribute, just like *altro* in (158) and (160). In that case *quello* becomes *quell'*:

- (161) Preferisco quell' alto albero.
I prefer that high tree
- (162) Preferisco quell' altro albero.
I prefer that other tree

That *quello* in (159) is a pronoun, whereas *quell'* in (160) is a determiner, is also suggested by the semantic difference between the two. Whereas the determiner *quell'* in (160) has a clearly demonstrative meaning, the pronoun *quello* in (159) does not. The pronoun *quello* can have two meanings. Either it can have a demonstrative meaning, as in (163), or it can just have a discriminating meaning, as in (159):

- (163) Prendo quello.
I take that
'I will take that one.'

Since the demonstratives in ((159)-(160)) differ in deictic force, this suggests that we are dealing with two different types of demonstratives, a pronoun in (159) and a determiner in (160).

Rizzi (1979) suggests that the phonological behavior of a masculine plural demonstrative pronoun in combination with an adjective also shows that the demonstrative is followed by an empty noun. Recall that the plural adjectival form is *quei* or *quegli* (see table 2.2):

- (164) quei lunghi articoli
those long papers
- (165) quegli strani articoli
those strange papers

In (166) and (167), *quelli* is a pronoun and licenses itself the empty noun:

- (166) quelli *pro* lunghi
those long
'the long ones'
- (167) quelli *pro* strani
those strange
'the strange one'

In (168) and (169), the only potential licenser is the adjective. But whereas licensing is marginally possible with the "classifying" adjective in (168) (cf. (147)), the "non-classifying" adjective in (169) cannot license the empty noun (cf. (148) and (149)):

- (168) ??quei lunghi *pro*
those long (ones)
(169) *quegli strani *pro*
those strange (ones)

Whereas with most adjectives of quality the *quello*-construction is the only possibility, with superlatives both the *il*-construction and the *quello*-construction are possible:

- (170) Preferisco il più grande.
I prefer the most tall
'I prefer the tallest one.'
(171) Preferisco quello più grande.
I prefer that more tall
'I prefer the tallest one.'

For (170) I have claimed that the superlative is an attribute that licenses the empty noun because of its partitive meaning. In (171) the demonstrative does not have a deictic but only a discriminating meaning. This suggests that *quello* in (171) is a pronoun which licenses an empty noun, and that the empty noun is followed by a predicate.²¹

- (172) Preferisco il più grande *pro*.
(173) Preferisco quello *pro* più grande.

With adjectives that are not adjectives of quality, *quello* only has a deictic reading:

- (i) Preferisco il ragazzo più intelligente.
I prefer the boy most intelligent
'I prefer the most intelligent boy.'
(ii) Je préfère le garçon *(le) plus intelligent.
I prefer the boy the most intelligent
'I prefer the most intelligent boy.'

²¹ In Italian, the definite article is not used before a postnominal superlative (i), as it is in French (ii):

- (174) Prendo quei tre.
I take those three
'I will take those three.'
(175) Prendo quell'altro.
I take that other
'I will take that other one.'

This suggests that these adjectives can only be generated in an attributive position and not in a DP-internal predicative position:

- (176) Prendo quei tre *pro*.
(177) Prendo quell'altro *pro*.
(178) *Prendo quei *pro* tre.
(179) *Prendo quello *pro* altro.

The *quello*-construction is not possible in these cases. Only the *il*-construction is possible, with the attributive adjective licensing the empty noun:

- (180) Prendo quei tre *pro*.
I take these three
'I will take these three.'
(181) Prendo l'altro *pro*.
I take the other
'I will take the other one.'
(182) Prendo il primo *pro*.
I take the first
'I will take the first one.'
(183) Prendo lo stesso *pro*.
I take the same
'I will take the same one.'

In this section I have analyzed two Italian noun ellipsis constructions: the *il*-construction and the *quello*-construction. I have claimed that in the *il*-construction the adjective or quantifier licenses the empty noun because of its partitive meaning. In the next chapter I propose that demonstratives in French may also license the ellipsis of the noun because of their partitive meaning, so that both the *il*-construction and the *quello*-construction involve licensing by partitivity. Although in Italian both attributive and predicative adjectives inflect to express number and gender distinctions, the Italian noun ellipsis facts suggest once again that the inflection of the adjective does not license the ellipsis of the noun.

12. Spanish

In Spanish, noun ellipsis is possible in combination with cardinals, just as in French, English and Spanish:

- (184) Juan ha visto dos libros, y María ha visto tres.
 Juan has seen two books, and María has seen three

The French noun ellipsis cases which were mentioned in the introduction to this chapter are also possible in Spanish. In (185) the nounless DP contains a superlative and in (186) a color adjective:

- (185) De estas chicas, María es la más inteligente.
 of these girls, Mary is the most intelligent (one)
 (186) De estos vestidos, yo prefiero el azul.
 of these dresses, I prefer the blue (one)

Sentence (187) shows that noun ellipsis is also possible with ordinals:

- (187) De sus libros, yo prefiero el primero.
 of his books, I prefer the first (one)

Sentences (188)–(191) also contain hierarchic adjectives (*anterior* ‘preceding; mismo ‘same’; *otro* ‘other’, and *único* ‘only’):

- (188) No he leído el anterior.
 not have read the preceding
 ‘I have not read the preceding one.’
 (189) He cogido el mismo que tú.
 I have bought the same (one) as you
 (190) Tomo el otro.
 I take the other
 ‘I will take the other (one).’
 (191) De todos mis amigos, ellos son los únicos que lo conocen.
 of all my friends, they are the only who it know
 ‘Of all my friends, they are the only ones who know it.’

Sentence (192) shows that even with a measuring adjective such as *grande* ‘big’ noun ellipsis is possible in Spanish:

- (192) De estos perros, yo prefiero el grande.
 of these dogs, I prefer the big (one)

At first glance this suggests that noun ellipsis in Spanish is licensed the same way as in French.

Spanish differs from French however, because in Spanish most adjectives of quality can be used in combination with a definite article and an ellipted noun:

- (193) Se casó con la inteligente.
 He married himself with the intelligent
 ‘He married the intelligent one.’

The French translation is ungrammatical:

- (194) *Il se maria avec l’intelligente.

Above I proposed that the reason for the ungrammaticality of (194) is that the adjective *intelligent* is not a ‘classifying’ adjective, and that for this reason it does not license the empty noun.

Since the Spanish adjective *inteligente* allows ellipsis of the noun, Spanish seems to behave like Germanic languages, in which noun ellipsis is possible in combination with almost all adjectives. In §1 of this chapter we saw that it is generally assumed that the inflection of the adjective licenses noun ellipsis in Germanic languages. For Spanish, an inflection-based analysis has been proposed by Schroten (1992). In the next section, however, I show that the inflectional system of the Germanic languages differs from that of the Romance languages. In the Romance languages that we have considered so far the noun ellipsis facts can generally be compared to the English noun ellipsis facts. The English adjective is not inflected at all for gender and number. It has been claimed in this chapter that in English, French, and Italian noun ellipsis has nothing to do with the inflection of the adjective. Since Spanish has the same type of adjectival inflection as other Romance languages, i.e., both attributive and predicative adjectives are inflected for number and gender, I propose in this section that noun ellipsis in Spanish is not licensed by the inflection of the adjective, but is licensed exactly the same way as in other Romance languages, i.e. by means of partitivity. As for the fact that in Spanish NP *pro* is possible within indefinite DPs (see (184)), I propose that specificity is not required, just as in English (see §10). In §10, I suggested that ellipted nouns are possible in indefinite DPs in English, because English does not have an overt NP pronoun. Old Spanish had an overt partitive pronoun, but modern Spanish does not have one anymore. It may be the case that the use of NP *pro* in indefinite object DPs only became possible when the partitive pronoun became lost. Further research is necessary in order to confirm this idea.

Although the Spanish noun ellipsis cases in (185)-(192) might very well be accounted for in terms of licensing by a partitive element, this kind of explanation seems to be problematic for a sentence like (193). Since the adjective *inteligente* is not an N-partitive (see chapter 4 for the discussion of N-partitives) it should not be able to license ellipsis of the noun. My solution is that in (193) it is the article that allows ellipsis:

- (195) Se casó con la *pro* inteligente.

I relate the analysis of (195) to the analysis of noun ellipsis with relative clauses and genitival PPs in Spanish, as in (196)-(197):

- (196) Los *pro* que enviaron al hospital estaban muy graves.
the ones that they sent to the hospital were very seriously injured
- (197) Prefiero los *pro* de María.
I prefer the ones of María

Contrary to Bernstein (1993a), who claims that in these cases, as well as in (195), the article nominalizes an AP, a relative clause, or a PP, so that there is no empty category at all, I believe that there is an empty category in all these cases, which is licensed by the article.²² This is also Bosque's (1986) idea, at least for (196)-(197). According to Bosque, however, the definite article in Spanish can license an empty category via proper government because of its "relative richness": it is inflected for gender and number. This would explain why in Spanish the definite determiner can license an empty noun, whereas the English definite article cannot. However, a problem for this solution is presented by languages like French or Italian, which have relatively rich definite articles, but which do not license ellipsis of the noun:

²² According to Bernstein the definite article in Spanish is a "subordinator of XP other than NP", whereas in Italian it is not. Her basic idea is that "the definite article in Spanish is able to bind an open position (in the sense of Higginbotham 1985) and therefore creates an argument out of a (otherwise) predicative category". In Italian, on the other hand, the definite article may only be a subordinator for NP. As for French, Bernstein analyzes it as Spanish. In French, the definite article may take AP as a complement, instead of NP. Although Bernstein's analysis may explain the productivity of noun ellipsis in Spanish and the unproductivity of noun ellipsis in Italian (at least for a considerable number of native speakers), it does not explain the position of French in between these two. If the definite article is a subordinator for AP in French, we would expect all adjectives to be possible in cases of noun ellipsis in French, as it is in Spanish. However, in French, only some adjectives are possible.

- (198) *Les qu'ils envoyèrent à l'hôpital étaient grièvement blessés.
(199) *Je préfère les de Marie.
- (200) *I che mandarono all' ospedale furono feriti gravemente.
(201) *Preferisco i di Maria.

Therefore, I propose that the Spanish definite article can license ellipsis of the noun in exactly the same way as elements with a partitive meaning in French can. It has often been noted in Spanish grammars that the definite article in cases like these is a pronoun which can be compared to the Italian pronoun *quello* (see the previous section) and the French pronoun *celui* (see chapter 3, §6) followed by an adjective or a relative clause. These pronouns do not really have demonstrative force in cases like these, but can be compared to the English *the one(s)*. I assume that the article in (195)-(197) is in fact a pronoun: it is followed by an empty noun and it licenses the empty noun itself, because it has a discriminating meaning. It forms a subset of a larger set and has therefore a partitive function.²³ Since it only has a discriminating meaning it needs the support of a relative clause, a genitival PP or an adjective which makes it refer.²⁴

²³ Although *el* in (i) is a pronoun and not an article in my analysis, phonologically it behaves the same way as the article *el* with the prepositions *a* and *de*, the contracted forms *al* and *del* are used:

- (i) Se casó con el *pro* inteligente.
herself married with the intelligent
'She married the intelligent one.'
- (ii) Enviaron María al hospital de Madrid y Juan al *pro* de Barcelona.
they sent Mary to the hospital of Madrid and Juan to the of Barcelona
'They sent Mary to the hospital in Madrid and Juan to the one in Barcelona.'
- (iii) los médicos del hospital de Madrid y los médicos del *pro* de Barcelona
the doctors of the hospital of Madrid and the doctors of the of Barcelona
'the doctors of the hospital in Madrid and the doctors of the one in Barcelona'

²⁴ In Old French, the definite article could also function as a pronoun. This was possible if it was followed by the genitive form of a proper name:

- (i) la Carluns
the of Charles
'Charles'

This is also possible in Romanian, even with common nouns:

If the definite article in (195)-(197) is a pronoun that licenses ellipsis of the noun, the material that follows has to be to the right of the empty noun. I therefore claim that not only in (196)-(197) but also in (195) the material following the definite article is a predicate, base-generated to the right of the empty noun. Since the adjective in (195) is a predicate, base-generated to the right of the noun, it does not c-command the empty noun and therefore cannot license it. Since it is not the adjective itself that licenses the empty noun, all kinds of adjectives of quality are possible in this construction in Spanish.

I have proposed in the previous section that the Italian *il*-construction is only possible with attributive adjectives, whereas the adjective in the *quello*-construction is a predicative adjective. In the Spanish noun ellipsis case (195), a definite article is combined with a predicative adjective. Since in the examples (185)-(192) we also have the combination of an adjective with a definite article, it might also be possible here that it is not the adjective but the article which licenses the ellipsis of the noun. I claim, however, that at least in some of these cases, it is the adjective itself and not the definite article which licenses the ellipsis. This is motivated by the fact that some adjectives are always attributive, as we have seen in the previous section. I claim that at least the cardinals, the ordinals, and the adjectives *otro* and *unico* are inherently attributive adjectives which can license the ellipsis of the noun. Superlatives might be analyzed either as attributive adjectives or as predicative adjectives, just as in Italian. This is also true for the color adjectives and adjectives of quality with a clearly discriminating meaning, such as *grande*, although a predicative analysis might be preferred. The combination with the indefinite pronoun *uno* supports a distinction between attributive and predicative adjectives in Spanish. Whereas *uno* is used in combination with most adjectives, it takes the form *un* before the ordinals, *ultimo* and *otro*. In chapter 4, with respect to comparable data in Italian, I will argue that *uno* is a pronoun immediately followed by an empty noun, whereas *un* is a determiner followed by adjective + empty noun:

(202) uno *pro* rosso
a red (one)

(203) un octavo *pro*
an eighth (one)

(ii) al vecinului
the of neighbor-the
'the neighbor's'

(204) un ulterior *pro*
a last (one)

(205) un otro *pro*
another (one)

Whatever the exact analysis of the examples (185)-(192) is, the ellipted noun is licensed by a partitive element in these cases, the definite article or the adjective. In (195)-(197), *pro* is also licensed by the definite article. Then in all cases ellipsis of the noun in Spanish is licensed by partitivity, which relates Spanish to French, English, and Italian.

The discussion of the "partitivity-type" languages has shown that in all languages noun ellipsis is licensed by D-partitives but not always by N-partitives. Sometimes N-partitives license noun ellipsis, but sometimes another strategy is used. This is schematized below:

table 2.3 adjectives of quality

| | |
|----------------|-------------------------|
| <i>French</i> | N-partitives |
| <i>English</i> | <i>one</i> -strategy |
| <i>Italian</i> | <i>quello</i> -strategy |
| <i>Spanish</i> | <i>el</i> -strategy |

After having discussed the "partitivity" type of licensing, I now turn back to the "inflection-type" of licensing which was already discussed at the beginning of this chapter.

13. Licensing mechanisms

I have proposed that in French, English, Italian and Spanish, noun ellipsis is licensed in a different way than in Dutch, German and the Scandinavian languages. Whereas for this last group of languages it has been proposed in the literature that empty nouns are licensed by adjectival inflection, I have proposed that in the first group of languages the meaning of the licenser, viz. a partitive meaning, plays a crucial role. I have proposed that D-partitives and to a minor extent N-partitives can formally license ellipted nouns.

Since adjectives inflect also in the Romance languages just as Germanic adjectives do, the question may arise why in the Romance languages

adjectival inflection cannot license empty nouns. As a matter of fact, we would even expect adjectival inflection in the Romance languages to be able to license empty nouns because in these languages adjectival inflection expresses a number and gender distinction (*phi*-features), which also plays an important role in the licensing of subject *pro*. In this section, I speculate on the reason for the difference between licensing of noun ellipsis in Romance and Germanic. I will explore whether it is possible to relate this difference to a difference in agreement mechanisms. However, this section will only have a speculative character. More research is needed, which is beyond the scope of this study.

Kester (1992, 1996) shows that the nature of adjectival inflection in Germanic languages is different than in Romance languages. This suggests that the different manners of licensing have to do with the type of adjectival inflection.

In Dutch, only attributive adjectives inflect. The inflection consists of a simple schwa. Adjectives that modify singular indefinite neutral nouns such as in (207) do not take the inflectional ending:

- (206) een kleine jongen MASC
a little boy
(207) een klein kind NEUT
a little child

In German, attributive adjectives modifying indefinite nouns are marked for number, gender, and Case, whereas those modifying definite nouns simply take an *-e* ending:

- (208) ein kleines Mädchen
a little girl
(209) das kleine Mädchen
the little girl

Also in Scandinavian, a distinction is made between weak adjectival inflection and strong adjectival inflection. The so-called weak adjectival inflection is only used in definite attributive adjectives and is morphologically poor. "Strong" adjectival inflection is used in indefinite attributive adjectives and in predicative adjectives. Strong adjectival inflection expresses number and/or gender distinctions. Kester illustrates this with the following examples from Norwegian:

- (210) det store huset
the big house-the
'the big house'
(211) et stort hus
a big house
(212) Huset er stort.
house-the is big
'The house is big.'

Kester shows that in Romance, on the other hand, adjectival inflection always expresses *phi*-features. It can be used both in definite and indefinite DPs and both in attributive or predicative adjectives. She illustrates this with the following examples from Spanish. In (213)-(214) we are dealing with predicatively used adjectives:

- (213) El chico es alto.
the boy is tall
(214) Las chicas son altas.
the girls are tall

In (215)-(216) the adjective is used attributively and the DP is definite:

- (215) el chico alto
the boy tall
'the tall boy'
(216) las chicas altas
the girls tall
'the tall girls'

Both weak and strong inflection in German and the Scandinavian languages and the schwa in Dutch license empty nouns. Delsing (1992) gives the following examples from Swedish:²⁵

- (217) Jag gillar inte den gröna.
I like not the green
'I do not like the green one.'

²⁵ Whereas in Dutch, uninflected adjectives cannot license ellipsis of the noun, in the Scandinavian languages they can. I propose, therefore, that the absence of an affix in Scandinavian expresses a relation to the presence of certain functional features.

- (218) Jag vill ha en grön.
I want-to have a green
'I want to have a green one.'

The following German examples are taken from Bhatt (1990):

- (219) Welches Auto hast du gekauft? Das rote oder das blaue?
which car have you bought? The red (one) or the blue (one)?
(220) Die Hausfrau stellte erst das Bügeleisen ab. Sie besaß ein elektrisches.
the housewife switched first the iron off. She possessed an electric
'First, the housewife switched the iron off. She had an electric one.'

In §1, we saw that noun ellipsis in Dutch and German is only possible with adjectives that are inflected.

Hence, the agreement systems in Romance and German differ in two important ways. First, in Romance, both attributive and predicative adjectives agree with the noun, whereas in Germanic only the attributive adjectives generally do so. Second, in Romance, adjectival agreement does not depend on the form of the determiner (definite or indefinite), whereas in Germanic it does.

In Germanic, therefore, attributive and predicative adjectives are two different systems with respect to inflection. In Romance, on the other hand, there is just one system. The difference suggests that whereas there is Spec-Head agreement (both with attributive and with predicative adjectives) in Romance, an agreement chain is formed from DP to NP in Germanic. It might be assumed that adjectival inflection is related to the presence of one or more functional features within the DP-system, expressing definiteness (DP), gender (gender phrase) or number (number phrase) (see e.g. Barbiers 1992; Menuzzi 1994). If there is no noun to form the foot of the chain, the next highest up element in the DP has to take over this role, which is only possible if this can be expressed in a morphological way. This would explain why empty nouns need to be licensed by inflected adjectives and why such an adjective has to immediately dominate NP. This interpretation of the licensing mechanism in Germanic combines Muysken's (1983) and Muysken's & van Riemsdijk's analysis with Kester's (1996).

It has been proposed in this chapter that Romance has another system of licensing noun ellipsis than Germanic. Whereas in Romance ellipsis is licensed by partitivity, in Germanic it is licensed by adjectival inflection.

However, I suggest that in Germanic, noun ellipsis can also be licensed by partitivity, especially with determiners that do not inflect, such as cardinals:

- (221) Ik heb twee *pro* van de boeken gelezen.
I have two of the books read
'I have read two of the books.'

In §8, I proposed that NP *pro* does not only have to be licensed by partitivity, but that it also has to be identified by a "specific" reading of the licenser. I propose that a "specific" meaning is required if NP *pro* is licensed by partitivity in the Germanic languages as well. This explains why (222) is ungrammatical. Since the indefinite DP in object position has a non-specific interpretation, it cannot be linked to an antecedent:

- (222) *Ik koop drie *pro*.
I buy three

However, when we add an adjective, the sentence becomes grammatical:

- (223) Ik koop drie kleine *pro*.
I buy three small
'I buy three small ones.'

In French, on the other hand, indefinite DPs in object position are ungrammatical (at least in a somehow formal style of speech), even if they contain an adjective that licenses the ellipsis of the noun:

- (224) *J'ai acheté trois petites *pro*.
I have bought three small

I suggest that the fact that (223) is grammatical while (224) is ungrammatical is due to the different licensing requirements. I have proposed that in French, NP *pro* is the empty counterpart of the quantitative pronoun *en*, a specific (i.e. anaphoric) pronoun. Since NP *pro* is not inherently specific, it has to be licensed by a specific element. Also in other languages with an overt NP pronoun, such as Dutch and Italian, an indefinite nounless DP is not possible in object position, see (222) and (225):

- (225) *Ho letto tre *pro*.
I have read three

In these languages, an overt NP pronoun has to be used to make the DP specific so that linking to an antecedent is possible:²⁶

- (226) Ik koop *er*, drie *t_i*.
I buy of it three
'I will buy three.'
(227) *Ne*, ho letti tre *t_i*.
I of it have read three
'I have read three.'

In languages without an overt NP pronoun, however, such as English and Spanish, indefinite nounless DPs in object position are possible. This suggests that specificity does not play any role in the licensing of the empty noun. But because of the empty noun, the DP cannot get a "novel" interpretation, but only a "specific" interpretation.

If I am on the right track with this idea, it would explain the grammaticality of (223) as opposed to the ungrammaticality of (222) and (224), for which I have proposed that the empty noun is licensed by partitivity. In (222) and (224), NP *pro* is the empty counterpart of an overt NP pronoun, *er* in Dutch and *en* in French, which is specific. In (223), on the other hand, the empty noun is licensed by adjectival inflection. Dutch does not have an overt NP pronoun that is the specific counterpart of this empty pronoun. Therefore, the empty pronoun in (223) does not need to be identified by specificity. This would then explain why indefinite objects are possible in Dutch if the empty noun is licensed by adjectival inflection but not if the empty noun is licensed by a quantifier. Quantifiers can also license the quantitative pronoun *er*. I have suggested that Dutch has two kinds of empty NP pronouns, which are licensed in different ways. In §4.6, I propose that one of the varieties of Italian has also two kinds of empty NP pronouns, which are licensed by two different classes of elements.

²⁶ Whereas Bennis (1987) argues that the quantitative pronoun *er* is base-generated in a position outside the noun phrase, I assume that *er* is base-generated within the noun phrase (cf. Coppen 1991), just like the French quantitative pronoun *en* (cf. Milner 1978; Hulk 1982, 1984; Godard 1988) and the Italian quantitative pronoun *ne* (cf. Rizzi 1979; Belletti & Rizzi 1981; Cardinaletti & Giusti 1991). This is motivated by the licensing restrictions.

14. Summary

In this chapter, I have shown that the analysis which has been proposed by some linguists to account for the noun ellipsis facts in Dutch, German and the Scandinavian languages, i.e. that the empty noun, *pro*, would be licensed by the inflectional part of the adjective, cannot be extended to French, because in French, most adjectives do not license noun ellipsis, even if they are inflected. I claimed that in French, the ellipted noun is licensed by being properly governed by elements with a partitive meaning. I made a distinction between D-partitives (i.e. elements with an inherently partitive meaning) and N-partitives, i.e. some adjectives of quality with highly discriminating force, which are only partitive at a cognitive level, involving familiarity of a superset expressing a kind. Furthermore, I proposed that the empty noun is identified by a specific interpretation, which is needed for the linking of the nounless DP to an antecedent. In the course of this chapter, I extended my analysis of French to several other Romance languages and to English. Finally, I suggested that the difference between the licensing of Germanic and Romance noun ellipsis is the result of a difference in the type of adjectival agreement systems.

0. Introduction

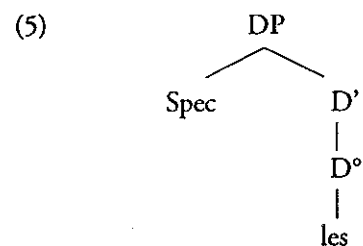
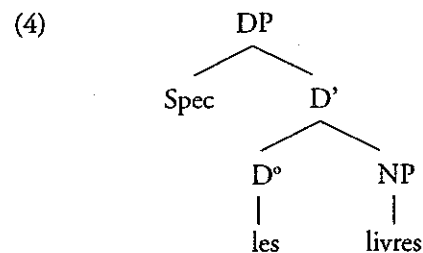
In early generative analyses, pronouns were considered to be NPs, i.e. they were dominated by NP, as in (1):

- (1) NP
 |
 lui
 him

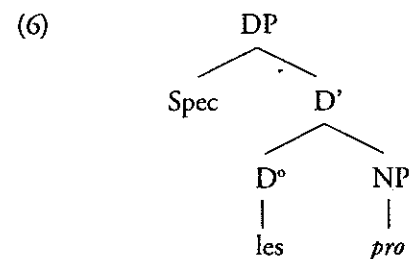
Postal (1969), however, considered pronouns, that is at least personal pronouns, to be determiners, because in many languages personal pronouns are morphologically identical to definite articles, see the example (2) from French with a definite article and (3) with a pronoun:

- (2) Je lirai les livres de Zola.
 I will-read the books of Zola
 'I will read Zola's books.'
- (3) Je les lirai.
 I them will read
 'I will read them.'

Abney (1987) adopts this idea, and generates both definite articles and personal pronouns in D^0 , the head of the functional projection DP , a functional projection of NP. According to Abney, the difference between definite articles and pronouns is that D^0 takes an NP as its complement in the case of the definite determiner, see (4), whereas it takes no complement at all in the case of the pronoun, see (5):



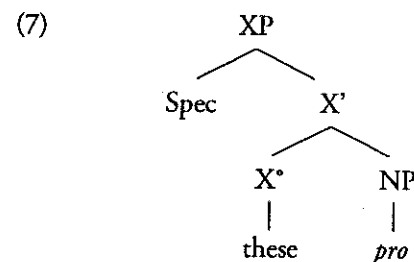
Personal pronouns are also determiners generated in D° on Corver & Delfitto's (1993) view, but they claim that the determiner takes an empty NP as its complement:



Empty categories have to be licensed in some way. In the spirit of Lobeck (1991, 1993, 1995), see the previous chapter, Corver & Delfitto propose that D° with the feature [+human] is able to properly govern an empty NP. They show that strong personal pronouns bear this feature, but that weak personal pronouns and clitics are underspecified with respect to this feature.

They propose that weak personal pronouns and clitics have to move to a verb which can provide them with a value, so that the clitic can license *pro*.

Traditionally, besides personal pronouns, five other groups of pronouns are distinguished: demonstratives, possessives, interrogatives, relatives and quantifiers. Since in these cases as well, there is often a relation with determiners, it might be conceivable to also generate these pronouns within the extended projections of NP. In the previous chapter (§7), we saw that this is what Lobeck (1991) proposes, at least for demonstratives. Lobeck generates demonstratives in a functional projection of the (empty) NP. The empty NP, *pro*, is licensed by the feature [+Num] or [+plural] on the demonstrative:



Although in the previous chapter I adopted Lobeck's idea that demonstratives involve an empty NP, I do not adopt the idea that the feature [+Num] or [+plural] is responsible for the licensing of *pro*. In this chapter I propose that demonstratives are partitive elements with a specific meaning and that they can therefore license their empty NP complement in the same way that I claimed that numerals and adjectives can license an empty NP.¹ Furthermore I extend this proposal to pronouns other than the demonstratives. I show that most pronouns (apart from the personal pronouns) have a partitive meaning (which means that there is a proper or improper inclusion relation with a referent set), so that, if they have a specific meaning, they can license empty NPs.

For the personal pronouns I assume as Corver & Delfitto do that they involve an empty NP. However, although I follow Corver & Delfitto in assuming that strong personal pronouns identify the empty noun by means of the feature [+human], I relate some clitics to the cases discussed in the previous chapter.

¹ But whereas according to Lobeck demonstratives are heads, I assume in §3 of this chapter that they are specifiers, just as I did for numerals and adjectives in the previous chapter.

In this chapter I take Corblin (1990) as a point of departure. Corblin distinguishes personal pronouns (in French) from other kinds of pronouns. He shows that most types of pronouns, apart from the personal pronouns, behave syntactically in the same way. He relates them to noun ellipsis cases with an adjective and claims that these types of pronouns involve an empty noun, whereas the personal pronouns do not. He calls all cases involving an empty noun "determiners without a noun".

Although I do not adopt Corblin's analysis of the personal pronouns - I assume that there is also an empty NP in this case - I distinguish (some) personal pronouns from other kinds of pronouns with respect to their means of identifying the empty noun. I relate all pronouns (including the personal pronouns) to the noun ellipsis cases discussed in the previous chapter with respect to their formal licensing and in most cases also with respect to their identification.

The chapter is organized as follows: In §1, I present Corblin's arguments for relating pronouns (except for personal pronouns) to noun ellipsis cases with adjectives. In §2, it is shown that all members of Corblin's class of "determiners without a noun" have a partitive meaning. In §3, it is argued that this group is generated in (the specifier of) functional projections of NP. In §4, the licensing of the empty noun is discussed. I claim that pronouns can also license an empty NP by means of proper government because they have a partitive meaning, as I did in the previous chapter for numerals and adjectives. In §5, the selection properties of pronouns are discussed. In §6, the use of attributes and DP-internal predicates in combination with pronouns and determiners is discussed. In §7, just as in the previous chapter, the assumption that *pro* is a maximal projection, thus also in case it is licensed by a pronoun, is defended. In §8, the effect of determiners and pronouns in various Specs of functional projections of NP on the extraction of other elements out of DP is investigated. I argue that only a filled [Spec, DP] has a blocking effect. In §9, *en*-extraction out of a DP containing pronouns is discussed. In §10, the pronouns *tous* and *chacun* are discussed. In §11, I discuss the licensing of an empty NP with personal pronouns in D°. §12 is devoted to pronouns with an inherently human or abstract interpretation, such as *personne* and *rien*. Finally, in §13, the results are summarized.

1. "Determiners without a noun"

Corblin (1990) defines DPs with the following properties to be nounless DPs:

1. The DP contains no noun, but there is a determiner ((8)), and it may also contain an adjective ((9)), a relative clause (10) or a PP ((11)):
- (8) Plusieurs sont venus me voir.
several are come me see
'Several have come to see me.'
 - (9) Je préfère l'autre.
I prefer the other (one)
 - (10) Je préfère la petite qu'il a achetée l'an dernier.
I prefer the little that he has bought the year last
'I prefer the little one that he bought last year.'
 - (11) Je préfère la bleue de David.
I prefer the blue of David
'I prefer David's blue one.'
2. Although the DP does not contain a noun, the DP is interpreted as if it contained a particular noun. The noun is "borrowed" from the context by means of an anaphoric relation. In (8), for instance, the missing noun may be interpreted as *enfants* 'children', if a relation can be established between the missing noun and *enfants* in the linguistic or pragmatic context.
 3. Nounless DPs can be used in combination with a right-dislocated noun preceded by *de*:
- (12) Donne-moi la bleue, de robe.
give me the blue, of dress
'Give me the blue dress.'
4. Nounless DPs cannot be used in combination with a dislocated referential DP:
- (13) *La bleue est très jolie, sa robe.
the blue is very nice, her dress
'Her blue dress is very nice.'
5. The nounless DP has to correspond in gender but not necessarily in number to its antecedent:

- (14) Je n'aime pas les robes blanches. Je prendrai donc la bleue.
I neg like neg the dresses white. I will take thus the blue
'I do not like white dresses. So, I will take the blue one.'

Using these five criteria, Corblin defines a class of elements that allow a DP to be nounless:

- **Adjectives**, such as *vert* 'green':

- (15) la verte que tu aimes
the green that you like
'the green one that you like'

- **Superlatives**:

- (16) Tu as pris la plus grosse, de part.
you have taken the most big, of part
'You have taken the biggest part.'

- **Quantifiers**, such as *certains* 'certain ones', *plusieurs* 'several ones', *quelques-uns* 'some', *aucun* 'no one', *chacun* 'every one':

- (17) Certains sont venus me voir.
some are come me see
'Some of them have come to see me.'

- **Possessive** pronouns, such as *sien* 'his' or 'hers':

- (18) Je préfère le sien, de chat.
I prefer his/hers, of cat
'I prefer his/her cat.'

- The **relative** and **interrogative** pronoun *lequel* 'which one':

- (19) Lequel préfères-tu, de chat?
which prefer you, of cat
'Which cat do you prefer?'
- (20) J'avais un chat, lequel, de chat, était blanc.
I had a cat, which, of cat, was white
'I had a cat, which was white.'

- **Demonstrative** pronouns, such as *celui* 'this one' or 'that one':

- (21) celui que tu aimes
that that you like
'the one that you like'

However, the criteria do not apply to personal pronouns. First, they cannot be combined with modifiers:

- (22) *Lui que j'aime est venu me voir.
he that I love is come me see

Second, the antecedent of the personal pronoun has to be a whole DP, rather than only a noun:

- (23) Tu vois cette voiture? Elle est belle!
you see that car? she is beautiful
'Do you see that car? It is beautiful!'

Third, right-dislocation with *de* is not possible with personal pronouns:

- (24) *Elle me plaît le plus, de robe.
she me pleases the most, of dress

Fourth, dislocation of a referential DPs without *de*, on the other hand, is possible:

- (25) Elle me plaît, cette robe.
she me pleases, this dress
'I like this dress.'

Fifth, the pronoun and its antecedent have to match in number, not just in gender:

- (26) *A propos de livres, donnez-le-moi.
speaking of books, give it me

Since the five criteria do not apply to personal pronouns, Corblin concludes that they are not determiners.

Although I agree with Corblin that there are differences between personal pronouns and other nounless DPs, I assume that personal pronouns *are* determiners. Personal pronouns are discussed in §11.

First, however, I will discuss the other pronouns that license the ellipsis of the noun. In the previous chapter I concentrated on noun ellipsis with numerals, adjectives and superlatives. In this chapter I concentrate on the other groups of "determiners without a noun" that Corblin distinguishes, viz. quantifiers other than numerals (which form the indefinite pronouns), possessives, relative pronouns, interrogative pronouns, and demonstrative pronouns. I will relate the analysis of these pronouns to the analysis I proposed in the previous chapter for noun ellipsis with cardinals, adjectives and superlatives. I propose that they are generated in the Spec of a functional projection of NP, and that via Spec-Head Agreement the head of their functional projections can license the empty noun by means of proper government, since they have a partitive meaning. In the next section, I will show that also these "determiners without a noun" have a partitive meaning (N-partitivity or D-partitivity). I will propose, in §4, that this partitive meaning enables them to license the empty noun.

2. Semantic properties

Although the class of elements that Corblin defines as "determiners without a noun" seems to be a rather heterogeneous group at first glance, I show in this section that semantically they have much in common. In the previous chapter, I proposed that numerals, superlatives and "classifying" adjectives can formally license the ellipsis of the noun because of their partitive meaning, where *partitivity* meant 'properly or improperly included in a reference set'. In this section, I will show that the other groups of "determiners without a noun" that Corblin distinguishes, viz. all pronouns other than the personal pronouns, also have a partitive meaning. In §4, it is argued that these pronouns allow ellipsis of the noun because of their partitive meaning.

In the previous chapter I made a distinction between D-partitives and N-partitives. I called those elements that do not denote a property themselves (and therefore cannot be used as predicates) and that necessarily form a subset D-partitives. N-partitives, on the other hand, denote a property and can be used as predicates. Their combination with a noun results in the intersection of two sets with different properties. They are partitive only at a cognitive level, because their highly discriminating properties create cognitively relevant subsets of a set denoting the kind, which results in a familiarity reading. N-partitives are adjectives of quality.

Pronouns do not in general denote properties themselves and can therefore be added to the list of D-partitives established in the previous chapter. Since they do not denote properties, they cannot be used as predicates and

necessarily form subsets of a reference set. The reference set can be formed by a DP, as in (27), or by an NP, as in (28):

- (27) De ces robes, je préfère celle-ci.
of these dresses, I prefer this-here
'Of these dresses, I prefer this one.'
- (28) Ces robes-ci ne me plaisent pas. Je préfère celle-là.
these dresses-here neg me please neg. I prefer that-there
'These dresses do not please me. I prefer that one.'

There is one pronoun that differs from the other pronouns: the possessive pronoun. Possessives seem to denote properties themselves: *my* things. Although in earlier stages of French, personal pronouns could be used as predicates, this is not possible in modern French. Therefore, I include them in the set of D-pronouns.

What shows that certain determiner-like elements (especially nouns and adverbs) in French have a partitive meaning is that the head noun of the DP has to be preceded by *de* 'of', which shows that a subset or subpart is formed of the kind:

- (29) Il a bu un litre *de* lait.
he has drunk a liter of milk
- (30) Elle a écrit beaucoup *de* poèmes.
she has written a lot of poems

Although this construction cannot be used to show that pronouns have a partitive meaning - since there is no head noun, there is no *de* either - there is a distinct construction in which a noun is preceded by *de*. In this construction, *de* introduces a right-dislocated noun (see also chap.2, footnote 10). It is possible with all "determiners without a noun" thus also with pronouns (see the previous section). In this case a subset of a larger set denoting a kind is also formed. For instance sentence (31) means: 'of dresses, I prefer this one':

- (31) Je préfère celle-ci, *de* robe.
I prefer this one, of dress
'I prefer this dress.'
- (32) Nous en prendrons une autre, *de* voiture.
we of it will-take an other, of car
'We will take another car.'

- (33) Lequel as-tu choisi, *de* sujet?
which have you chosen, of subject
'Which subject have you chosen?'

A related construction (see Hulk 1996, who establishes a relation between the two constructions) is the *de* + adjective construction (see Azoulay-Vicente 1985; Hulk & Verheugd 1992, 1994). This construction is also possible with most "determiners without a noun", therefore also with pronouns:

- (34) Il n'y en a *aucun* de bon.
it neg there is none of good
'There is no good one.'
- (35) J'ai lu *le tien* d'intéressant.
I have read the your of interesting
'I have read your interesting one.'
- (36) J'ai lu *celui-ci* d'intéressant.
I have read this here of interesting
'I have read this interesting one.'

In this case a subset is also formed, denoting the property expressed by the adjective this time. Sentence (35) means: 'of interesting things I have read yours.'

In the sentences above, some pronouns need the "support" of the quantitative pronoun *en* ((32) and (34)) while others do not. In this chapter I argue that this distinction has to do with a semantic property of the pronoun. I make a distinction between "strong" and "weak" pronouns, i.e. D-linked and non D-linked pronouns in Pesetsky's (1987) terms. This corresponds to the specific/nonspecific distinction I made in the previous chapter. In §4 and in §10 I argue that only "strong" (i.e. specific, D-linked) pronouns can license NP *pro*.

I have shown in this section that the pronouns among "determiners without a noun" have a partitive meaning. In §4 I propose that if they are furthermore provided with specificity features, i.e. if they are "strong", they can license a base generated empty noun. But first, in the next section, I discuss the position of pronouns within the extended projections of NP.

3. Syntactic analysis

In the previous chapter we have seen that for some of the elements that Corblin defines as "determiners without a noun", especially the adjectives,

the generation in an extended projection of NP has been proposed by among others Abney (1987); Valois (1990, 1991); Bernstein (1993a) and Cinque (1993). However, a point of discussion in these studies is the exact position of the adjectives: are they heads, specifiers, or adjuncts? In the previous chapter, I followed Cinque (1993), according to whom all attributive adjectives are generated in Spec-positions (see §2.4). I proposed that the cardinals are generated in [Spec, QP], the ordinals in [Spec, _{ord}AP] and the pronominal adjectives in [Spec, _{pre}AP]. In French, QP dominates _{ord}AP and _{ord}AP dominates _{pre}AP.

In this chapter I relate the analysis of the traditional classes of pronouns to the analysis that I proposed for noun ellipsis in the previous chapter. Just as Corblin, I assume that pronouns involve an empty noun. Just as Lobeck (1991) does for the English demonstratives, I assume that these pronouns are generated within the extended projections of NP and involve an empty NP which they license. Again, the question arises if they are heads, specifiers, or adjuncts. Since I propose in the next section that, because of their partitive meaning, they can license the empty NP by means of proper government, this implies that they cannot be adjuncts. Although proper government generally involves a head-complement relation, I assume that the pronouns among Corblin's "determiners without a noun" are specifiers. Spec-Head Agreement (maybe in combination with Head-Head Agreement, see §2.7) will enable the pronouns to properly govern the empty noun.

Although the generation of pronominal elements in a Spec-position instead of in a Head-position is not motivated by noun movement to the head of NumP, as the generation of the intransitive "postnominal" adjectives in a Spec-position was, there is another argument for generating them in a Spec-position instead of a Head-position. As we saw in the previous section, most types of pronouns allow a right-dislocated noun introduced by *de* and most types can be combined with *de* + adjective. Hulk (1996) analyzes both types as adjuncts of a maximal projection. In both cases, *de* is the head of a functional projection, which takes either an NP or an AP as its complement. The specifier of the functional projection does not contain any lexical material, but is [+Q]. In the previous chapter (footnote 10), I assumed that *de* introducing right-dislocated nouns is the spell-out of an empty functional head dominating NP, whose specifier (containing a quantifier, an adjective, or, as I assume in this chapter, a pronoun) binds the specifier of the functional projection in the adjunct.

I propose that the pronouns among Corblin's "determiners without a noun" that can license an empty NP are generated within the specifier of extended projections of NumP. I propose that the quantifiers, i.e. the indefinite pronouns, are generated in [Spec, QP]. I suggest that demonstrative pronouns are generated in [Spec, DP], because extraction facts (see

§9) show that their adjectival counterparts are. I assume that *lequel* is generated in a functional projection in between DP and QP, because word order facts suggest that its adjectival counterpart *quel* is generated in a functional projection dominating QP:

- (37) Quels deux livres as-tu lus?
 which two books have you read

I propose that this is a position in between DP and QP, because the form of comparable (relative) pronouns in a language like Italian suggests that at least *quel* is generated in a functional projection dominated by DP ((38)). Furthermore, *en*-extraction shows that [Spec, DP] must be empty (39) (see §9):

- (38) il quale
 the which
 'which one'
(39) Quels chapitres en as-tu lus?
 which chapters of it have you read
 'Which chapters have you read?'

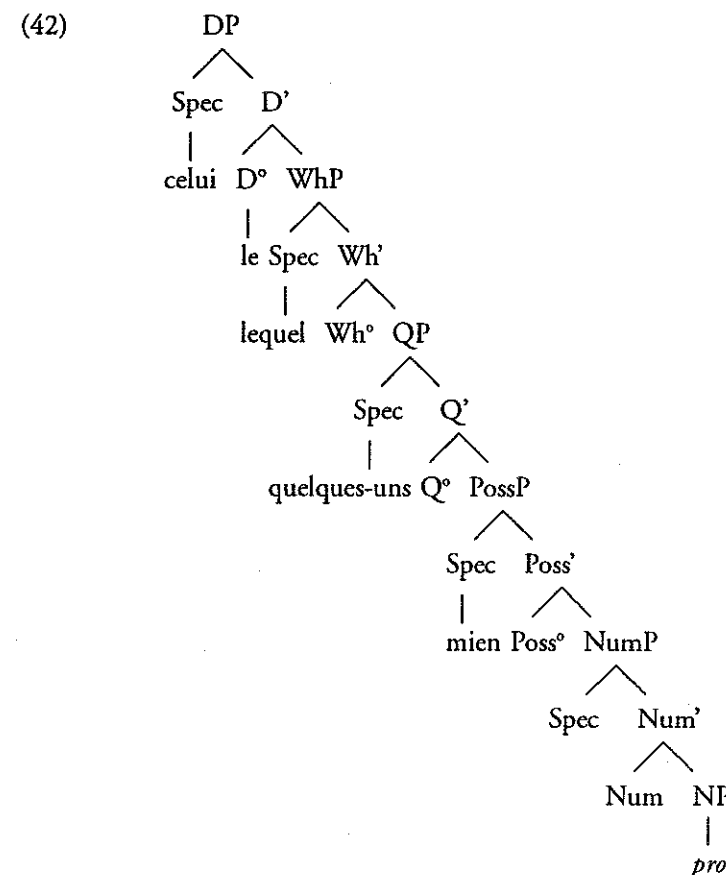
As for the possessive pronouns, I propose that while the part formed by the definite article is generated in D°, the possessive pronoun itself is generated in the specifier position of a functional projection in between QP and NumP. This is motivated by word order facts. While the adjectival form of the possessive precedes the numeral - and therefore is generally assumed to be generated in DP (which is furthermore motivated by extration facts, see §9) -, the pronominal form follows it:

- (40) mes deux livres
 my two books
(41) les deux miens
 the two mine

This structural difference between the possessive adjective (generated in DP) and the possessive pronoun (generated in a lower functional projection) might be the consequence of the fact that the possessive adjective is [+def]. Because of this feature it is generated in DP. The possessive pronoun, on

the other hand, is itself not [+def]. Only the definite determiner preceding the possessive pronoun is.²

The distinctions that I have made lead to the following structural representation (irrelevant projections have been left out):



² Up until the 16th century, the possessive pronoun was used as an adjective in French (Grevisse 1988, §1128):

- (i) le mien visage
 'my face'
(ii) ce mien livre
 'this book of mine'
(iii) un mien frère
 'one of my brothers'

Having discussed some of the semantic and syntactic properties of the class of elements that Corblin defines as “determiners without a noun”, especially the pronouns, I will now give a formal account of their ability to license noun ellipsis.

4. Licensing of the empty noun

In §2, it was shown that the pronouns among Corblin’s class of “determiners without a noun” have a partitive meaning. For the cardinals and adjectives this had already been shown in the previous chapter. I proposed that because of their partitive meaning cardinals and “classifying” adjectives in French can license noun ellipsis by properly governing the NP. The goal of this chapter is to relate the analysis proposed for noun ellipsis with cardinals and adjectives in French to the analysis of pronouns.

In §2, I showed that all “determiners without a noun” have a partitive meaning. Because of their partitive meaning, I assume that all “determiners without a noun”, and therefore also the pronouns among them, can formally license the missing noun.

In chapter 2 (§8), I proposed furthermore that the partitive element needs to have a specific interpretation in order to identify the empty noun. I assumed that besides a partitive PP, a definite determiner or a position outside the VP can also trigger a specific reading. Indefinite DPs in object position are generally non-specific. Therefore elements in an indefinite object DP cannot license an empty NP, unless there is a trigger for a specific reading, such as a partitive PP. That in the case of the five traditional groups of pronouns among Corblin’s class of “determiners without a noun”, the empty noun is also identified this way, is suggested by the following data:

- (43) *J’ai remercié quelques-uns *pro*.
I have thanked some-ones
- (44) J’ai remercié quelques-uns *pro* des étudiants.
I have thanked some-ones of the students
‘I thanked some of the students.’
- (45) J’ai remercié les quelques-uns *pro* qui étaient venus me voir.
I have thanked the some-ones who were come me see
‘I thanked the ones who came to see me.’
- (46) Quelques-uns *pro* sont venus me voir.
some-ones are come me see
‘Some have come to see me.’

Whereas (43) is ungrammatical because the indefinite pronoun in object position has a non-specific reading, (44)-(46) are grammatical because a specific reading is triggered. In (44) a specific reading is triggered by the partitive PP, in (45) by the definite article, and in (46) by the subject position. Recall that subjects generally receive a specific interpretation.

In the previous chapter I made a distinction between indefinite DPs (non-specific or specific) and definite DPs (specific). This corresponds to Milsark’s (1974) weak-strong distinction. Weak determiners can be used in a *there is* context, whereas strong determiners cannot:

- (47) Il y a quelques problèmes.
there are some problems
- (48) *Il y a ces problèmes.
there are these problems

Strong determiners, as in (48), are always specific (Enç 1991; Diesing 1992). The following data show that this is also true for the strong “determiners without a noun”. They can license an empty NP, even if they are in object position:

- (49) Je préfère celle *pro* que tu as achetée.
I prefer that that you have bought
‘I prefer the one that you have bought.’
- (50) Je préfère les tiens *pro*.
I prefer the yours
‘I prefer yours’

I propose therefore that Corblin’s “determiners without a noun” involve an empty noun that is licensed by a partitive element with a specific reading.

In the previous chapter I claimed that licensing of noun ellipsis has to obey Minimality. I claimed that the ungrammaticality of a sentence like (51) is the consequence of the violation of this constraint: proper government of the empty noun by *seul* is blocked by the intervening adjective *intelligent*, which itself cannot license the empty NP because it does not have a partitive meaning:

- (51) *Il est le seul intelligent *pro*
he is the only intelligent

In principle, Minimality can also explain the ungrammaticality of (52); the demonstrative pronoun cannot license the empty noun because of the

intervening "postnominal" adjective *intelligents* which, following Valois (1990, 1991) and others, I assumed to be generated in a pre-NP position:

- (52) *Ceux intelligents *pro* ne sont pas venus.
 those intelligent neg are come
 'The intelligent ones have not come.'

However, in the following two sections I propose that there is another reason for the ungrammaticality of (52).

5. Pronouns and determiners

According to Damourette & Pichon (1911-1940, §2492), one of the most difficult and most interesting problems of the French language is the status of *le* / *celui* and the status of the adjective in sentences such as (53)-(54):

- (53) C'est le meilleur.
 this is the best
 (54) Celui capable de m'aider est Paul.
 that capable of me help is Paul
 'The one capable to help me is Paul.'

Throughout this century, these questions have been a subject of discussion. While Damourette & Pichon (1911-1940) consider both *le* and *celui* to be determiners, Yvon (1949, 1950a,b, 1957) argues that both are pronouns. In Frei's (1961) opinion, *le* belongs to the traditional class of determiners, whereas *celui* is a pronoun. Warnant (1980) defends Yvon's position. More recently, there has been a new discussion in *Travaux de Linguistique*, while Pierrard (1991) takes the position of Damourette & Pichon, and thus considers both *le* and *celui* to be determiners, Hirschbüller & Labelle (1990), Veland (1990), and Grosu (1992) take Frei's position, and consider *le* to be a determiner, and *celui* to be a pronoun.

As for the adjective, it is considered to be either a noun (see e.g. Damourette & Pichon) or an adjective generated in a nominal position (see e.g. Bernstein (1993a) for the construction in (53) and e.g. Pierrard for both constructions), or an attribute which accompanies an empty noun (see e.g. Ronat (1977) for (53) and Bernstein (1993a) for (54)).

In this section and the following one, I will show that there is a relation between the attributive/predicative status of the adjective and the determiner/pronoun status of the element preceding the adjective.

I have proposed that both determiners and pronouns are always generated within the extended projections of NP, where they can license an empty noun from. It follows from my proposal that both *ce* and *celui* are generated within the extended projections of NP. The same holds for e.g. *mon* and *mien*, or *quelques* and *quelques-uns*. The difference between the two types is that determiners are followed by lexical material, for instance a noun or an adjective, whereas pronouns are followed by an empty noun, which already occurs at D-structure (*pro*) or else at S-structure, after the movement of *en* (see chapter 4). Thus, *quelques* is a determiner, whereas *quelques-un(e)s* is a pronoun:

- (55) Quelques voitures seulement me plaisent.
 a few cars only me please
 'Only a few cars please me'
 (56) Quelques-unes seulement me plaisent.
 a few only me please
 'Only a few of them please me.'

The idea is thus that *quelques* and *quelques-un(e)s* are generated in the same position, [Spec, QP], and that the difference between the two is that *quelques* is a weak form, which cannot be followed by an empty noun, whereas *quelques-un(e)s* is a strong form, which is only used if it is followed by an empty noun. If there is no distinction with respect to the position in which both the pronoun and the determiner are generated, the problem is then how to avoid ungrammatical combinations like (57)-(59):

- (57) *quelques-unes voitures
 some-ones cars
 (58) *quelques e
 some
 (59) *quelques-unes autres *pro*
 some-ones other

Corver & Delfitto (1993) posit that both the weak personal pronouns and the strong personal pronouns are generated in D°. Weak personal pronouns act both as a determiner and as a pronoun (60)-(61):

- (60) Je vois *le* garçon.
I see the boy
- (61) Je *le* vois.
I him see
'I see him.'

In contrast, the strong form of the personal pronoun can only be a pronoun (62)-(63):

- (62) Je ne vois que *lui*.
I not see but him
'I see only him.'
- (63) *Je ne vois que *lui* garçon.
I not see but him boy

In order to rule out (63), Corver & Delfitto propose to specify in the lexicon if a determiner selects an empty NP, a lexically filled NP, or both. Strong personal pronouns only select empty NPs, whereas the determiners *le*, *la* and *les* (which are also weak personal pronouns) select both types of NPs. In the same manner, it could be mentioned in the lexicon that *quelques-un(e)s* (directly) selects an empty complement, whereas *quelques* selects a lexically filled complement, AP or NP. In (58), *quelques* does not select a lexical complement. On the other hand, (64)-(65) are grammatical. Since *quelques-unes* selects an empty complement, (64) is possible, whereas in (65), the overt noun is possible because *quelques* selects an overt complement:

- (64) quelques-unes *pro*
some-ones
'some'
- (65) quelques voitures
some cars

If pronouns have the form of determiners (cardinals, *plusieurs*, *aucun* etc.), there is just one form in the lexicon. Then there are no selection restrictions, so that both an empty noun and a lexical noun can be selected:

- (66) plusieurs *pro*
several
- (67) plusieurs voitures
several cars

However, although *plusieurs* in (66) is not specified as a pronoun or a determiner in the lexicon, it functions as a pronoun, because it takes a lexically empty NP as its complement. On the other hand, in (67), *plusieurs* functions as a determiner, because it takes a lexical noun as its complement.

It follows that a distinction can be made between lexical pronouns, i.e. pronouns whose selection properties are specified in the lexicon (they (directly) select an empty noun) and syntactic pronouns, i.e. pronouns for which there are no selection restrictions, but which function as a pronoun if they are directly followed by an empty noun.

Returning to the problem mentioned at the beginning of this section, although we know by now that lexical pronouns are elements that directly select an empty noun, we still do not know whether *le* in (53) and *celui* in (54) are pronouns or determiners. All depends on the position of the adjective. If the adjective is an attribute, the preceding element is a determiner and if the adjective is a predicate, the preceding element is a pronoun. Therefore, in the next section I will discuss the position of adjectives with respect to pronouns.

6. Predicates and attributes

In the previous chapter it was proposed that adjectives with a partitive meaning are able to license an empty NP if they are generated within the extended projections of NP, if they have a specific interpretation, and if they respect Minimality. No distinction was made between prenominal adjectives, such as *autre*, and "postnominal" adjectives, such as color adjectives. Both types of adjectives are generated within the extended projections of NP. The postnominal surface position of adjectives such as color adjectives is the result of the movement of the noun to the head of NumP, a functional projection of NP, situated between the functional projections that contain the "prenominal" and "postnominal" adjectives. This way there is no parametric difference between the D-position of the adjectives in Germanic versus Romance languages, which according to Giorgi & Longobardi (1991) has to do with the direction of external theta-role assignment - to the right in the Romance languages, but to the left in the Germanic languages - but which, according to more recent insights, simply has to do with the movement of the noun past the adjective or not (see among others Valois 1990, 1991; Bernstein 1993; Cinque 1993; Longobardi 1994b).

However, in the Germanic languages not all adjectives are generated to the left of the noun. Bolinger (1967) shows that there are adjectives in English which are generated to the right of the noun. These are adjectives which are

followed by a complement, as in (68), and also adjectives with an implicit complement, as in (69):

- (68) a man proud of his country
 (69) ?a man proud

Cinque (1993) shows that in German there are also postnominal adjectival phrases:

- (70) Röslein rot
 little rose red
 'little red rose'
 (71) Gewhrkugeln gross wie Taubeneier
 bullets big as pigeon eggs

On Cinque's view the postnominal adjectival phrases in the Germanic languages are predicates, whereas the prenominal ones are attributes.

The same distinction can be made in French (and the other Romance languages). Ronat (1974) shows that adjectives followed by a complement, which I have called transitive adjectives, behave like relative clauses (see §2.2). Since they are thus a kind of reduced relative, their generation and licensing as predicates within the DP seems to be motivated. Since these predicative APs are not generated within the extended projections of NP, they are not able to license the ellipsis of the noun, because they cannot properly govern the NP. Sentence (72) is then ungrammatical because the predicative AP is not able to properly govern the ellipted noun (neither is the article):

- (72) *Voici la e belle à voir.
 this is the beautiful to see

Sentence (73), on the other hand, is grammatical, because the attributive adjective *seul* licenses the ellipsis of the noun:

- (73) Voici la seule e belle à voir.
 this is the only beautiful to see
 'This is the only one capable of pleasing me.'

This distinction between attributive adjectives and predicative adjectives allows for an explanation of why in French demonstrative adjectives can only be combined with transitive adjectives, and not with intransitive adjectives:

- (74) *Voici ceux capables.
 these are those capable
 'These are the capable ones'
 (75) Voici ceux capables de me plaire.
 these are those capable of me please
 'These are the ones that are capable of pleasing me.'

This difference is the consequence of the fact that in French only transitive adjectives, i.e. adjectives followed by a complement, can be used as DP-internal predicates, and intransitive adjectives cannot (see chapter 2, footnote 20). In the previous section, I defined lexical pronouns as elements which necessarily (directly) select an empty noun. In (74), the lexical selection restrictions are not reflected in the syntactic structure, because *ceux* does not take the empty noun as its complement:

- (76) *Voici ceux capables *pro*.

In (75), on the other hand, the transitive adjective is a predicate, so that *ceux* takes the empty NP as its complement:

- (77) Voici ceux *pro* capables de me plaire.

Since the demonstrative pronoun can be combined with predicates, we predict that it can also be combined with relative clauses. This prediction is borne out:

- (78) Celui e que tu vois là me plaît le plus.
 that which you see there me pleases the most
 'I prefer the one which you see there.'

Sandfeld (1965) observes furthermore that *celui* is not only used before a relative clause, but also before several equivalents of relative clauses. In other words, *celui* can only be followed by predicates. Sandfeld mentions several types:

1. Celui + past participle

- (79) une somme plus rondelette que *celle* promise d'abord
 a sum more round than that promised first
 'a more considerable sum of money than had first been promised'

2. **Celui + present participle**

- (80) La plus surprenante de ses aquarelles, c'était *celle représentant*
un cabinet particulier.
the most surprising of his aquarelles, it was that representing
a cabinet particular
'His most surprising aquarelle was the one that represented a
cabinet.'

3. **Celui + à + infinitive**

In (81), *à + infinitive* has a passive meaning ('those that have to be done'), whereas in (82) it has an active meaning ('those that will come'). Huot (1981) also relates *à + infinitive* to a relative clause:

- (81) ... et toutes *celles à faire*
... and all those to do
'... and all those which have to be done'
(82) et toutes *celles à venir*
.... and all those to come

4. **Celui + adjective**

Sandfeld notes that the use of *celui* before an intransitive adjective as in (83) is severely condemned by most grammarians:

- (83) *une culture plus légère que *celle allemande*
a culture more light than that German

This is as predicted, since *celui* cannot be followed by an attributive adjective. Furthermore, I proposed in the previous chapter that intransitive adjectives can only be generated as attributes, with the exception of the more "verbal" intransitive adjectives, such as past participles or adjectives ending in the suffix *-ible* or *-able*. These may also be generated as predicates. Therefore the combination with these kinds of adjectives is possible, as noted by Sandfeld ((84)-(85)):

- (84) Il lui dit d'ouvrir une fenêtre en face de *celle déjà ouverte*.
he her said of open a window facing that already opened
'He told her to open a window opposite the one that was
already open.'

- (85) Je ne parle que de *celles respectables*.
I neg speak neg of those respectable
'I only speak about the respectable ones.'

Finally, Sandfeld observes that the intransitive adjective can be more easily used as a predicate within the DP if it is preceded by an adverb. This fact is also mentioned by Damourette & Pichon (§569). They give the following example:

- (86) Cette remarque, ainsi que *celles purement grammaticales*, sont
pour les étrangers.
this remark, just like those purely grammatical, are for the
foreigners.
'This observation just like the purely grammatical ones, was
meant for the foreigners.'

Sleeman & Verheugd (to appear) claim that constituents are generated as DP-internal predicates, if they have argument structure. In that case an argument position can be projected in which an empty or overt operator can be generated, which can make the constituents function as predicates. The more or less verbal nature of most of the constituents that are generated in a DP-internal predicative position (participles, adjectives ending in the suffix *-ible* or *-able* and *à + infinitive*) motivates the assumption that they have argument structure. As for the transitive adjectives, Sleeman & Verheugd claim that the presence of an internal argument implies the presence of an external argument, which can take the form of an empty operator. They assume that the presence of argument structure prevents the constituent from being generated within the functional system dominating NP. On the other hand, intransitive adjectives can either have argument structure, which consists of an external argument and which enables them to be used in copular constructions, or not, on their view. They have argument structure if there is a syntactic reason for it, such as the generation in a small clause construction, but otherwise they do not. If there is no argument structure, they can be generated within the functional projections of NP.

Sleeman & Verheugd do not discuss adjectives preceded by an adverb. In this case it seems less likely to assume that the presence of the adverb implies that the adjective has argument structure, as they do for the transitive adjectives. However, although it does not seem plausible at first glance, I assume here that the modification by an adverb can imply that the adjective projects argument positions. It is a well-known fact that only some adverbs in French (especially the short ones: *plus*, *si*, *très*, etc.) allow prenominal adjectives to "stay" in their prenominal position. In combination

with most adverbs, the adjective (even the "prenominal" ones) can only occur postnominally:

- (87) une longue discussion
 a long discussion
- (88) une très longue discussion
 a very long discussion
- (89) *une énormément longue discussion
 'an enormously long discussion'
- (90) une discussion énormément longue
 a discussion enormously long
 'an enormously long discussion'

In order to account for this difference, I make a distinction between two adverb positions. One is the functional projection *deg(ree)* phrase (see e.g. Abney 1987; Corver 1990) which takes AP as its complement and the other is an adjunct position, in which the adverb occurs as a modifier of AP. I propose, in the spirit of Grimshaw (1990), that modification involves non-thematic a-structure (argument structure). Just as verbs can have a non-thematic argument, i.e. an event position, which can be saturated by an adverb (Higginbotham 1985), I propose that adjectives can have a non-thematic argument; let us call it a property position, which can also be satisfied by an adverb.³ This adverb can be a degree adverb, but it can also be another type of adverb such as *souvent* 'often' or *essentiellement* 'essentially'. I propose that just as the presence of an internal argument implies the presence of an external argument in the case of transitive adjectives (on the view of Sleeman & Verheugd (to appear)), the presence of a non-thematic argument, i.e. the property position, implies the presence of thematic argument structure, which minimally consists of an external argument. The external argument position can be filled by an empty operator. This way a predication relation with a noun can be established. On the other hand, adverbs that are generated in DegP (a functional projection of AP) are not modifiers in this sense. They are not identified with a non-thematic argument of the adjective. Since in this case there is no

³ On another point, I depart from Higginbotham (1985), because I assume that attributive adjectives do not have a syntactic external theta role that is identified with the noun's external theta-role. I assume that the adjective is linked in some way to a noun, but that this does not involve syntactic positions. Intransitive adjectives only have a non-thematic argument position that can be identified with an adverb. If there is no identification with an adverb, the adjective does not deploy thematic argument structure and must be generated within in a functional projection of NP.

non-thematic argument structure, there is no thematic argument structure either. Therefore, adverb + adjective has to be generated within the functional system dominating NP.

Yvon (1957) notes that besides *les plus âgées*, it is possible to use *celles plus âgées*. Note however that there is a difference in meaning. In the first case, we are dealing with a superlative, whereas in the latter case, we are dealing with a comparative. The superlative adjective (the DegP *plus âgées*) in the first case is an attribute generated in a functional projection of NP, and licenses the empty noun itself, whereas in the second case it is the demonstrative that licenses the empty noun.⁴ The comparative is a predicate, because the demonstrative pronoun has to be followed by an empty noun:

- (91) les plus âgées *e*
 the more old
 'the eldest ones'
- (92) celles *e* plus âgées
 those more old
 'the elder ones'

There is thus a relation between the attributive status of the superlative and the determiner status of *les* in (91), and also between the predicative status of the adjective and the pronominal status of the demonstrative in (92). This relation can be represented in the following way:

- (93) determiner - adjective - *pro*
- (94) *determiner - *pro* - adjective
- (95) pronoun - *pro* - adjective
- (96) *pronoun - adjective - *pro*

⁴ In this case, the generation of the adjective in an attributive or a predicative position cannot be the result of the adverb being a degree adverb or not, because it is the same adverb, a degree adverb in both cases. It is rather the consequence of the difference in meaning that the speaker wants to express. In the first case, *plus + adjective* gets a superlative meaning because of the presence of the definite article. If one wants to express the comparative meaning, the predicative position has to be used. To account for these cases, I propose that degree adverbs do not necessarily have to be generated within a DegP above AP, but can also be adjoined to AP. In the first case the adjective does not deploy thematic structure so that adverb + adjective are generated within a functional projection of NP, whereas, as I have proposed, in the second case it deploys thematic structure so that only adjunction to NP is possible.

This leads us back to the problem mentioned at the beginning of the previous section. The question was: what is the status of *le*, *celui* and the adjectives in (53) and (54), repeated here as (97)-(98):

- (97) C'est le meilleur.
this is the best
- (98) Celui capable de m'aider est Paul.
that capable of me help is Paul
'The one capable of helping me is Paul.'

I have proposed that within the DP in French, intransitive adjectives (with some exceptions) are always attributes, whereas transitive adjectives are always predicates. I have furthermore proposed that there is a relation between the attributive status of an adjective and the determiner status of a preceding element, and between the predicative status of an adjective and the pronominal status of the preceding element. We can now give an answer to the question posed at the beginning of the previous section. In (97), *le* is a determiner, whereas *meilleur* is an attribute. In (98), *celui* is a pronoun, whereas *capable de me plaire* is a predicate.

In this section I have argued that pronouns can only be combined with predicates but not with attributes. In general, predicates are adjoined to NP or a functional projection of NP. This implies that the empty noun is a maximal projection. However, Sandfeld (1965) observes that *celui* can also be combined with a PP:

- (99) celui de mon frère
that of my brother
'my brother's'

In the next section I discuss the status of PPs in combination with pronouns. Are they dominated by NP or not? Or, to put it differently, is the empty pronoun a maximal projection or not?

7. The empty pronoun

In the previous chapter (§5), I argued that in noun ellipsis constructions (with adjectives or cardinals) *pro* is a maximal projection, NP. In this section, I argue that in the case of pronouns, *pro* is also a maximal projection. To put it differently, I claim that NP never contains any lexical material apart from *pro*.

Most pronouns are difficult to combine with any other lexical material within the DP, but the demonstrative pronoun must do so. Grosu (1992) observes that the demonstrative has to be combined with one of the following elements:

1. a restrictive relative clause

- (100) celui qui dort
that who sleeps
'the one who sleeps'

2. a PP

- (101) celui de la Grèce
that of the Greece
'the one from Greece'

3. -ci or -là

- (102) celui-ci
that-here
'this one'
- (103) celui-là
that-there
'that one'

4. a transitive adjective

- (104) celui incapable de se contrôler
that incapable of himself control
'the one who cannot control himself'

I have proposed that both relative clauses and transitive adjectives are adjoined to NP, as predicates. I propose that *-ci* and *-là* are also adjoined to NP. That they are adjoined to NP and not to the pronoun itself is suggested by the fact that they can also be combined with a demonstrative adjective and an overt noun. In that case, they surface to the right of the noun:

- (105) ce livre-là
that book-there
'that book'

PPs which have no complement status can also be seen as adjuncts. Therefore, I assume that the PP in (106) is an adjunct of NP:

- (106) Laquelle? Celle en bleu?
 which? that in blue
 'Which one? The blue one?'

The consequence of the analysis of (100)-(104) and (106) is then, that in all of these cases, the NP is empty; the other material within the DP is either in the extended projection of the DP or right-adjoined to NP.

However, Grosu (1992) notes that the PP in (101) can also be a complement. An example is given in (107):

- (107) Le bombardement de la Turquie m'a plus étonnée que *celui de la Grèce*.
 the bombardment of the Turkey me has more astonished than that of the Greece
 'The bombardment of Turkey has astonished me more than that of Greece.'

This suggests that the NP that is the complement of the demonstrative can contain, besides *pro*, lexical material dominated by N'. This would contradict my claim (also see Lobeck 1991) that *pro* is a maximal projection in the case of pronouns.

Grimshaw (1990), however, makes a distinction between semantic and syntactic complements. Only complex event nominals, i.e. those nominals which express an event, can have a syntactic complement, dominated by N'. Event nominals are not countable. The noun *bombardement* in (107), however, can be pluralized:

- (108) Les bombardements de la Turquie m'ont plus étonnée que *ceux de la Grèce*.
 the bombardments of the Turkey me have more astonished than those of the Greece
 'The bombardments of Turkey have astonished me more than those of Greece.'

This shows that *bombardement* is not an event nominal here, but rather a result nominal. Grimshaw claims that the semantic complement of a result nominal is syntactically an adjunct. I therefore claim that the PPs in (107) are adjuncts.

Hirschbüller & Labelle (1990) cite an example of *celui* with two complements:

- (109) L'enseignement de l'histoire aux enfants est plus amusant que *celui de la géographie aux adultes*.
 the teaching of the history to the children is more amusing than that of the geography to the adults
 'History lessons to children are more amusing than geography lessons to adults.'

This example also suggests that the NP that is the complement of *celui* can contain lexical material dominated by N'. Note, however, that *celui* can only replace *l'enseignement* if this noun has a result reading. *L'enseignement de l'histoire aux enfants* can only be replaced by *celui* if it means 'history lessons to children'. If it has an event reading, i.e. if *l'enseignement de l'histoire aux enfants* means 'teaching history to children', the sentence is unacceptable, because in that case the noun cannot be substituted by *celui*. The same holds for (110), in which the noun *apprentissage* can only have an event reading:

- (110) *L'apprentissage du grec prend plus de temps que *celui du latin*.
 the learning of Greek takes more of time than that of Latin
 'It takes more time to learn Greek than to learn Latin.'

The ungrammaticality of (110) is as expected, because here the complement is a syntactic complement dominated by N'. The syntactic complement prevents the empty noun from being a maximal projection.

Another apparent counterexample to my claim that *pro* is always a maximal projection in the case of pronouns, is formed by the occurrence of a demonstrative pronoun followed by a complement clause. Sandfeld (1965) cites the following example:

- (111) Une crainte le troublait cependant, *celle que Savinien vint à connaître son passé*.
 one fear him disturbed however, the one that Savinien came to know his past
 'One fear disturbed him, however, which was that Savinien would discover his past.'

Grimshaw (1990) proposes that the complement is not a syntactic complement in cases like these either, although it is a semantic complement.

According to Grimshaw, nouns with sentential complements do not have syntactic argument-structure. The sentential complement of the noun is only a semantic argument. Whereas syntactic arguments are generated in specifier and complement positions, semantic arguments are adjuncts. Grimshaw already argues in (1979) that the selection of complement clauses is a matter of semantics and not of syntax. She showed that the semantic properties of complement clauses are maintained despite variation in the syntactic form of the head. Even the subjunctive requirement is maintained, as the past subjunctive form *vînt* in (111) and (112) shows:

- (112) Il craignait *que Savinien vînt à connaître son passé*.
 he feared that Savinien came to know his past
 'He feared that Savinien would discover his past.'

A third possible counterexample is the use of the demonstrative pronoun in the following example:

- (113) La notion de légitimation est plus connue que *celle d'identification*.
 the notion of licensing is more known than that of identification
 'The notion of licensing is better known than that of identification.'

I propose that here too, *de* + *noun* is an adjunct to NP since the noun is countable:

- (114) Les notions de légitimation et d'identification sont plus récentes que celles de gouvernement et de liage.
 the notions of licensing and of identification are more recent than those of government and binding

Note that in this case the pronoun always has to be followed by *de*, even if the noun that it replaces is not:

- (115) La notion 'légitimation' est plus connue que celle *(d')identification.

This fact might also indicate that *de* + *noun* is an adjunct, whereas the noun that is not preceded by *de* (115), is not. What the analysis of the latter construction is, is a question that I leave open here.

In this section I have claimed that *pro* is always a maximal projection in the case of noun ellipsis with pronouns, i.e. an NP. This, among other things, is the consequence of my claim that pronouns are generated within the extended projections of NP and not within NP.

In this dissertation, I consider the quantitative clitic *en* (i.e. NP *en*) to be the overt counterpart of NP *pro*. In the previous chapter and in this section I have argued that *pro* in nounless DPs is a maximal projection. In the next chapter I do the same with respect to *en*. Although *en* is the subject of the next chapter, I discuss its movement in this chapter. In the following section I first discuss the behavior of various specifier positions within DP with respect to the movement of constituents out of DP. Subsequently I discuss the possible combination of quantitative *en* with several kinds of pronouns. I investigate whether impossible combinations are the result of the movement of *en* or if they have another explanation.

8. Movement out of DP

It is a well-known fact that possessive and demonstrative adjectives block wh-movement out of DP:

- (116) *De qui_i as-tu vu [ce portrait <sub>t_i']?
 of whom have you seen this portrait
 (117) *De qui_i as-tu vu [son portrait <sub>t_i']?
 of whom have you seen his portrait</sub></sub>

Both Stowell (1989) and Dijkonings (1993) try to account for these extraction facts by making use of Chomsky's (1986) Barriers theory. The wh-phrase is first moved out of NP, which is a barrier because it is not theta-marked. If [Spec, DP] is filled, by *ce* in (116), or *son* in (117), it cannot be used as an escape hatch. When the wh-phrase is moved out of DP, a second barrier is crossed, DP, which is a barrier by inheritance. If [Spec, DP] is not filled, it can be used as an escape hatch for wh-movement. DP does not become a barrier by inheritance and there is no subadjacency violation. This explains the grammaticality of (118):

- (118) De qui_i as-tu vu [_{t_i} le portrait <sub>t_i']?
 of whom have you seen the portrait
 'Whose portrait have you seen?'</sub>

The genitive (i.e. adnominal) clitic *en* behaves in the same way as *wh*-phrases. Therefore, in this case it could also be assumed that extraction of *en* is blocked because NP and hence DP are barriers if [Spec, DP] is filled:

- (119) *J'_{en}_i ai lu ce chapitre _{t_i}.
I of it have read that chapter
(120) J'_{en}_i ai lu la préface _{t_i}.
I of it have read the preface

The problem with this kind of solution, however, is that it has to be assumed that NP is a barrier. But if we assume that quantifiers and adjectives are specifiers, as I assumed in the previous chapter, (121)–(124) would also have to be ungrammatical, contrary to fact, because here two barriers would also have been crossed (NP and QP, resp. AP):

- (121) De qui_i as-tu vu _{QP}[quelques _{NP}[portraits _{t_i}]]?
of whom have you seen some portraits
(122) De qui_i as-tu vu _{DP}[les _{AP}[premiers _{NP}[portraits _{t_i}]]]
of whom have you seen the first portraits
(123) J'_{en}_i ai lu quelques chapitres _{t_i}.
I of it have read some chapters
'I have read some chapters.'
(124) J'_{en}_i ai lu les premiers chapitres _{t_i}.
I of it have read the first chapters
'I have read the first chapters.'

In Sleeman (1992), I claim that the complement of a functional category is never a barrier (elaborating on Cinque 1990b, who claims that the complements of I and C are never barriers). This implies that NP is never a barrier and that only the highest functional projection dominating NP can be a barrier, providing that it is not L-marked, i.e. theta-governed. Therefore, the Barriers theory is unable to explain the ungrammaticality of (116) and (117), since NP is not a barrier. DP is not a barrier by inheritance then, so that there is no barrier at all.

To explain the ungrammaticality of these sentences, I follow Rizzi (1990, pp. 106–110) in proposing that constituents that are extracted out of DP must pass through [Spec, DP] because their feature [+genitive] (possibly a Case feature) has to be checked (see also Drijkoningen 1993). This explains why non-genitive phrases cannot be extracted out of DP. Since D° contains a checking feature, the non-genitive phrase has to pass through [Spec, DP].

Since in (125), the PP bears a nominal feature, it has to pass through [Spec, DP]. But since it does not bear a genitive feature, the derivation crashes:

- (125) *Contre quel fléau ont-ils poursuivi la lutte?
against which plague have they continued the fight

This also explains why (116) and (117) are ungrammatical. The genitive feature of the PP cannot be checked, because the PP cannot pass through [Spec, DP], the only position in which the genitive feature can be checked, because [Spec, DP] is already filled by *ce*, resp. *son*. As for (121), I assume that QP is dominated by an empty DP, through whose Spec the PP passes because of feature checking.

In Chomsky (1992), morphological features such as the genitive feature have to be checked, either at the syntactic level or at LF. Checking takes place against a feature in a functional head. If this feature is strong, checking has to take place at the syntactic level. If it is weak, checking takes place at LF. Movement takes place because of feature checking. This way movement to [Spec, DP] takes place because of feature checking. D° contains a genitive feature against which the moved constituent's genitive feature has to be checked. If D° contains a genitive feature, is this feature strong or weak? In French, [Spec, DP] is not a terminal landing site for movement, but only an intermediary landing site. This suggests that the genitive feature in D° cannot be a strong feature; otherwise genitive phrases other than *wh*-phrases and genitive clitics also would have to move to [Spec, DP] at the syntactic level, which would be their terminal landing site. Only genitive *wh*-phrases and the clitic *en* move at the syntactic level to this position. This suggests that the genitive feature in D° is a weak feature. Genitive phrases distinct from *wh*-phrases and clitics would then only move to [Spec, DP] at LF. Notice that even at LF, movement to [Spec, DP] must not be possible if this position is already filled. However, genitive PPs are possible even if [Spec, DP] is filled:

- (126) Tu connais ce livre de Zola?
you know this book of Zola
'Do you know this book of Zola's?'
(127) Tu as vu ma photo de Paul?
you have seen my photograph of Paul
'Have you seen my photograph of Paul?'

This suggests that the genitive PP does not move to [Spec, DP], neither at the syntactic level nor at LF. I suggest therefore that the genitive feature in D° is an optional feature (maybe associated with the presence of a strong

nominal feature in a higher projection). For this reason, it is only used as an intermediary landing site and is not a terminal landing site, neither at the syntactic level nor at LF.

I have shown that a filled [Spec, DP] blocks movement to this position. But whereas a filled [Spec, DP] blocks movement, the specifier of other functional projections of NP do not. In (128)-(129), the *wh*-constituent and genitive *en* can be moved out of DP:

- (128) De qui_i as-tu vu [_i les deux premiers grands portraits _i]
 of whom have you seen the two first big portraits
 'Whose first two big portraits have you seen?'
 (129) J'en_i ai relu les deux premiers bons chapitres _i.
 I of it have reread the two first good chapters
 'I have reread the first two good chapters.'

The intervening Spec positions do not block movement to [Spec, DP]. This means that a constituent does not have to make use of these intervening Spec positions in order to be moved out of DP. This also means that these intervening specifiers are not potential antecedent governors which block the relation between a PP moved to [Spec, DP] and its trace (Relativized Minimality, Rizzi 1990). The explanation for this might be that they are not referential. In this respect, they can be contrasted with ethnic adjectives. When these adjectives bear a theta role (Kayne 1984), they block movement:

- (130) *De quel pays a-t-on condamné l'invasion américaine?
 of which country has one condemned the invasion American
 (131) *On en a condamné l'invasion américaine.
 one of it has condemned the invasion American

Note that if ethnic adjectives do not bear a theta role, they do not block movement:

- (132) De quel film de Disney as-tu vu la version américaine?
 of which film of Disney have you seen the version American
 'Which one of Disney's film have you seen the American version of?'
 (133) J'en ai vu la version américaine.
 I of it have seen the version American
 'I have seen the American version.'

I have shown above that determiners in [Spec, DP], i.e. possessive and demonstrative adjectives, block extraction out of DP, whereas quantifiers in [Spec, QP] do not. Can the same distinction be made between the pronominal counterparts of these kinds of determiners?

At first glance, the extraction of *wh*-phrases out of DPs containing a pronoun suggests that pronouns have a blocking effect:

- (134) *De quels livres_i est-ce que quelques-uns *pro* _i seulement sont bons?
 of which books is it that some-ones only are good
 'Of which books are only some good?'

However, I suggest that the ungrammaticality of (134) is not due to the presence of the pronoun in an intervening Spec position. Milner (1978) suggests that the unacceptability of these kinds of sentences has to do with the so-called Partitive Constraint (Jackendoff 1977): partitive PPs have to be definite. Quantifiers (without an additional definite determiner) are excluded:

- (135) *J'ai lu deux de cinq livres.
 I have read two of five books

Since *wh*-words are also generally considered to be quantifiers, the Partitive Constraint would also apply to constituents containing them. I follow Milner in assuming that the ungrammaticality of (135) has to do with the Partitive Constraint and relate the ungrammaticality of (134) to the ungrammaticality of (135).

If we use a relative pronoun instead of an interrogative PP, sentence (134) becomes grammatical, although it contains an empty NP:

- (136) ces livres_i dont quelques-uns seulement *pro* _i sont bons ...
 these books of which some-ones only are good ...
 'these books, only some of which are good, ...'

However, I follow Hulk (1982) and Godard (1988) in assuming that *dont* is base-generated in a sentence-initial position in combination with a nounless DP and is therefore not moved out of DP. Therefore *dont* cannot reveal anything about the blocking effects of Specifier positions within DP that are filled by pronouns.

The combination of genitive PPs with pronouns is not acceptable, because the combination does not contain an overt noun that can take the genitive

PP as its semantic complement. For the same reason the combination with the genitive (i.e. adnominal) pronoun *en* is not possible:

- (137) *Lesquels *de ce livre* as-tu lus?
 which (ones) of this book have-you read
 (138) *Lesquels *en* as-tu lus?
 which (ones) of it have-you read

In the next section I discuss extraction of the NP *en* (i.e. the quantitative/partitive pronoun *en*) out of DPs containing pronouns.

9. Extraction of quantitative/partitive *en*

Another element besides wh-phrases and genitive *en* for which movement out of DP is generally assumed is the quantitative/partitive pronoun *en*. The quantitative/partitive pronoun *en*, generated in NP, can be combined with some types of pronouns. I assume that not only genitive elements (see also the discussion on (119)-(120)) but also partitive elements such as the quantitative/partitive pronoun *en* have to make use of [Spec, DP] in order to be moved out of DP. With quantificational pronouns, extraction is indeed possible, as (139) shows:

- (139) J'en ai lu quelques-uns t_i .
 I of them have read some
 'I have read some of them.'

This is as expected within my analysis, because *quelques-uns* is generated in [Spec, QP] and not in [Spec, DP].

The wh-word *combien* does not block extraction of *en* either. I assume it to be generated in [Spec, QP]:

- (140) [Combien t_i] en_i as-tu pris t_i ?
 how many of it have you taken
 'How many did you take?'

With demonstrative pronouns, on the other hand, extraction is not possible. This fact is also expected, if it is assumed that demonstrative pronouns are generated in [Spec, DP], just as the demonstrative adjectives:

- (141) *Parmi ces verbes, il y en_i a ceux t_i qui sont toujours
 impersonnels et ceux qui ne le sont pas forcément.
 among these verbs, there (of them) are those that are always
 impersonal and those that neg it are neg necessarily

As for the possessive pronouns, I proposed that they are generated in another functional projection than their adjectival counterpart. This was motivated by word order facts (see §3):

- (142) Ce sont mes enfants.
 these are my children
 (143) Ce sont les deux miens.
 these are my two

Whereas [Spec, DP] is filled by *mes* in (142), it is empty in (143). This means that extraction of the quantitative/partitive pronoun *en* would have to be possible. However, it is not:

- (144) *J'en ai lu les siens.
 I (of them) have read his

This is unexpected because [Spec, DP] is not filled.

Another pronoun that I have assumed to be generated in a functional projection different from [Spec, DP] is *lequel*. Although *lequel* is not in [Spec, DP], the extraction of the quantitative/partitive *en* out of DP is blocked:

- (145) Lesquels de ces bonbons as-tu pris?
 which (ones) of these sweets have you taken
 (146) *[Lesquels t_i] en_i as-tu pris t_i ?
 which of it have you taken

Since (144) and (146) are ungrammatical although [Spec, DP] does not seem to be filled it might be the case that the ungrammaticality of these sentences does not have anything to do with extraction, but is the result of something else.

It might be conceivable that the ungrammatical cases are not the consequence of the impossibility of the extraction of *en*, but instead the consequence of selection restrictions. Whereas "weak" (i.e. indefinite) pronouns such as *quelques-uns* would select *en*, "strong" (i.e. definite) pronouns such as *celui* would not.

This idea is (indirectly) confirmed by Bianchi (1992). Bianchi distinguishes two quantifier positions (for Italian). Strong quantifiers such as *tutti* 'all' and *entrambi* 'both' are the head of a QP that dominates DP. Weak quantifiers such as *molti* 'many', *pochi* 'a few' and the numerals are generated in D°. Bianchi gives several arguments in favor of this distinction. First, strong quantifiers take DP as their complement (147), whereas weak quantifiers take NP as their complement (148):

- (147) [tutti [i [libri]]]
all the books
(148) [molti [libri]]
many books

Second, strong quantifiers are floating quantifiers, whereas weak quantifiers are not. Sportiche (1988) proposes that in a sentence like (149), both *tutti* and *gli invitati* have been moved out of the subject in [Spec, VP]. According to Bianchi, the difference in grammaticality between (149) and (150) is then a consequence of the fact that *tutti* takes DP as its complement whereas *molti* takes NP as its complement. Only DP movement is possible whereas NP movement is not:

- (149) Gli invitati hanno tutti salutato Maria.
the guests have all greeted Maria
(150) *Invitati hanno molti salutato Maria.
guests have many greeted Maria

Third, whereas strong quantifiers can be followed by a personal pronoun (in D°) in Italian, weak quantifiers cannot:

- (151) Tutti noi pensiamo alla guerra.
all we think of the war
'We all think of the war.'
(152) *Molti noi pensiamo alla guerra.
many we think of the war

Fourth, DP *pro* can bear a person feature, whereas NP *pro* cannot:

- (153) Molti *pro* sono d'accordo con te.
many agree 3PL with you
(154) *Molti *pro* siamo d'accordo con te.
many agree 1PL with you

- (155) Tutti *pro* sono d'accordo con te.
all agree 3PL with you
(156) Tutti *pro* siamo d'accordo con te.
all agree 1PL with you

Although only the first and second argument also apply to the French quantifier *tous*, there is an additional argument which shows that *tous* is generated in a functional projection on top of DP. Extraction of the genitive pronoun *en* out of a DP introduced by *tous* is possible. Since genitive *en* (an adjunct of a lexically filled NP) also has to make use of [Spec, DP] (see §8), *tous* cannot be in [Spec, DP], but has to be in a functional projection dominating DP:

- (157) J'en ai lu tous _i les chapitres.
I of it have read all the chapters
'I have read all of its chapters.'

As for the weak quantifiers, Bianchi proposes that they are generated in D°. I propose that they are generated in a functional projection dominated by DP, because some weak quantifiers, such as the numerals and *quelques-un(e)s*, can be preceded by a definite article.

- (158) J'ai lu les trois.
I have read the three
'I have read the three of them.'
(159) Il a perdu les quelques-unes qu'il avait.
he has lost the some-ones that he had
'He has lost the few ones that he had.'

Although the quantitative/partitive pronoun *en* can move through [Spec, DP], it cannot be combined with *tous*:

- (160) *J'en ai lu tous.
I of them have read all
'I have read all of them.'

However, since [Spec, DP] is not filled, extraction should be possible. This suggests that the impossibility of combining the quantitative/partitive pronoun *en* with certain types of pronouns is not the consequence of movement, but the consequence of selection restrictions. Only "weak" (i.e. indefinite) pronouns select *en*, whereas "strong" (i.e. definite) pronouns do not. The ungrammaticality of the combination of the pronoun *en* with *ceux*,

les siens or *lesquels* could then also be the result of a selection restriction in the lexicon.

There are two problems with this approach. First, in §5 I proposed that pronouns select empty complements. Since *en* is not an empty NP it cannot be selected by pronouns such as *quelques-un(e)s*. However, the combination of *en* with *quelques-un(e)s* is grammatical. Second, the following data also suggest that the fact that *en* can only be used in combination with “weak” pronouns cannot be the consequence of selection restrictions:

- (161) J'en_i ai lu quelques-uns t_i.
I of it have read some-ones
'I have read some.'
- (162) *J'en_i ai lu les quelques-uns t_i qu'il a écrits.
I of it have read the some-ones that he has written
- (163) J'ai lu les quelques-uns *pro* qu'il a écrits.
I have read the some-ones that he has written
'I have read the few that he has written.'

If *en* were selected by *quelques-uns*, (162) should be grammatical. The same holds for the combination of *en* with adjectives. Whereas (164) is grammatical, (165) is not. This cannot be a consequence of selection restrictions, because if it would be encoded in the lexicon that *troisième* selects *en*, (165) should be grammatical:

- (164) J'en ai lu un troisième.
I of it have read a third
'I have read a third one.'
- (165) *J'en ai lu le troisième.
I of it have read the third

If the ungrammaticality of (160) is not the consequence of selection restrictions, what is then the reason for the ungrammaticality of this sentence? Note that the combination of *chacun* ‘every’ with the quantitative/partitive pronoun *en* is also impossible:

- (166) *J'en ai lu chacun.
I of them of read everyone
'I have read every one.'

It is not plausible that *chacun* is generated in [Spec, DP], because its adjectival counterpart is not, as the grammaticality of sentence (167) with the genitive pronoun *en* shows (cf. (157)):

- (167) J'en ai lu chaque volume.
I of it have read every volume
'I have read every volume of it.'

Since it precedes the cardinal in (168) and since it is a floating quantifier ((169)), just like *tous*, I propose that *chacun* is generated in an extended projection of DP:

- (168) L'autobus passe chaque dix minutes.
the car passes every ten minutes
- (169) Ils ont chacun raison.
they have everyone right
'Everyone of them is right.'

Therefore, we have the same problem as in the case of *tous*, *les miens* and *lesquels*. In all these cases, [Spec, DP] is not filled, but nevertheless the occurrence of *en* is not possible.

In the next section I propose a solution to this problem. But first I investigate what kind of quantifiers *tous* and *chacun* are. Are they “determiners without a noun” in Corblin's sense?

10. “Strong” pronouns

In this section I discuss the semantic properties of *tous* and *chacun*. This will lead to a proposal with respect to the reason for the ungrammaticality of *en* with certain pronouns.

Corblin (1990) makes a distinction between *chacun* and *tous*. He considers *chacun* to be a “determiner without a noun” because his five criteria apply to this pronoun. First, there is no noun, but there can be e.g. a relative clause:

- (170) Chacun que j'ai lu était captivant.
each one that I have read was captivating

Second, the missing noun is borrowed from the context by means of an anaphoric relation:

- (171) J'ai lu cinq livres. Chacun était captivant.
I have read five books. Every one was captivating

Third, the combination with a right-dislocated *de* + noun is possible:

- (172) Chacun, de livre, était captivant.
each one, of book, was captivating
'Every book was passionating.'

Fourth, the combination with a dislocated referential DP is not possible:

- (173) *Chacun était captivant, ce livre.
each was captivating, this book

Fifth, the nounless DP corresponds in gender but not necessarily in number to its antecedent:

- (174) J'ai rencontré cinq filles. Chacune était blonde.
I have met five girls. Each one was blond

This suggests that we are dealing with noun ellipsis. I assume therefore that there is an empty NP of the small *pro* type:

- (175) Chacun *pro* était captivant.
every one was captivating

As for *tous*, Corblin does not consider it to be a "determiner without a noun", because instead of the third criterion, the fourth criterion applies to this pronoun:

- (176) *Tous, de livres, étaient captivants.
all, of books, were captivating
'All the books were captivating.'
(177) Je les ai tous lus, ces livres.
I them have all read, these books.
'I have read all these books.'

However, all other criteria apply to *tous*. First, there is no noun, but there can be e.g. a relative clause:

- (178) Tous que j'ai lus étaient captivants.
all that I have read were captivating

Second, the missing noun is borrowed from the context by means of an anaphoric relation:

- (179) J'ai lu cinq livres. Tous était captivants.
I have read five books. All of them were captivating

Third, the nounless DP corresponds in gender, but not necessarily in number, to its antecedent:

- (180) Je n'ai lu que le premier livre de Zola, mais tous méritent d'être lus.
I neg have read than the first book of Zola, but all merit of be read
'I have only read Zola's first book, but all deserve reading.'

As for the third criterion, the combination with a right-dislocated *de* + noun, the fact that it does not apply to *tous* might be the consequence of the fact that *de* + noun has to be a real superset of the quantifier. This is suggested by Hulk (1996) who claims that there has to be a proper inclusion relation.

Since the other criteria do apply to *tous*, I propose that it is a "determiner without a noun" and involves an NP of the small *pro* type. The question arises then if *pro* is licensed in the same way as the other "determiners without a noun". I suggest that it is. I have proposed that *partitivity* means 'proper or improper inclusion in a set'. In the case of *tous*, there is improper inclusion. As Enç (1991) argues, even identity (i.e. improper inclusion) involves inclusion, but in this case the subset is equal to the superset. The difference between *tous* and a pronoun such as *lequel* is thus that the first involves improper inclusion, whereas the latter involves proper inclusion. In the case of *chacun* there is also improper inclusion, but in this case there is quantification over a set of individuals which are properly included in the set. Because of this, the combination with a right-dislocated *de* + noun is possible. Since both *tous* and *chacun* are therefore partitive in the sense in which I use the notion *partitivity*, they can formally license NP *pro*. I have proposed furthermore that NP *pro* has to be identified by an element with a specific reading. Both *tous* and *chacun* are "strong" (i.e. D-linked) pronouns, the pronominal counterparts of the strong quantifiers *tous* and *chaque*. Since *tous* and *chacun* are strong pronouns, they can identify NP *pro*.

Let us now turn back to the ungrammatical sentences with *en*. In the next chapter I propose that *en* is formally licensed the same way as NP *pro*, viz. by a partitive element. In the case of noun ellipsis, I have furthermore claimed that NP *pro* has to be identified by an element with a specific meaning. I have also proposed that *en* inherently has a specific reading. This is what differentiates *en* from *pro*. Whereas *en* is [+specific] (in the sense of

anaphoric) (also see Uriagereka 1995 for the assumption that overt pronouns are specific), *pro*, being an empty pronoun, is not specific. Furthermore, in the spirit of Chomsky (1992), I would like to propose that *en* is only used if a more economical derivation, i.e. a derivation with *pro* risks crashing. *En* is not used if *pro* can be used, because *en* has to be moved whereas *pro* stays in situ. Since a derivation with *pro* is therefore a more economical derivation than a derivation with *en*, it is preferred. My theory therefore predicts that *en* is used only if a nounless DP, with *pro*, does not have a specific interpretation and therefore risks crashing. This prediction is borne out; *en* is only used in combination with indefinite or weak object DPs:

- (181) *J'ai lu trois *pro*.
I have read three
- (182) J'en ai lu trois.
I of it have read three
'I have read three.'
- (183) *J'ai acheté un autre *pro*.
I have bought another
- (184) J'en ai acheté un autre.
I of it have bought an other
'I have bought another one.'
- (185) *J'ai jeté certains *pro*.
I have thrown away some
- (186) J'en ai jeté certains.
I of it have thrown away certain
'I have thrown certain ones away.'

Since definite DPs and "strong" (i.e. D-linked) pronouns have a specific reading so that they can be used in combination with *pro* even in object position, *en* is not used in combination with these, because the use of *pro* is more economical. This explains the impossibility of the combination of *en* with D-linked pronouns, such as *celui*, *le mien*, *lequel*, *tous* and *chacun*.⁵

⁵ Pesetsky (1987) distinguishes D-linked (discourse-linked) *which* from non D-linked *what*:

- (i) Which books (= which of these books) have you read?
(ii) What books (= what kind of books) have you read?

Lequel can only have the "strong" (i.e. D-linked) reading.

I propose that *en* is inserted in the empty NP position, before LE, if the empty NP cannot be licensed. The empty NP is then empty at D-structure, which solves the problem of the selection restrictions on pronouns (pronouns select empty complements, see §9).

Up until this point, I have claimed that five types of pronouns are generated in the Spec of extended projections of NP, from which position they license an empty NP, *pro*, by means of a [+partitive] feature. We saw that for Corblin (1990) the sixth type of pronoun, i.e. the personal pronoun, is not an instance of a "determiner without a noun", contrary to the other five types of pronouns. In the next section we turn to this sixth type of pronoun, the personal pronoun.

11. Personal pronouns

Corblin argues that personal pronouns do not involve an empty noun, because none of the criteria that apply to determiners without a noun applies to personal pronouns. First, personal pronouns cannot be combined with a relative clause ((187)), an adjective ((188)), or a PP ((189)):

- (187) *lui que j'ai vu
him that I have seen
- (188) *eux grands
they tall
- (189) *eux de mon frère
they of my brother

Second, although in the case of *le*, *la* and *les* it seems as if a missing noun is borrowed from the context by means of an anaphoric relation, this is certainly not the case with the other pronouns:

- (190) Le professeur me paraît sympathique. Je m'adresserai à lui
(*professeur).
the teacher me seems sympathetic. I me will-turn to him
(teacher)
'The teacher seems to be a nice person. I will turn to him.'

Third, the combination with a right-dislocated *de* + noun is not possible ((191)), only the combination with a dislocated DP (without *de*) is ((192)):

- (191) *Je les ai lus, de livres.
I them have read, of books

- (192) Je les ai lus, ces livres.
I them have read, these books

Fourth, personal pronouns correspond both in gender and in number to their antecedent:

- (193) Cette robe me plaît. Je la prends.
this dress FEM SG me pleases. I it FEM SG take
'I like this dress. I will buy it.'

Although personal pronouns differ from most of the "determiners without a noun" in the sense that they do not entail proper inclusion, this does not necessarily imply that there is no empty noun at all (see the discussion on *tous* and *chacun* in the previous section). Since Abney (1987), it is generally assumed that personal pronouns are generated in D°. Although Abney assumes that D° is intransitive in the case of personal pronouns, so that there is no NP projection, in more recent literature it is generally assumed that there is an empty NP (Corver & Delfitto 1993; Longobardi 1994a and many others).

Longobardi defends his assumption as follows: He claims that only DPs with a filled D° are referential, i.e., are arguments. He assumes that proper names are base-generated in NP and are moved, via head movement, to D°. Personal pronouns, on the other hand, are base-generated in D°. He presents several arguments in favor of this distinction. First, proper nouns can be combined with a definite determiner (in Italian):

- (194) il mio Gianni
the my Gianni
'my Gianni'
(195) *i ricchi noi
the rich we

Second, proper names, under a relatively marked interpretation, may provide a range satisfying essentially all kinds of determiners which end up quantifying over different individuals (or stages of the same individual):

- (196) every Mary I met in my life
(197) Il (simpatico) Gianni che conoscevo non esiste più.
The (nice) Gianni that I knew not exists more
'The (nice) Gianni that I used to know no longer exists.'

Personal pronouns may not provide a range satisfying determiners:

- (198) *every she I met in my life
(199) *Il (simpatico) lui che conoscevo non esiste più.
the (nice) he that I knew not exists more

Therefore, Longobardi makes the following distinction: Common nouns must always be used to refer to a kind (and therefore be in NP at S-structure) and thus may provide a range to a (lexical or overt) determiner understood as an operator; pronouns can never undergo this interpretation; proper names can, at least in marked cases, but need not.

Corver & Delfitto (1993) claim that both strong pronouns such as *lui*, and clitics such as *le* or *me* are generated in D° and take an NP *pro* complement. They show that strong pronouns can only have human reference (hence a [+human]-specification), whereas weak pronouns or clitics can both have human reference and non-human reference, which suggests that they are underspecified for the feature [+human]. Whereas in the Italian example (200), the strong personal pronoun *lui* can only have human reference, the clitic *lo* (here *l'*) in (201) can have both human and non-human reference:

- (200) Ho visto lui in strada.
I have seen him in the street
(201) L'ho visto sul tavolo.
it have seen on the table
'I have seen it on the table.'

Because of this difference, Corver & Delfitto claim that "the trigger for clitic pronoun movement is the underspecification of D° for the feature [+human]. This means that the clitic has to move to a position in which the empty slot (of the feature [+human]) contained in its feature matrix can be supplied with a value." What forces the clitic to move "is the impossibility of satisfying the lexical government requirement on the *pro*-complement." In the spirit of Lobeck (1991, 1993), see §2.7, Corver & Delfitto claim that the feature [+human] makes a pronoun in D° a proper governor for NP *pro*. This explains why strong pronouns, being [+human], do not have to be moved. Since clitics are underspecified with respect to the feature [+human], they are unable to license NP *pro*, unless they move to a verb which can provide the clitic with a value (cf. Rizzi 1986), i.e., which makes the clitic "strong" in the sense of Lobeck (1993), so that the clitic can license *pro*.

As for first and second person pronouns, Corver & Delfitto assume that they are unspecified with respect to the feature [+human]. They assume that

their human characterization is entailed by their grammatical person specification (first or second person). They assume that this is sufficient to make them weak forms, which must undergo pronoun movement. Since this would imply that the strong first and second person pronouns would also have to move, they propose that their deictic force enables them to license NP *pro* in situ.

I would like to suggest, departing somewhat from Corver & Delfitto, that the empty noun that is the complement of personal pronouns has to be both formally licensed and identified, just like the empty noun that is the complement of Corblin's class of "determiners without a noun". As for its formal licensing, I propose that the empty noun is formally licensed in the same way as in the case of noun ellipsis, i.e. by partitivity. Although personal pronouns are not partitives in the same way as most of Corblin's "determiners without a noun", they are partitive in another way. The difference is that in the case of personal pronouns there is improper inclusion whereas in the case of "determiners without a noun" there is proper inclusion. This relates the personal pronouns to *tous*, discussed in the previous section, which is also a case of improper inclusion. Enç (1991) calls this distinction *identity* versus *inclusion*. She argues that names, pronouns and definite descriptions are always specific. This is because identity of referents entails inclusion. Therefore, in an example like (202), the pronoun *they* is specific:

- (202) Five children arrived late. They had missed their bus.

The pronoun *they* requires an antecedent with which it is coreferential (identity). The only possible antecedent is *five children*. Therefore the pronoun is coindexed with *five children*. Since the inclusion holds whenever the identity relation holds, the pronoun is specific.

Although I assume that all personal pronouns can formally license their empty complements for the same reason as Corblin's "determiners without a noun" do (both are provided with the feature [+partitive] and can therefore formally license the empty noun by means of proper government), I propose that some of them differ from the other "determiners without a noun" in their way of identifying the empty noun. Whereas I have claimed that "determiners without a noun" identify their empty complement by means of a "specific" interpretation, I propose that in the case of some of the personal pronouns, the feature [+human] is involved. These personal pronouns are not "determiners without a noun" in Corblin's acception of the notion. The reference of the empty noun is not picked up from the context, as in the case of "determiners without a noun", but is DP-internally "satisfied" by a [+human] feature. Being specific, the whole DP, and not

only the empty noun, will have to be bound by an antecedent in the context, just like a definite description.

Whereas in the case of strong personal pronouns, I will assume that the feature [+human] identifies the empty noun, in the case of clitics I will assume that either the feature [+human] or the feature [-human] can identify the empty noun. Some of the clitics are [+human]: not only first and second person clitics, but also third person dative clitics, such as *lui* and *leur* in French:

- (203) Je lui parle.
I him/her speak
'I am speaking to him/her.'

The genitive clitic *en* and the dative/locative clitic *y* are always [-human]:

- (204) J'en ai lu le premier chapitre.
I of it have read the first chapter
'I have read the first chapter.'
- (205) *J'en connais le père.
I of him/her know the father
- (206) J'y pense.
I of it think
'I am thinking of it.'
- (207) *J'y parle.
I to her/him speak

Third person accusative and nominative clitics can have both human and non-human reference:

- (208) Je le vois.
I him/it see
- (209) Il est là.
he/it is there

Accusative and nominative clitics are related in this way to most other "determiners without a noun", which also can have both human and non-human reference:

- (210) Je préfère l'autre.
I prefer the other (person or object)

- (211) Tous me plaisent.
all please me
'I like them all (persons or objects).

Therefore, I propose that these clitics do not identify their empty complement by means of one of the features [+human] or [-human], but simply by their specificity features. Recall that personal pronouns always have a specific reading. In this way they are related to "strong" (i.e. D-linked) pronouns such as *tous*.

One problem is why third person dative clitics such as *lui* and *leur* only have human reference and why third person accusative and nominative clitics do not. I suggest that this is related to the fact that there is already a [-human] dative/locative clitic in French, viz. *y*.

Besides third person nominative and accusative clitics, there is another clitic that can have either [+human] or [-human] reference, viz. the quantitative clitic pronoun *en*. This pronoun differs from the personal pronouns discussed in this section because it is not generated in D°, but rather in NP. It does not license an empty noun, but has to be licensed itself by an element within the extended projections of NP. Its licensing is discussed in the following chapter. In §4.9, I will argue that the absence of one of the features [+human] or [-human] on the quantitative pronoun *en* is related to its NP position.

Since I have proposed that there are clitics that are identified DP-internally by the feature [+human], underspecification with respect to the feature [+human] cannot be the reason for the movement of clitics. What the trigger is is a problem that I leave open.

In this section I have proposed that all personal pronouns formally license their empty noun by partitivity (improper inclusion). I have made a distinction with respect to the identification of the empty noun, however. Whereas I have proposed that some personal pronouns identify their empty complement by a [+human] or [-human] feature, for others I have proposed that the empty noun is identified by the specific interpretation of the pronoun. In the next section I discuss another case in which the feature [+human] is involved in the identification of the empty noun.

12. *Personne* and *rien*

In this chapter I have claimed that pronouns can formally license an empty noun by means of partitivity and identify it by means of a "specific" interpretation:

- (212) J'ai lu beaucoup de ses livres. Quelques-uns *pro* seulement m'ont plu.
I have read a lot of his books. Some-ones only me have pleased
'I have read a lot of his books. I only liked some of them.'

If the empty noun is identified by specificity, it receives its interpretation from the antecedent and can therefore have human or non-human reference.

In the previous section I distinguished personal pronouns from other pronouns. Although I assumed that these also involve an empty noun, which is formally licensed by the partitive interpretation (improper inclusion) of the personal pronoun, I proposed that in some cases the empty noun is identified by the features [+human] or [-human]. In this section I propose that there are more pronouns that license their empty complement by means of comparable features.

In addition to the personal pronouns, there are more pronouns that can only refer to humans or only to non-humans. These are pronouns such as *quelqu'un* 'somebody', *personne* 'nobody', *quelque chose* 'something' or *rien* 'nothing'. These pronouns have a human (*quelqu'un*, *personne*) or abstract (*quelque chose*, *rien*) interpretation and therefore do not depend on the linguistic context for their interpretation.

In this chapter I have shown that Corblin (1990) makes a distinction between "determiners without a noun" (such as *plusieurs* 'several') and determiners for which he assumes that they do not involve an empty noun (the personal pronouns). One of the reasons for the distinction is the *de* + right-dislocated noun construction, which is possible with his "determiners without a noun", but not with personal pronouns:

- (213) J'en ai lu plusieurs, de livres.
I of it have read several, of books
'I have read several books.'
- (214) *Je les ai lus, de livres.
I them have read, of books

Since pronouns such as *quelqu'un* or *rien* cannot be combined with a right-dislocated noun introduced by *de*, they would not be "determiners without a noun", i.e. they would not involve an empty noun, on Corblin's view:

- (215) *J'ai vu quelqu'un, de garçon.
I have seen somebody, of boy

- (216) *Je ne vois rien, de livre.
I neg see nothing, of book

For Radford (1993) a pronoun such as *quelqu'un* is a lexical compound of the type Q (*quelque*) + N (*un*). For pronouns such as *rien* he assumes that there is an empty noun, but only at a lexical level. In the case of *rien*, there is a lexical compound of the type Q (*rien*) + empty N.

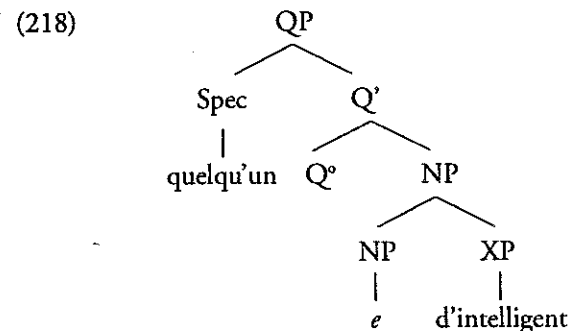
Neither on Corblin's view (if we extend his way of reasoning to these cases), nor on Radford's view, do pronouns such as *quelqu'un* or *rien* involve an empty noun at the syntactic level.

However, whereas Corblin assumes that personal pronouns do not involve an empty noun, I follow Longobardi (1994a) who argues that there is an empty noun (see also, among others, Corver & Delfitto (1993); Uriagereka 1995). Therefore, it might be possible to explore whether it is also possible to assume that there is an empty NP at the syntactic level in the case of *quelqu'un* etc.

A first reason for assuming that there is an empty NP at the syntactic level is that these kinds of pronouns can be combined with *de* + adjective (see, among others, Azoulay-Vicente 1985; Hulk & Verheugd 1992, 1994; Lagae 1994):

- (217) Quelqu'un d'intelligent m'a posé une question intéressante.
somebody of intelligent me has asked a question interesting
'An intelligent person has asked me an interesting question.'

In chapter 2 and in this chapter I assumed that *de* + adjective is right-adjoined to NP (or to another phrase, such as VP) and that *de* is the spell-out of a functional head of NP, which has a quantifier, a pronoun, or an adjective as its specifier. Since a pronoun such as *quelqu'un* also can be combined with *de* + adjective, this analysis would imply that here *quelqu'un* would also be the specifier of a functional projection of NP, for instance of QP:



A second argument in favor of an empty noun analysis in the case of the *quelqu'un* type of pronoun is that they do not agree in gender with the adjective introduced by *de*, whereas real nouns do. When *personne* means 'person' it is a feminine noun and the adjective agrees in gender with it. However, when *personne* (with *ne*) means 'nobody', there is no agreement:

- (219) Je ne connais qu'une personne d'intelligente.
I neg know than one person of intelligent
'I only know one intelligent person.'
- (220) Je ne connais personne d'intelligent.
I neg know nobody of intelligent
'I do not know anyone who is intelligent.'

This difference suggests that pronouns such as *personne* do not have to be generated in a noun position, but in the quantifier position. Quantifiers are neutral with respect to gender.

Because of these arguments, I propose that pronouns such as *quelqu'un*, *personne*, *quelque chose*, and *rien* are generated in the QP projection of NP and involve an empty noun. I propose that indefinite pronouns such as *tout*, interrogative pronouns such as *qui* or *quoi* and relative pronouns such as *ce qui* be analyzed in a similar way.

Since these pronouns have a quantificational meaning, just like *quelques-un(e)s*, *aucun* etc., I propose that they formally license the empty noun by means of partitivity (proper inclusion). But since their empty noun is not interpreted by a noun in the linguistic context, as in the case of *quelques-un(e)s*, I propose that they are identified by means of the features [+human] or [+abstract]. The difference between *quelqu'un* and *quelques-uns* is thus that *quelqu'un* bears a feature [+human], whereas *quelques-uns* does not. Since *quelques-uns* does not have such a feature, it has to receive a human or non-human interpretation from an element in the linguistic context. Since *quelqu'un*, on the other hand, provides itself a human interpretation,

there is no need of finding a referent in the linguistic context. This could explain why *en* is not possible in combination with this type of pronoun ((221)), although it is weak ((222)):

- (221) *J'en connais quelqu'un.
I of it know someone
(222) Il y a quelqu'un de nouveau.
there is someone of new
'There is someone new.'

A possible counterargument to the idea that pronouns such as *quelqu'un* license an empty NP is provided by the difference in behavior between *d'autre* and other adjectives preceded by *de*. Huot (1981) analyzes *de* + adjective as a reduced relative clause with *de* as the complementizer. This corresponds more or less to the analysis in (218), because in both cases *de* + adjective is a predicate which is right-adjoined to NP. Huot shows, however, that syntactically *d'autre* behaves in a different way than the other adjectives preceded by *de*. First, although it is not possible to have two instances of *de* + adjective (see (223)), it is possible to have *d'autre* followed by *de* + adjective:

- (223) *J'ai lu quelque chose de nouveau d'intéressant sur ce sujet.
I have read something new of interesting on this subject
(224) Avez-vous quelque chose d'autre de moins cher?
have you something of other of cheaper
'Do you have something else that is cheaper?'

Second, *d'autre* cannot be in a sentence-final position, separated from the pronoun, whereas other adjectives preceded by *de* can:

- (225) Quelqu'un aura saisi cette occasion, de bien plus avisé en affaires.
someone will have taken this opportunity, of far more handy in affairs
'A person that is far more handy in affairs, will have taken the opportunity.'
(226) *Je connais quelqu'un dans cet immeuble, d'autre.
I know someone in this building, of other

Since *d'autre* behaves in a different way than the other adjectives in the *de* + adjective construction, Huot distinguishes them syntactically. Whereas *de* + adjective is a predicate, *d'autre* is an attribute. In the DP-framework

that I have adopted, this would mean that *d'autre* would be generated within the extended projections of NP, possibly in [Spec, OrdP]. Since the pronoun precedes *d'autre*, it would have to be generated within QP, a functional projection of NP. However, I argued in this chapter and in the previous chapter, that an element that licenses an empty NP has to be adjacent to the NP. Since *d'autre* seems to be generated in a functional projection lower than QP, this would mean that *quelqu'un* cannot license the empty noun. Since *autre* seems to be the only adjective that syntactically behaves in this way in combination with these pronouns (all others are right-adjuncts), I propose that *quelqu'un d'autre* is a lexical compound and is generated as a whole in [Spec, QP] (see also Culicover & Wasow 1995 for *X else*). From this position the lexical compound licenses the empty noun in the same way as *quelqu'un* does. I assume the same for other pronouns that can be combined with *d'autre* (*qui d'autre* 'who else', *rien d'autre* 'nothing else' etc.).

13. Summary

In this chapter, I have related the analysis of a large group of pronouns to the analysis of noun ellipsis with cardinals and adjectives presented in the previous chapter. I have argued that of all these pronouns are generated in the Spec of several functional projections of NP and that, because of their partitive meaning, they formally license ellipsis of the noun exactly the same way as cardinals and a small group of adjectives in French do. They bear a partitive feature which enables them to license the empty noun through proper government. As for the identification of *pro*, I have again proposed that *pro* is identified if the formal licenser has a specific reading, so that the nounless DP can be linked to an antecedent. "Strong" (i.e. D-linked) pronouns are always specific and can therefore be used in any position. "Weak" (i.e. non D-linked) pronouns, on the other hand, are not necessarily specific and therefore cannot be used in object position, unless a partitive PP gives them a specific reading. I proposed that the quantitative pronoun *en*, being anaphoric, necessarily gives the "weak" pronoun a specific interpretation. I tried to account for the fact that *en* is only used in combination with "weak" (i.e. "indefinite") pronouns and not with "strong" (i.e. "definite") pronouns by proposing that *en*, being the overt version of NP *pro*, is only used if a derivation risks crashing. Just as in the previous chapter, I argued that *pro* is also a maximal projection, NP, when it is licensed by a pronoun. Furthermore, I showed that since pronouns directly select an empty NP, they cannot be followed by attributive adjectives, but only by predicates. On the basis of extraction data, I argued that elements

that are extracted out of DP, such as *en*, must pass through [Spec, DP] because their genitive/partitive feature has to be checked. I showed that a filled [Spec, DP] blocks movement, whereas other specifiers of functional projections of NP do not.

Finally, I distinguished some personal pronouns from the “elliptical” pronouns discussed in this chapter. Although I argued that all personal pronouns (except for the quantitative pronoun *en*) involve an empty noun, which is formally licensed by partitivity (improper inclusion), I made a distinction between “elliptical” personal pronouns (in this case specificity identifies the empty noun) and personal pronouns that identify the empty noun by means of the features [+human] or [-human]. I also claimed that pronouns such as *quelqu’un* and *rien* are not elliptical. I argued that these also involve an empty noun, which they formally license by means of partitivity (proper inclusion) and identify by means of the features [+human] and [+abstract].

0. Introduction

In the previous two chapters I discussed two cases of nounless DPs: DPs containing cardinals or adjectives (chapter 2) and DPs containing pronouns (chapter 3). I focused mainly on DPs with NP *pro*, but I also discussed the combination of pronouns with (the trace of) the quantitative (or partitive) pronoun *en* (especially in §9 and §10). In this chapter, more attention will be paid to *en* than in the previous chapter. I propose that the quantitative pronoun *en* is licensed by partitivity, just as NP *pro*. This will distinguish the quantitative pronoun *en* from all pronouns discussed in the previous chapter. Whereas *en* (within NP) is formally licensed by partitivity, all other pronouns (within the extended projections of NP) license NP pronouns by means of partitivity.

It is a well-known fact that the quantitative pronoun *en* can only occur in combination with indefinite object DPs. But what is not so well-known is that *en* cannot be extracted from all indefinite object DPs; there seem to be further restrictions. So, whereas (1) is fine, (2) is not:

- (1) J’en ai acheté un petit.
I of it have bought a small
'I have bought a small one.'
- (2) *J’en ai acheté un cher.
I of it have bought an expensive
'I have bought an expensive one.'

Again, as in the case of noun ellipsis, the notion “classifying” seems to play an important role, as I show below. Therefore, I claim that NP *en* and NP *pro* are formally licensed in exactly the same way.

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that are extracted out of DP, such as *en*, must pass through [Spec, DP] because their genitive/partitive feature has to be checked. I showed that a filled [Spec, DP] blocks movement, whereas other specifiers of functional projections of NP do not.

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Although little attention has been paid in the literature to the types of indefinite object DPs from which *en* can be extracted, the Italian

quantitative pronoun *ne* has been the subject of some recent studies in which attention is paid to the internal structure of the DP from which *ne* is moved. In this chapter I especially discuss Cardinaletti & Giusti's (1991) paper on *ne*. Cardinaletti & Giusti assume, following Cinque (1990a), that adjectives of quality that are combined with *ne* are always right-adjoined to the empty noun, as in (3):

- (3) Ne ho letto uno _{NP} [_{NP} *e*] lunghissimo].
 of them have read one very long
 'I have read a very long one.'

These right-adjoined adjectives are adjectives that can also be used as predicates in copular constructions. All adjectives of this type can be used in combination with *ne*. Furthermore Cardinaletti & Giusti assume that the empty noun has to be licensed by a [+Q] element. However, it is not clear from their study what these [+Q] elements are. The only [+Q] element that they use in their examples, is the quantifier *uno*.

In this chapter I propose a refinement of Cardinaletti & Giusti's theory. I show that adjectives that cannot be used as predicates are also possible in the *ne*-construction. Furthermore I show that Cardinaletti & Giusti's analysis of the Italian data involving *ne* cannot be applied without modification to the French facts, because whereas in Italian all predicative adjectives are possible in this construction, in French there seems to be a restriction on the adjectives that can be used in combination with *en*. Although my analysis of the French data differs substantially from Cardinaletti & Giusti's analysis of the Italian data, I show however that Cardinaletti & Giusti's basic insights can be maintained. I propose that partitivity plays an important role, which is one property of Cardinaletti & Giusti [+Q] licensers.

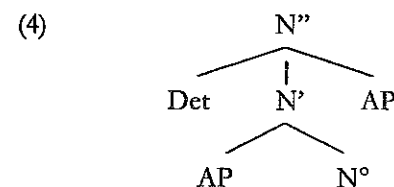
In this chapter I discuss some further problems with respect to *ne/en*, which are also discussed by Cardinaletti & Giusti: Is *ne/en* a head or an NP? What is the analysis of partitive *ne/en*? Why can *ne/en* not be used in combination with definite DPs? Why does it have to be used in combination with indefinite object DPs but not in combination with indefinite subject DPs?

This chapter is organized as follows: In §1 I summarize Cardinaletti & Giusti's (1991) paper on the Italian quantitative pronoun *ne*. In §2 I discuss two analyses that have been proposed for the French *en* + adjective construction. In §3, it is shown that, contrary to what Cardinaletti & Giusti claim, there are adjectives in Italian that cannot be used predicatively, but which nevertheless can be combined with *ne*. This leads to a reformulation of Cardinaletti & Giusti's explanation of the Italian data. In §4 I discuss the adjectives that can be combined with *en* in French. In §5 I make more

precise assumptions about the position of the adjectives in the *en* + adjective construction. In §6 I provide an account for the fact that, in the languages that have been discussed, empty noun constructions are better with some elements than with others. In §7 it is shown that there are different constructions involving an empty noun, and that the class of licensers of the empty noun may differ for each of the constructions. In §8 the possible distinction of a partitive pronoun *en* is discussed. In §9 the complementary distribution of the quantitative pronoun *en* and NP *pro* is discussed. Finally, in §10, the results are summarized.

1. Cardinaletti & Giusti (1991)

The theoretical starting point of Cardinaletti & Giusti's (1991) paper is Chomsky's (1986) claim that the only projections that undergo movement are X^0 and XP. This represents a problem for Rizzi's (1979) and Belletti & Rizzi's (1981) claim about the status of the Italian quantitative pronoun *ne*; according to these linguists *ne* is an X' (cf. Milner 1978) which is moved to a preverbal position. One of Rizzi's (1979) motivations for the assumption that *ne* is an X' is the combination of *ne* with adjectives. Rizzi assumes that prenominal adjectives are generated under N' , while postnominal adjectives are generated under N'' , as in (4):



This structure shows that the assumption that *ne* is an N' explains why prenominal adjectives cannot be stranded by the movement of *ne*, while postnominal adjectives can. According to Rizzi, the full form of the quantifier *uno*, which also appears when the quantifier is bare (as in (5)) shows that the adjective in (6) has to be analyzed as a postnominal adjective (in both cases *uno* is directly followed by an empty noun):

- (5) Ne_i ho letto uno _{t_i}.
 of them have read one
 'I have read one'

- (6) Ne_i ho letto uno _{t_i} lunghissimo.
 of them have read a very long
 'I have read a very long one.'

The adjective *lunghissimo* can also occur in a prenominal position, as (7) shows. If it is in a prenominal position, however, it cannot be stranded by *ne*. Hence the ungrammaticality of (8), where the shortened form *un* shows that the adjective must be in a prenominal position, so that *un* is not immediately followed by the empty noun:

- (7) Ho letto un lunghissimo libro.
 I have read a very long book
- (8) *Ne ho letto un lunghissimo _{t_i}.
 of them have read a very long
 'I have read a very long one.'

The contrast in grammaticality between (6) and (8) is explained by the assumption of structure (4) and the assumption of the N'-status of *ne*. If *ne* is an N', it can strand a postnominal adjective, which is generated under N'', but it cannot be combined with prenominal adjectives, because *ne*, being an N', does not allow any other material to be generated under N'.

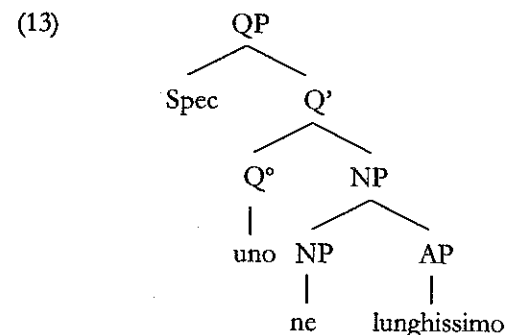
Cardinaletti & Giusti (1991) object that there are postnominal adjectives which cannot be stranded by the movement of *ne*, such as the adjective *principale* or ethnic adjectives such as *tedesco* which bear a theta role:

- (9) Ho dato un argomento principale.
 have given an argument main
 'I have given a main argument.'
- (10) *Ne ho dato uno principale.
 of them have given one main
 'I have given a main one.'
- (11) L'invasione tedesca della Polonia
 the invasion German of Poland
 'The German invasion of Poland'
- (12) *Ne ho vista una tedesca.
 of them have seen one German
 'I have seen a German one.'

These adjectives constitute a problem for Rizzi's theory because, being postnominal adjectives, they would have to be generated under N'' and therefore it should be possible to combine them with *ne*. This is however not the case, as the ungrammatical sentences (10) and (12) show.

Because of the theoretical and empirical problems with the analysis of *ne* as an N', Cardinaletti & Giusti make a different proposal. They claim that *ne* is an NP which is directly selected by Q (the head of QP, which is a functional projection of NP). Q assigns partitive Case to the NP, which explains the genitive morphology of *ne*.

Cardinaletti & Giusti claim furthermore that all postnominal material left in place by *ne*-cliticization consists of modifiers of the NP. They consider these modifiers to be predicates, which are right-adjoined to the NP. At D-structure, the direct object in (6) has the structure shown in (13):



Since both prenominal material, i.e. the quantifier, and postnominal material, i.e. the modifier, are generated outside the NP - the first as the head of a functional projection of NP and the second as a right-adjunct of NP - *ne* can now correspond to a maximal projection (NP). This is the best option from a theoretical point of view.

But according to Cardinaletti & Giusti this analysis must also be preferred to Rizzi's from an empirical point of view. Since they draw a parallelism between modifiers and predicates, they predict that adjectives that cannot occur as predicates cannot be modifiers, i.e. cannot be right-adjoined to NP. This prediction is correct, as they show. The ungrammaticality of (10) and (12) is the consequence of the fact that *principale* and ethnic adjectives bearing a theta role cannot be predicates:

- (14) *Questo argomento è principale.
 this argument is principal
- (15) *L'invasione (della Polonia) fu tedesca.
 the invasion (of Poland) was German

Although Cardinaletti & Giusti's analysis is convincing, it raises several questions. First, they make a distinction between attributively and predicatively used adjectives. Adjectives such as *principale* in (14) and *tedesco*

in (15) cannot be used predicatively, i.e. in a copular construction or as a right-adjunct to NP, but only attributively. However, it is not clear from Cardinaletti & Giusti's paper where attributively used adjectives are generated. As a consequence, although Cardinaletti & Giusti explain the grammaticality of (6) they do not explain the ungrammaticality of (8). Which is the position of *lunghissimo*, and why is sentence (8) ungrammatical? In the next two sections I refine Cardinaletti & Giusti's analysis, after having taken the French facts into consideration.

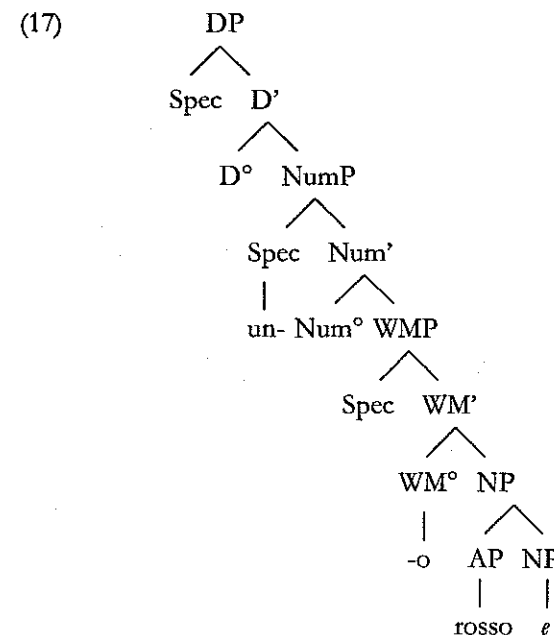
2. French

Bernstein's (1993a,b) analysis of *ne + uno + adjective* in Italian differs from Cardinaletti & Giusti's analysis in two respects. First, Bernstein analyzes *uno* as a discontinuous element at D-structure: *un* as a quantifier in the Spec of NumP and *-o* as the head of a functional projection dominating NP (the word-marker phrase). The noun raises to Num° and picks up the word-marker through incorporation. If there is no noun, the word-marker raises to D°. Subsequently, *un* moves from [Spec, QP] to D° and left-adjoins to the word-marker. The word-marker (or its trace) licenses the empty NP, which may be a base-generated empty NP or the result of the movement of the Italian pronominal clitic *ne*. Second, the adjective is analyzed as an attributive adjective, which is left adjoined to NP. Bernstein assigns thus the D-structure in (17) to the direct object in (16):¹

- (16) Ne ho visto uno rosso *t*.
 of it I-have seen a red
 'I have seen a red one.'

¹ Bernstein analyzes *uno* (Italian) / *un* (French) + adjective + *pro*, as in (i) and (ii), the same way:

- (i) Uno rosso *pro* è sulla tavola.
 a red one is on the table
 (ii) Un très gros chien vit dans cette maison. Un petit *pro* vit dans celle d'à côté.
 a very big dog lives in this house. A small one lives in that one next door



In the French example (18) there is no *-o*:

- (18) J'en ai vu un rouge *t*.
 I of it have seen a red
 'I have seen a red one.'

Bernstein assumes that in the French example (18), there is an abstract word-marker on *un* which licenses the empty noun.

So for both languages, Bernstein claims that an (abstract or overt) word-marker on the pronominal determiner licenses the quantitative clitic (at D-structure). In this respect, Bernstein's analysis generally corresponds to Cardinaletti & Giusti's analysis: it is the pronoun and not the adjective that licenses the clitic.

Milner (1978) and Huot (1981), however, oppose (19) to (20):

- (19) J'en ai un bon.
 I of them have a good
 'I have a good one.'
 (20) J'en ai un de bon.
 I of them have one of good
 'I have a good one.'

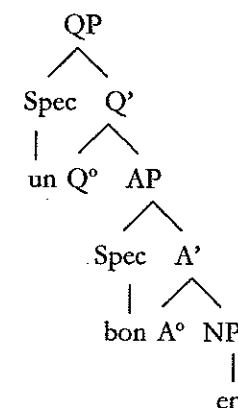
Whereas (19) simply means 'I have a good one', (20) means 'of good things I have one'. Huot analyzes *de* + adjective as a kind of reduced relative clause, with *de* as the complementizer. This means that the analysis that Huot proposes for (20) resembles the analysis that Cardinaletti & Giusti propose for the Italian example (6): *un* is in a position to the left of the empty noun and *de* + adjective is a right-adjunct of the empty noun.

The construction in (19), however, is analyzed differently by Huot. She analyzes the adjective in (19) as an attribute:

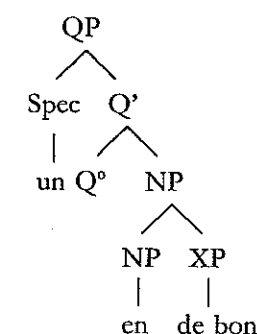
(21) *un bon e*

Huot notes that whereas in the *de* + adjective construction there is almost no restriction on the kind of adjective that is used, in the construction without *de* there is a restriction: the adjective has to be a "classifying" adjective. She does not, however, define *classifying adjective*. In §4 I discuss the French data and I try to define the notion "classifying" more precisely. We have already come across this notion in chapter 2. I adopt Huot's analysis of (19), i.e., I analyze the adjective in this construction as an attribute and not as a predicate. In this respect my analysis of the French example (19) differs from Cardinaletti & Giusti's analysis of the Italian example (6). Furthermore I claim that in the French example (19), it is the adjective and not *un* that licenses the empty noun (or rather the clitic). In this respect my analysis of French differs both from Cardinaletti & Giusti's analysis of Italian and from Bernstein's analysis of Italian and French. I assume that, in Italian, adjectives which can be used as predicates are right-adjuncts, i.e. DP-internal predicates. This implies that it must be the pronoun, i.e. the quantifier, which licenses *ne*. For French, on the other hand, I assume that adjectives are predicates only if they are preceded by *de*. Otherwise they are attributes (but see chapter 3, §6). To the D-structure objects of (19) and (20), I assign thus the structures (22) and (23) respectively. I assume that both indefinite articles and quantifiers (see chapter 2) are generated in [Spec, QP] and that adjectives are generated in [Spec, AP]. Furthermore I assume, following Hulk & Verheugd 1992, 1994), that *de* + adjective is right-adjoined to NP:

(22)



(23)



In Cardinaletti & Giusti's analysis of Italian, *uno* licenses *ne* because it is a quantifier. It is generated as the head of QP, a functional projection dominating NP. Being a quantifier, it assigns partitive Case to the NP. This partitive Case licenses *ne*. In Bernstein's analysis, the pronoun bears an overt or abstract word-marker. This word-marker is base-generated as the head of a functional projection of NP, the word-marker phrase. The word-marker expresses gender features and can therefore license the empty NP. In both analyses it seems to be impossible for an adjective to license a quantitative pronoun. In Cardinaletti & Giusti's analysis, the adjective would have to be the head of QP. And although adjectives may also bear word-markers, in Bernstein's analysis these word-markers would not be in a position from which they could properly govern the NP.

In §3 and §4 I propose that the same licensing mechanism applies to French and Italian. I propose however that the set of licensors differ in these two languages.

But first, in the next section, I extend Huot's analysis for French which I have adopted to a small class of adjectives in Italian, which is a first step toward the unification of the different analyses that have been proposed.

3. A small class of licensing adjectives

We have seen that Bernstein (1993a,b) assumes that the word-marker on *uno* is responsible for the licensing of *ne*.

- (24) Ne ho visto uno alto.
of them have seen a high
'I have seen a high one.'

However, there are adjectives with which *un* is used instead of *uno*:

- (25) Ne ho visto un altro.
of them have seen an another
'I have seen another one.'
- (26) un ultimo
a last (one)
- (27) un secondo
a second (one)

Since in Bernstein's analysis *-o* in Italian is a word-marker that licenses the empty noun, the empty noun in (25)-(27) would not be licensed, because there is no word-marker. Therefore, these cases would have to be ungrammatical, which is not the case. To solve this problem, Bernstein assumes that the adjective is not an adjective in these cases, but a noun. There is no empty noun then that has to be licensed. To explain the ungrammaticality of (28), on the other hand, Bernstein assumes that *altro* is an adjective, generated as the head of a functional projection of NP. Since it is a head, it blocks the raising of the word-marker to D°. This explains the ungrammaticality of this sentence:

- (28) *Ne ho letto uno altro.
of them have read an other
'I have read another one.'

However, I do not think that the adjective is a noun in (25)-(27), because in that case (25) should be ungrammatical: both *altro* and *ne* would be (the head of) NP. Nor do I believe that in (28) the adjective is a head rather than an adjunct (in Bernstein's analysis of adjectives) or a specifier (in Cinque's 1993 analysis). I claim that the adjective has exactly the same status in these cases.

I propose that what makes (24) differ from (25)-(27) is that in (24) the adjective is a predicate, whereas in (25)-(27) it is an attribute (for Bernstein also the adjective in (24) is an attribute). Since the adjective is a predicate in (24), the quantifier is a pronoun that licenses the empty noun. In (25)-(27), the adjective is an attribute and therefore, the quantifier is a determiner. I claim that in (25)-(27), it is not the quantifier but the adjective

that licenses the empty noun (cf. chapter 3, §6 for the idea that pronouns cooccur with predicates and determiners with attributes).

According to my analysis, besides quantifiers there are some adjectives that may license *ne* in Italian. Cardinaletti & Giusti do not mention these cases. The only examples that they give are examples with *uno* as the licenser of *ne*. I think that Cardinaletti & Giusti's account for the *uno* + adjective cases can easily be extended to cover the *un* + adjective cases as well. In chapter 3 I showed that in Italian *il* + adjective + *pro* is only possible with a restricted class of adjectives: ordinals, superlatives, *solo*, *altro* and *stesso*. With some of these adjectives, we get *un* instead of *uno*, i.e. we get a determiner instead of a pronoun. Note that superlatives and *stesso* have to be combined with a definite determiner and can thus not be combined with *un(o)*:²

- (29) il / un secondo
the / a second (one)
- (30) l' / un altro
the / an other
'the other / another'

I have claimed that in the *il* + adjective + *pro* construction, it is the adjective (which is an attribute) that licenses the empty noun. In the *un* + adjective + *ne* construction, I have also claimed that it is the adjective (an attribute) that licenses the pronoun. In this case there is a definite or indefinite determiner plus an attributive adjective. It is very natural to

² D. Delfitto has pointed out to me that whereas *solo* can be combined with the definite article, it cannot be combined with *un* but only with *uno*.

- (i) il solo
the only (one)
- (ii) *un solo
an only
- (iii) uno solo
one only
'only one'

This might simply have to do with the meaning of *solo*. Since *solo* has a restrictive meaning, it cannot be combined as an attribute with *un*, because if there is only one element, there is no further restriction possible. Therefore, it can only be used as a predicate, which has no restrictive function. The English adjective 'only' behaves in the same way:

- (iv) the only book
- (v) *an only book

analyze the adjective as an attribute in this case, because this restricted class of adjectives can only be used as attributes and not as predicates.

With other adjectives than the restricted class mentioned above, *il* is replaced by *quello* and *un* is replaced by *uno*:

- (31) *quello / uno interessante*
 that / one interesting
 ‘that interesting one / an interesting one’

I have claimed that in this case we are dealing with a pronoun + predicate construction. In this case it is the pronoun that licenses the empty noun:

- (32) *quello / uno e interessante*
 that / one interesting
 ‘the/an interesting one.’

Just as Cardinaletti & Giusti, I assume that the pronoun is base-generated as a whole and not the result of the movement of a word-marker to a determiner.

Cardinaletti & Giusti claim that in the *uno* + adjective construction, the adjective has to be one that can be used as a predicate. This excludes the restricted class of adjectives mentioned above from being possible in the *uno* + adjective construction, since they cannot be used as predicates. Nonetheless, I have shown that they can occur in combination with a quantifier and an empty noun, but I have claimed that they are attributes in these structures.

Cardinaletti & Giusti only mention quantifiers as the licensers of *ne*. Developing an idea of Belletti’s (1988), Cardinaletti & Giusti propose that quantifiers license *ne* by assigning partitive Case. This is motivated by the fact that in languages such as Russian, nouns can be assigned partitive Case by cardinals, as the following example taken from Pesetsky (1982) illustrates:

- (33) *Ja polucil [sest’ priemnikov].*
 I received six radios MASC GEN PL

However, there are several problems with the assumption that *ne* is licensed by (abstract) partitive Case. First, apart from the partitive form *ne*, there is no other evidence that quantifiers in Italian assign partitive Case. Second, and more importantly, in languages in which overt partitive Case is assigned to a noun, such as Russian, Finnish and Old English, only quantifiers (especially cardinals) assign partitive Case. I have argued that in Italian, *ne* can also be licensed by a small class of adjectives (especially ordinals and

altro). If *ne* is licensed by partitive Case assignment, we would be forced to assume that there are also adjectives that can assign partitive Case, which is rather implausible. In French, there even seem to be adjectives of quality that can license the quantitative pronoun, as we have seen in the previous section. Therefore, in the sequel, I assume that *ne* (and *en*) are not licensed by partitive Case assignment, but simply by being properly governed by an element bearing the feature [+partitive], also including ‘classifying’ adjectives, just as I did for the noun ellipsis cases:

- (34) **Licensing of pronominal NPs**
 Pronominal NPs are (formally) licensed by being properly governed by an element specified as [+partitive].

Note that the licensing mechanism covers the licensing of both empty pronominal NPs (*pro*) and lexically filled pronominal NPs (*ne*). This means that according to this principle NP *pro* is simply the phonologically empty counterpart of *en/ne*.

In chapter 2 (§5) and chapter 3 (§7), I argued that in nounless DPs, *pro* is a maximal projection (NP) since it cannot have syntactic complements, i.e. complements of N°. Following Grimshaw (1990), I assumed that apparent syntactic complements are in fact semantic complements and are adjoined to NP or an extended projection of NP. Since *pro* cannot have syntactic arguments, it is a maximal projection. In that case the argumentation concerned only *pro*, but in the case of quantitative *en* it is even more clear that there can only be semantic arguments, at least if one adopts Grimshaw’s theory. Grimshaw makes a distinction between complex event nominals and result nouns. She claims that only event nouns can have syntactic arguments. In the case of result nouns, N° can only have semantic arguments. According to Grimshaw, syntactic arguments of N° are not possible if the DP contains a numeral or an indefinite article, because in that case the noun can only be a result noun and not an event noun. In the case of *en*, the DP is always introduced by a numeral or an indefinite article (for an explanation, see §9). Therefore, quantitative *en* cannot have syntactic arguments, only semantic arguments are possible. In (35), both arguments are thus semantic arguments, i.e. adjuncts:

- (35) *J’en ai vu un t d’Aristote de Rembrandt.*
 I of it have seen one of Aristotle by Rembrandt
 ‘I have seen one of Aristotle by Rembrandt.’

Since the quantitative pronoun *en* is a maximal projection, i.e. an NP, it is not necessary to assume that it is moved via head-movement out of DP.

In chapter 3 (§9), I assumed that *en* is moved as an NP via [Spec, DP] where its partitive feature is checked. I assume that NP *en* then moves further to [Spec, Agr_oP] and that the head subsequently adjoins to V^o (cf. Chomsky 1992). It is generally assumed that other clitics, i.e. D^o pronouns also move this way. The whole DP is moved to [Spec, Agr_oP] and subsequently the pronoun in D^o adjoins to V^o (see e.g. Corver & Delfitto 1993).

I have assumed in chapter 2 that the restricted class of D-partitive attributive adjectives mentioned above can also license NP *pro* by means of partitivity in French. In this chapter I do the same with respect to *en*.³

- (36) J'en_i ai acheté un autre *t_i*.
I of them have bought an other
'I have bought another one.'
- (37) J'en_i ai acheté un troisième *t_i*.
I of them have bought a third (one)
- (38) Je n'en_i ai pas lu un seul *t_i*.
I neg of it have neg read an only
'I have read none.'

Cardinaletti & Giusti claim that in Italian only adjectives of quality that can be used as predicates can be used in the *uno* + adjective construction. In this construction they analyze the adjective as a predicate, i.e. as a right-adjunct. In the previous section, however, we saw that in the French *en* + adjective construction, Huot analyzes as attributes some adjectives of quality (such as *bon*) which can be used as predicates in copular constructions. If Huot's analysis is correct, French differs in this respect from Italian.

In chapter 2 I argued that in French "classifying" adjectives of quality can license the ellipsis of the noun. That is, they can license NP *pro*. In the next two sections I propose that they can do the same with respect to *en*.

4. Classifying adjectives

Apart from the small group of D-partitive adjectives (the ordinals, *autre*, and *seul*), Huot (1981) analyzes some adjectives of quality as attributive adjectives in the *en* + adjective + empty noun construction. She notes that only "classifying" adjectives can be used in combination with *en*. She defines

³ Note that according to this analysis, the French adjective *seul* can be used as an attribute in combination with *un*, contrary to the Italian adjective *solo* (see the previous footnote).

"classifying" adjectives as those which are able to distinguish among identical elements those which have a given characteristic from those which do not have it (Huot 1981, p. 301).

For Milner (1974) "classifying" adjectives are descriptive adjectives such as the adjective *red*, whereas "non-classifying" adjectives are adjectives that express an emotion, such as the adjective *horrible*. Whereas "non classifying" adjectives can be used in exclamations, "classifying" adjectives cannot:

- (39) Quel livre admirable!
what a fantastic book
- (40) *Quelle robe rouge!
what a red dress

We also came across the notion "classifying" in chapter 2. We saw that it was used by Barbaud (1976) to define the class of adjectives which can occur in combination with an ellipted noun. According to Barbaud, "classifying" adjectives are superlatives, color adjectives, hierarchic adjectives (ordinals, *autre*, *seul* etc.) and measuring adjectives such as *grand* and *petit*. Since Huot notes that *en* can only occur in combination with "classifying" adjectives, it should be acceptable with all of the adjectives that Barbaud mentions.

In the previous section we saw that *en* can be combined with hierarchic adjectives ((36)–(38)). But *en* cannot be used with superlatives. In §9 I relate the ungrammaticality of (41) to the ungrammaticality of the combination of *en* with D-linked pronouns (see chapter 3, §10):

- (41) *Elle n'en_i a pas jeté les plus grands *t_i*.
she neg of it/them has thrown away the biggest

Color adjectives can also be used in combination with *en*, as noted by Huot:

- (42) J'en ai un rouge.
I of them have a red
'I have a red one.'

Apart from the color adjectives, Barbaud adds "measuring adjectives such as *grand* and *petit*" to the "classifying" adjectives of quality. This is a rather vague definition of the notion "measuring adjectives". Which are the measuring adjectives?

Whereas besides the color adjectives Barbaud only mentions the adjectives *grand* and *petit* as examples of "classifying" adjectives, Huot gives some more examples:

- (43) J'en ai trois petits.
I of them have three small
'I have three small ones.'
- (44) J'en ai découvert plusieurs nouveaux.
I of them have discovered several new
'I have discovered several new ones.'
- (45) J'en possède peu d'anciens.
I of them own a few of ancient
'I have only a few old ones.'
- (46) J'en ai un bon.
I of them have a good
'I have a good one.'

Are all of the adjectives in these examples "measuring adjectives"? Whereas *petit* in (43) may be called a "measuring" adjective, this seems to be more difficult for an adjective such as *bon* in (46). Milner's definition of "classifying" does not cover all the data either, since there is also an example containing an adjective which expresses an emotion, which is non-classifying according to Milner.

Let us have a closer look at the adjectives in (43)-(46). What is striking in these examples is that almost all adjectives belong to binary pairs of adjectives which express basic notions: big-small, old-new/young, good-bad, beautiful-ugly. This suggests that the "classifying" character of adjectives of quality has to do with their expressing primitive concepts which serve to classify the experience of the surrounding world in all kinds of cultures.

Dixon (1977) shows that in languages with only a few adjectives, such as Igbo, Hausa and the Bantu languages, the adjectives express only the semantic types COLOR, DIMENSION, AGE, and VALUE. Other semantic types are expressed by means of verbs or nouns.

Dixon notes that "semantically, an adjective describes some important but non-criterial property of an object. That is, an adjectival description will serve to distinguish between two members of the same species that are referred to by a single common noun. It seems that, for speakers of human languages, the culturally and cognitively most relevant properties include *colour* (basically 'black' and 'white', sometimes extended to 'red' and so on) and *size*...Description of the *age* of an object is also considered important (with terms 'new/young'-'old')...The other important means of distinguishing tokens of a specific type involves judgments of *value*." Igbo for instance has an adjective class with just eight members, making up four antonym pairs: 'large' - 'small', 'new' - 'old', 'black, dark' - 'white, light', 'good' - 'bad'.

The French examples mentioned by Huot all contain basic adjectives of the four most important semantic types: COLOR ((42)), DIMENSION

((43)), AGE ((44)-(45)) and VALUE ((46)). Examples with adjectives of other semantic types or hyponyms of the basic adjectives are far less acceptable, although an implicit or explicit contrast can improve the grammaticality (cf. chapter 2, footnote 3):

- (47) ??J'en ai rencontré un content.
I of it have met a satisfied
- (48) ??J'en ai mangé un aigre.
I of it have eaten some sour
- (49) ??J'en ai vu trois lents.
I of it have seen slow
- (50) *?J'en ai vu plusieurs énormes.
I of it have seen several enormous

In §6 and §7 we will see that if an contrastive reading is not possible, the combination of *en* with these kinds of adjectives is impossible.

This discussion suggests that although there are many adjectives that are "classifying" in Huot's use of the word, not all these adjectives are equally acceptable in combination with *en*. It is not simply the case that an adjective has to be "classifying"; there seem to be more restrictions. Barbaud's definition, on the other hand, is too restrictive, because more adjectives than just the "measuring adjectives" can be combined with *en*. Milner's definition cannot be used either, because adjectives that can express an emotion can also be combined with *en*.

Therefore I suggest that attributive adjectives that can be combined with *en* must express cognitively relevant notions, which give them discriminating properties. In the sequel I use "classifying" this way.

I claimed in chapter 2 that "classifying" adjectives can formally license NP *pro* because of their partitive meaning. In this chapter I do the same with respect to the licensing of *en*. I assume that in both cases the class of licensors is essentially the same. I claim that in (42)-(46), it is the adjective and not the numeral or indefinite article which licenses *en*. In chapter 2 I argued that attributive adjectives but not predicative adjective can license the pronominal NP. Huot assumes the adjectives in the examples with *en* to be attributive adjectives. I adopt this analysis. But whereas Huot assumes that the adjective is generated to the right of the (empty) noun in the NP-framework she uses, in the DP-framework that I make use of, even "postnominal" attributive adjectives are generated to the left of the noun (see chapter 2).

The assumption that in (42)-(46), the adjectives are attributes explains why there is a restriction on the semantic type of adjective that can occur in this construction in French, but not in Italian:

- (51) *J'en ai rencontré quelques fâchés *t*.
I of it have met some angry
- (52) Ne ho incontrati alcuni *t* arrabbiati.
I of it have met some angry
'I have met some angry ones.'

Since the adjective is not a "classifying" adjective, it is not "discriminating" enough to license itself the ellipsis of the noun. Although the adjective is preceded by a quantifier, the quantifier cannot license the quantitative pronoun (at D-structure) by properly governing it, because of the intervening attributive adjective (Minimality). In French, intransitive adjectives cannot be generated in a DP-internal predicative position (see chapter 2, §6), so that the combination of *fâché* with *en* is never possible. In the Italian example, on the other hand, the adjective is generated in a predicative position, so that the numeral licenses *ne*.

I propose thus that a small group of adjectives of quality with clearly discriminating properties can license *pro* or its overt counterpart *en*. The suggestion that adjectives of the four major semantic classes mentioned by Dixon are more able to license pronominal NPs than others is corroborated by noun ellipsis facts from Sardinian and their analysis by Jones (1993). Jones notes that in Sardinian:

"... in order to modify an empty N' the adjective must denote some fairly concrete property which the addressee can easily recognise as distinguishing the intended referent from other potential referents, typical examples being colour terms and other "basic" adjectives, particularly those which imply a binary paradigmatic contrast: e.g. *mannu* 'big', *minore* 'small'; *longu* 'long', *curtzu* 'short'; *vetzu* 'old', *novu* 'new', *dzovanu* 'young'; *bruttu* 'dirty, ugly', *nettu* 'clean', *bellu* 'beautiful', etc." (Jones 1993, pp. 73-74)

Jones' observation concerns noun ellipsis in noun phrases with a definite article. The examples in (42)-(46) involve indefinite noun phrases with *en*. However, the licensing principle proposed in (34) applies to both cases.

Although the discussion in this section is not conclusive, because the class of adjectives that can license pronominal NPs in French is still vague, I hope to have shown that adjectives can only license empty noun if they have "discriminating" properties. This relates French (and Sardinian) to languages such as Italian, Spanish, and English, in which the licensing of pronominal NPs clearly has to do with the partitive properties of the governor, although in these languages D-partitivity seems to be required. N-

partitivity is only marginally accepted in these languages, which sets them apart from French (and Sardinian).

I have proposed that in French adjectives that can be combined with the quantitative pronoun are always attributes, unless they are preceded by *de*. In chapter 2 I assumed, following Valois 1991, Cinque 1993, and others, that "postnominal" adjectives are generated in a prenominal position at D-structure, i.e. a post-NumP, position. However, it is also conceivable that adjectives that license pronominal NPs are always generated in a "prenominal", i.e. a pre-NumP position, so that it would not be necessary to assume that "postnominal" adjectives are generated in a prenominal position at D-structure. I discuss this alternative in the following section.

5. The position of the licensing adjectives

The class of adjectives that, according to Weinrich (1966), can occur in a prenominal position strongly resembles the class of adjectives that can license NP pronominals in French. Weinrich gives the following list of prenominal adjectives from the novel *Les Muets* written by Camus:

table 4.1

prenominal adjectives

| | | | | | |
|------------------------------|----------------------------|-------------------------|-----------------------------|-------------------------|---------------------------|
| <i>ancien</i> 'former' | <i>gros</i> 'thick' | <i>fort</i> 'strong' | <i>grand</i> 'big, tall' | <i>long</i> 'long' | <i>bon</i> 'good' |
| <i>propre</i> 'own' | <i>beau</i> 'beautiful' | <i>mauvais</i> 'bad' | <i>nouveau</i> 'new' | <i>plein</i> 'full' | <i>unique</i> 'unique' |
| <i>petit</i> 'small' | <i>vieux</i> 'old' | <i>maigre</i> 'thin' | <i>seul</i> 'only' | <i>lourd</i> 'heavy' | <i>grossier</i> 'bad' |
| <i>jeune</i> 'young' | <i>court</i> 'short' | <i>léger</i> 'light' | <i>simple</i> 'simple' | <i>faux</i> 'false' | <i>épais</i> 'thick' |
| <i>curieux</i> 'peculiar' | <i>rude</i> 'hard' | <i>rapide</i> 'fast' | | | |

Weinrich notes that the prenominal adjectives fall into two classes. Some of the prenominal adjectives denote numerals. An example of this is the adjective *seul*. The other adjectives are members of classes that each consist of only two members. Weinrich distinguishes the following pairs:

- | | | | |
|------|-----------|---|-------|
| (53) | big | - | small |
| | long | - | short |
| | old | - | young |
| | good | - | bad |
| | former | - | new |
| | thick | - | thin |
| | heavy | - | light |
| | beautiful | - | ugly |
| | warm | - | cold |

We could add pairs like the following to the list:

- | | | | |
|------|----------|---|--------|
| (54) | strong | - | weak |
| | hard | - | soft |
| | fast | - | slow |
| | real | - | false |
| | peculiar | - | simple |

Weinrich concludes that prenominal adjectives of quality have either an augmentative (+) or a diminutive (-) sense.

What is striking in Weinrich's analysis is that the two classes of prenominal adjectives, the adjectives with a quantitative meaning, such as *seul*, and the adjectives of quality which are a member of an antonymic pair of adjectives, are also the two classes of adjectives that can license NP pronouns in French (note that not all of Weinrich's prenominal adjectives license NP pronouns). Since there is such a relation, it might be tempting to relate the licensing capacity of adjectives to the prenominal position. In other words, it is conceivable that an adjective has to be base-generated in a prenominal, i.e. pre-NumP, position in order to be able to license NP pronouns.

I think that there is no relation between the position of the adjective, pre-NumP or post-NumP, and its ability to license NP pronouns to this effect. I will present several arguments. First, although there are adjectives of quality which are generally generated in a prenominal position, such as *grand*, *jeune*, *bon* etc., there are also adjectives which license ellipsis of the noun, but which are generally generated in a postnominal, i.e. post-NumP, position, such as color adjectives. As we have seen, these allow ellipsis of the noun.

The second argument concerns adjectives which have a different meaning in a prenominal position than in a postnominal position. An example of this is the adjective *ancien*, which in a prenominal position has the meaning 'former' and in a postnominal position means 'old':

- | | |
|------|-----------------------|
| (55) | mes anciens collègues |
| | my former colleagues |
| (56) | des livres anciens |
| | some books old |
| | 'old books' |

In the case of a pronominal NP, the adjective *ancien* can only have the meaning 'old'. Therefore, in (57), *anciens* is a "postnominal" adjective. Recall that I assumed, following Valois (1990, 1991), Cinque (1993), and others that "postnominal" adjectives are base-generated within one of the functional projections dominating NP:

- | | |
|------|--|
| (57) | J'en _i possède des anciens _i . |
| | I of them own some old |
| | 'I have some old ones.' |

A third argument concerns Sardinian. In Sardinian, as noted by Jones (1993), most of the adjectives of quality that can license ellipsis of the noun are always generated in a "postnominal" (i.e. post-NumP) position:

- | | |
|------|---|
| (58) | Imbetzes de cudda makkina, appo comporatu sa (makkina) manna. |
| | instead of that car, I have bought the (car) big |
| | 'Instead of that car, I have bought the big one (car).' |

In conclusion, the licensing capacity of an adjective seems unrelated to a pre-NumP position. Some adjectives that can license ellipsis of the noun are generated in a pre-NumP position. For other adjectives, however, it has to be assumed that they are generated in a post-NumP position.

According to Bernstein (1993a,b) the fact that prenominal adjectives such as *simple* 'simple, mere' or *pauvre* 'pitiful' cannot license pronominal NPs is also related to the structural position of the adjective:

- | | |
|------|--------------------------------|
| (59) | *J'en ai rencontré un pauvre e |
| | I of them have met a pitiful |
| | 'I have met a pitiful one.' |

According to Bernstein these adjectives are generated as the head of a functional projection of NumP, whereas all other adjectives are adjuncts of NP or its functional projections. The ungrammaticality of (59) is the consequence of the fact that the movement of the abstract word-marker (see §2) from the head of the word-marker phrase to D° is blocked by the

adjective in an intervening head-position. In the system that I have developed in this dissertation, the licensing of pronominal NPs does not depend on the licenser's position within a functional projection. Both heads and specifiers can, in principle, license pronominal NPs. Therefore, in my system, the ungrammaticality of (59) cannot be the consequence of the adjective being a head.

I adopt the position of Cinque (1993) in thinking that in this case the adjective also occupies a Spec-position. In the DP-system that I have adopted, the heads of the functional projections, except for the head of DP, can only be filled by (phonologically unrealized) features or by *de*. All lexical material is generated within Spec-positions, except for the definite articles and personal pronouns, which I have assumed to be generated in D°. I think that the ungrammaticality of (59) does not have to do with the position of the adjective, but rather with its meaning. Adjectives such as 'pauvre' or 'simple' do not have any discriminating function when they are generated in a pre-NumP position. Higginbotham (1985) makes a distinction between (60) and (61):

- (60) a big tank
(61) a big butterfly

In (60), the semantics of adjective + noun simply consists in conjunction: a big tank is a big thing that is a tank. In (61), on the other hand, there is more than simple conjunction. A big butterfly is something which is big for a butterfly. Higginbotham proposes that the open theta-position of the adjective in (61) is identified with the open theta-position of the noun. The same semantic distinction can be made between (62) and (63):

- (62) un pauvre homme
a pitiful man
(63) un homme pauvre
a man poor
'a poor man'

Whereas (62) simply means 'a pitiful thing that is a man', (63) means 'someone who is poor with respect to other men'. Therefore, (62) simply involves conjunction, whereas (63) is more than conjunction, viz. conjunction + theta-identification. I propose that the ungrammaticality of (59) is the result of the fact that there is no theta-identification (cf. (62)), because *pauvre* means 'pitiful'. Adjectives only have a distinguishing, i.e. N-partitive meaning if there is theta-identification. Since empty nouns are only

possible if the adjective has a partitive interpretation, the ungrammaticality of (59) is expected.

The result of the discussion in this section is that adjectives that can license NP pronouns do not necessarily have to be in a pre-NumP position, but can also be in a post-NumP position. Therefore, I do not reject Valois' assumption that "postnominal" adjectives are generated in a pre-NumP position. The following adjectives are generated in a pre-NumP position: the ordinals, *seul*, *autre*, *même*, and possibly adjectives of quality that express basic antonymic notions and which are predominantly used in a pronominal position, such as *grand*, *petit*, *bon*, *mauvais*, *vieux*, *jeune*, and their comparatives or superlatives. Most of the other adjectives of quality are in a post-NumP position. All adjectives are generated in Spec-positions.

But whereas it is necessary for an adjective to be generated in a functional projection dominating NP, either pre-NumP or post-NumP, in order to be able to license pronominal NPs, this is not a sufficient condition. What is necessary is that the adjective has a partitive meaning. We have seen that adjectives with a D-partitive meaning can license NP pronouns in all languages we have considered so far. Adjectives of quality, which have an N-partitive meaning (cf. chapter 2), license NP pronouns especially in French, Sardinian and some varieties of Italian. But among these adjectives, some restrictions also have to be made related to their ability to license NP pronouns. We turn to this in the next section.

6. Licensing classes

In chapter 2 and in the present chapter we have seen that in French, besides quantifiers and pronouns adjectives of quality can license *en* and the ellipsis of the noun, although not all adjectives can do so. We have also seen that in other languages, such as English, (some varieties of) Italian, and Spanish, the licensing of empty nouns is possible with quantifiers but generally impossible with adjectives of quality. These differences suggest that the elements that can license pronominal NPs (empty or not empty) can be hierarchically ordered, with their position in the hierarchy related to the extent to which they are able to license pronominal NPs. I propose the following hierarchy:

- (64)
1. D-partitives (quantifiers, pronouns, superlatives, ordinals, 'only')
 2. color adjectives
 3. 'big' - 'small'
'good' - 'bad'
'old' - 'young', 'new'
 4. all other adjectives of quality

In most of the languages that have been considered so far, pronominal NPs are only possible with elements of class one and sometimes class two.⁴ In French and Sardinian, a pronominal NP can also be licensed by adjectives of quality from classes three and (more marginally) four. I do not have an answer as to why this should be so, but I suggest that there is a relation with the existence of the right-dislocated *de* + noun construction. This construction is possible, both in French and Sardinian (the Sardinian example has been taken from Jones (1993):

⁴ Whereas I proposed for Dutch that noun ellipsis with adjectives (involving the empty pronominal NP *pro*) is not licensed by partitivity, I propose that the overt pronominal analogue of the French pronoun *en* in Dutch is. The Dutch overt quantitative pronoun is *er*, which is historically related to Germanic *iro*, a genitive form of a third person pronoun. Only some of the elements of class one of the hierarchy, viz. cardinals and other pure quantifiers, license *er*:

- (i) Ik heb *er*_i drie _{NP}[*t*_i] opgegeten
I have of them three eaten
'I have eaten three.'
- (ii) Ik heb *er*_i verschillende _{NP}[*t*_i] gezien.
I have of them several seen
'I have seen several.'
- (iii) Ik ken *er*_i een honderdtal.
I know of them about hundred
'I know about hundred.'
- (iv) *Ik heb *er* drie blauwe.
I have of it three blue
'I have three blue ones.'

This is as expected, because the other D-partitives are adjectives, which license empty nouns by means of their inflection. I proposed in chapter 1 (§13) that Dutch quantifiers license empty nouns the same way as in French, Italian, etc., viz. by means of partitivity. I suggested that the overt NP pronoun is only used to save the derivation, i.e. if the quantifier does not have a specific reading.

- (65) la rouge, de voiture
(66) sa ruja de makkina
the red of car
'the red car'

Right-dislocated nouns are possible in neither Spanish nor English. In Italian, they are for at least some speakers, but in chapter 2 I observed that there are also speakers who accept adjectives of quality licensing ellipsis of the noun. A problem with this variety of Italian, however, is that speakers who accept the licensing of NP *pro* by adjectives of quality do not accept the licensing of NP *ne* by adjectives of quality. I suggest that for these speakers NP *pro* that is licensed by adjectives (N-partitives) in the noun ellipsis construction does not have an overt counterpart. Only NP *pro* that is licensed by D-partitives does. In chapter 2 (§13) I suggested that Dutch also has two kinds of empty NP pronouns, one licensed by adjectives and the other by quantifiers and pronouns. Only the latter type of *pro* has an overt counterpart.

The adjectives expressing basic antonymic notions are put on a higher hierarchical level in (64) than their hyponyms of class four because there is a difference in their licensing pronominal NPs. Huot (1981) observes that the combination of an adjective such as *intéressant* or *propre* becomes more ungrammatical if a determiner other than *des* or *un* (or sometimes a cardinal) is used:

- (67) J'en ai vu des énormes.
I of them have seen some enormous
'I have seen some enormous ones.'
- (68) ??J'en ai vu quelques énormes.
I of them have seen some enormous
'I have seen some enormous ones.'
- (69) J'en ai encore un propre.
I of it still have a clean one
'There is a clean one left.'
- (70) ??J'en ai plusieurs propres.
I of it have several clean ones
'I have several clean ones.'

However, in combination with an adjective such as *petit*, an adjective expressing a basic semantic notion, all determiners can be used:

- (71) J'en ai acheté quelques petits.
I of them have bought some small
'I have bought some small ones.'

In §4 I suggested that "basic" antonymic notions, such as 'good' - 'bad', 'old' - 'new' etc. are highly contrastive and therefore clearly have a partitive meaning (at a cognitive level). Other adjectives, on the other hand, are only partitive if they are explicitly or implicitly used in a contrastive way. If a determiner other than the neutral *des* or *un* is used, such as *quelques* or *plusieurs*, the determiner has a contrastive reading (see Gondret 1976). Therefore, the adjective cannot be used contrastively itself, which might explain the marginal acceptability of (68) and (70).

As for the adjectives of quality of class two, the color adjectives, they can license ellipsis of the noun in, for instance, English, whereas other adjectives of quality do not. Therefore, they are higher in the hierarchy than the adjectives of the classes three and four:

- (72) I take the blue.
(73) *I take the big.

On the other hand, color adjectives have been put on a lower level than the adjectives of class one, because they have to function as DP-internal predicates in Italian and Spanish indefinite DPs with an empty noun:

- (74) uno rosso
(75) *un rosso
a red (one)

As for the adjectives of class one, they license pronominal NPs in all languages that we have considered so far (but see footnote 4).

After the discussions of the semantic properties of the licensing elements (see chapters 2 and 3), the proposed hierarchy ((64)) is as expected. We have seen that D-partitives presuppose the existence of a set in which they are included, because their only function is to form a subset of a larger set. Since they do not denote properties themselves, they can only be used as attributes and not as predicates:

- (76) *This book is one.
(77) *These books are some.
(78) *This book is best.
(79) *This book is third.
(80) *This book is only.

Adjectives of quality, on the other hand, do not necessarily form subsets of larger sets, because they denote properties themselves. This is why they can be used as predicates or as attributives with a simply conjunctive interpretation, just as in the case of *un pauvre homme* or *a big tank*, see the discussion in §5):

- (81) La neige est blanche.
the snow is white
(82) la blanche neige
the white snow

Since adjectives of quality do not necessarily create subsets of larger sets, they are not D-partitives and therefore cannot license empty nouns in most of the languages that I have considered in this thesis.

We saw in §5, however, that in addition to conjunction, theta-identification between a noun and an adjective is also possible. In this case, the adjective has a discriminating meaning, such as in *a big butterfly* (with respect to other butterflies). A clearly discriminating meaning (see the discussion of "classifying" adjectives in §4) makes adjectives partitive in a sense (N-partitive), which, in French, makes their licensing of noun ellipsis possible.

Color adjectives are clearly more discriminating than other adjectives, which permits them (marginally) to license ellipsis of the noun in languages in which only D-partitives do so.

The licensing strategies in the languages that have been discussed are roughly schematized below:

table 4.2 noun ellipsis

| <i>Spanish</i> | all adjectives | <i>el</i> + predicate |
|---------------------------------------|-----------------|------------------------------|
| <i>Dutch</i> | all adjectives | D-partitives inflection |
| <i>French</i> | some adjectives | D-partitives N-partitives |
| (some varieties of) <i>Italian</i> | no adjectives | <i>il</i> + D-partitives |
| | all adjectives | <i>quello</i> + predicate |
| <i>English</i> | no adjectives | D-partitives |

In the case of the adjective *bleu*, on the other hand, we have are dealing with the *intersection* of two different sets: one the property denoted by a noun, and the other with the property denoted by the adjective. In this case, a subset may be formed from a given set, but this is not necessary. (97) may be used either in the context described in (98) or in (99):

- (97) J'aime le bleu.
I like the blue

Est-ce que tu aimes ces chapeaux?

- (98) Oui, j'aime le bleu.
Yes, I like the blue one

- (99) Non, je n'aime pas ceux-là, mais j'aime le bleu qui est là-bas.
No, I neg love neg those-there, but I love the blue that is there
'No, I do not like those, but I like the blue one over there.'

The adjective *autre* is special. In this case, a partition is formed, not within a subset of the noun, but within the superset denoting the kind. This partition contrasts with another subset. This explains the ungrammaticality of (86) and (93). Although *autre* is a D-partitive, it has a contrastive meaning, and therefore cannot be combined with partitive PPs or *dont*, which both denote subsets.

The possessive pronoun is also special. I have called it a D-partitive, but it denotes a property of its own, and on that basis an intersection is formed. It cannot be used as a predicate, however, which adjectives of quality can, and is always related to a noun by means of theta-identification (see Higginbotham 1985). It clearly has a discriminating meaning.

Since partitive PPs and *dont* require that a partition within a subset be formed, only the elements of class one are allowed.

A left-dislocated PP does not require that a partition is formed, although this is possible. In this case, a subset may also be created by means of intersection (see (89)-(90)). *Autre* is also excluded here, because of its contrastive meaning:

- (100) *De ces livres, je préfère l'autre.
of these books, I prefer the other

A third construction which reduces the number of potential licensing classes is the right-dislocated noun construction. Milner (1978) and Huot (1981) observe that whereas the classes one through four license *en*, the addition of a right-dislocated noun introduced by *de* reduces the number of licensing classes. Class four is excluded in this case:

- (101) J'en ai acheté une petite, de table.
I of it have bought a small, of table
'I have bought a small table.'

- (102) J'en ai des propres (*, de chemises).
I of it have clean (of shirts)
'I have clean ones.'
- (103) J'en ai raconté des salées (*, d'histoires).
I of it have told some funny, (of stories)
'I have told some funny stories.'

In §4 I suggested that "basic" antonymic notions, such as 'good' and 'bad' or 'old' and 'new' are highly contrastive and therefore clearly have a (N-)partitive meaning. Their hyponyms, on the other hand, are only partitive if they are explicitly or implicitly used in a contrastive way. In the case of *de* + noun, there is no contrastive reading, because there is only a semantic relation between the superset (noun) and subset (adjective), and no relation between a subset and another subset. This might explain the ungrammaticality of (102) and (103) with a right-dislocated noun.

Traditionally, *dont* and the partitive PP are related to the so-called partitive *en*, which is the subject of the next section.

8. Quantitative *en* and partitive *en*

We have seen that whereas *pro* can be combined with all of the licensing classes, the combination with *dont* or a partitive PP reduces the number of potential licensing classes. In the literature, *dont* and the partitive PP are often related to the partitive pronoun *en* (see, among others, Kayne 1975 and Milner 1978). Milner (1978) shows that partitive *en* has to be compared to *dont* in its interpretation:

- (104) Ils ont attrapé dix lions, dont ils ont tué plusieurs le lendemain.
they have caught ten lions, of which they have killed several the next day
'They caught ten lions, several of which they killed the next day.'
- (105) Hier ils ont attrapé dix lions. Aujourd'hui ils en ont tué plusieurs.
yesterday they have caught ten lions. Today they of it/them have killed several
'Yesterday they caught ten lions. Today they have killed ten/ten of them.'

In sentence (105) *en* is ambiguous in its interpretation. If *en* is the quantitative pronoun, several other lions have been killed, besides the ten that had already been caught. If *en* is the partitive pronoun, several lions out of the ten that had been caught are killed.

This semantic distinction led Milner (and others) to make also a syntactic distinction: whereas the quantitative *en* was analyzed as an N° or an N', the partitive *en* was analyzed as a PP, the complement of an empty N°.

However, several linguists have argued against such a distinction. Cardinaletti & Giusti (1991) claim that besides genitive *en*, the complement of a noun, there is only one other *en*, viz. NP *en*.

Lagae (1994) argues also against a distinction between a quantitative *en* and a partitive *en*. She argues against Milner (1978), who associates partitive *en* with genitive *en*, by showing that these two kinds of *en* behave differently. For one, genitive *en* cannot refer to human nouns, whereas partitive *en* can:

- (106) *Tu vois ces enfants? J'en connais les parents.
you see these children? I of them know the parents
'Do you see these children? I know their parents.'
- (107) Tu vois ces enfants? J'en connais deux.
you see these children? I of them know two
'Do you see these children? I know two of them.'

Since partitive *en* resembles quantitative *en* in this respect, Lagae claims that partitive *en* is quantitative *en* and that the partitive reading is only a function of the context.

In chapter 2 (§11), I showed that all pronouns in French, with the exception of nominative and accusative third person clitics and the quantitative pronoun *en*, always have either [+human] or [-human] reference. The fact that the quantitative pronoun *en* both has [+human] and [-human] reference is predicted by my analysis. I have claimed that it is the phonological spell-out of NP *pro* which is used in noun ellipsis constructions. I have claimed that quantitative *en* is only used to save a derivation that otherwise risks crashing, viz. within non-specific DPs. Since in the case of noun ellipsis, the human or non-human reference of NP *pro* always depends on the reference of the antecedent, NP *en* can also have either [+human] or [-human] reference. If partitive *en* is in fact genitive *en* we expect it to have [+human] reference. Since partitive *en* can actually have both [+human] and [-human] reference, it is reasonable to assume that there is no distinction between partitive *en* and quantitative *en*.

The distinction between licensing classes that I made in §6 and §7 also supports Lagae's claim. I showed that partitive PPs and *dont* can only be combined with elements of the first class, whereas quantitative *en* can be

combined with all of the four classes. Since partitive *en* resembles partitive PPs and *dont*, we would expect it to be possible only in combination with the elements of class one. However, this prediction is not borne out:

- (108) Hier ils ont attrapé dix lions. Aujourd'hui ils en ont tué deux
petits/énormes.
yesterday the have caught ten lions. today they of it/of them
have killed two little/enormous
'Yesterday they caught ten lions. Today they have killed two
little/enormous ones (of these).'

In this example, *en* is again ambiguous, as it was in (105). Besides the quantitative reading, the partitive reading is also possible. This shows thus that in the partitive reading *en* can also be combined with all classes of licensing elements. This supports Lagae's claim that partitive *en*, the PP complement of an empty noun, does not exist, but that it simply is quantitative *en* with a "partitive" interpretation.

A final argument in favor of the association of partitive *en* with quantitative *en* is the fact that NP *pro* can also have both a "quantitative" and a "partitive" reading:

- (109) Trois garçons sont entrés. Deux *pro* sont restés dehors.
three boys are come in. two are stayed outside
'Three boys came in. Two stayed outside.'
- (110) Trois garçons sont entrés. Deux *pro* ont commencé à me
parler.
three boys are come in. two are begun two me speak.
'Three boys came in. Two (of them) began to speak to me.'

In this section, I argued that partitive *en* is not distinct from quantitative *en*. Both are NP pronouns. In the next section, I will discuss the complementary distribution of NP *pro* and NP *en*.

9. *En* versus *pro*

I have proposed that *en* and *pro* are both licensed the same way, viz. by partitivity. The question that arises in this situation is why both NP *en* and NP *pro* exist. There must be some reason, because the following sentences show that they are almost in complementary distribution:

- (111) *Je n'ai lu qu'un seul *pro*.
I not have read than an only
'I have just read one.'
- (112) Je n'en_i ai lu qu'un seul *t_i*.
I not of them have read than an only
'I have just read one.'
- (113) Je préfère la rouge *pro*.
I prefer the red
'I prefer the red one.'
- (114) *J'en_i préfère la rouge *t_i*.
I of them prefer the red
'I prefer the red one.'
- (115) Un autre *pro* m'a aidé à retrouver mes lunettes.
an other me has helped to find back my glasses
'Another has helped me to find my glasses back.'
- (116) *Un autre *t_i* m'en_i a aidé à retrouver mes lunettes.
An other of them me has helped to find back my glasses
'Another one has helped me to find my glasses back.'
- (117) *J'ai parlé à trois *pro*.
I have talked to three
- (118) *J'en_i ai parlé à trois *t_i*.
I of them have talked to three
'I have talked to three of them.'

In chapter 2 I discussed the impossibility to have NP *pro* within an indefinite object DP in French. I argued that in order to be linked to an antecedent, DPs with NP *pro* need a specific interpretation. I proposed that a specific interpretation can be triggered by the presence of a definite article (or a D-linked pronoun, see chapter 3) within the DP or by the DP's position outside VP. This accounts for the grammaticality of (113) and (115). Indefinite DPs in object position generally do not have a specific interpretation. I claimed that for this reason (111) is unacceptable. (117) is unacceptable for the same reason. But whereas in French an indefinite DP with NP *pro* is not possible, in English and Spanish it is:

- (119) I have taken two *pro*.
(120) Quiero dos *pro*.
I want two

In chapter 2 I proposed that in languages without an overt quantitative pronoun, NP *pro* is licensed even in indefinite DPs in object position.

As for the grammaticality of (112) as opposed to the ungrammaticality of (111), I proposed that it has to do with the identification requirement for empty pronouns. Whereas the use of an indefinite (i.e. non-specific) object DP in (111) is not possible because the empty noun cannot be identified, in (112), on the other hand, the overt NP pronoun does not have to be identified. Formal licensing (by partitivity) is sufficient.

In chapter 3 (§10), I proposed that *en* is only used to save a derivation with NP *pro* that otherwise risks crashing. If NP *pro* can be used, the use of *en* is excluded for economy reasons. Since *en* has to be moved to a verbal host (at the syntactic level), whereas NP *pro* stays in situ, the derivation with NP *pro* is a more economical derivation. This explains the ungrammaticality of (114) as opposed to the grammaticality of (113). Since the definite object DP is specific, the use of *en* is excluded for economy reasons. The ungrammaticality of (116) can also be explained this way. Since the indefinite DP in subject position is specific, the use of *en* is excluded for economy reasons. Furthermore *en* cannot be extracted from the subject, which is a strong island (Ruwet 1972).

The ungrammaticality of (118) can be attributed to Subjacency. Since DP is not properly governed by the preposition, it is a barrier for movement (Chomsky 1986). PP is a barrier by inheritance.

In this section I have assumed that although *en* and NP *pro* are licensed the same way (by means of partitivity), differences in their use is the result of Specificity, Economy of derivation, and Subjacency.

10. Summary

In this chapter, I have shown that the conditions for the use of the quantitative pronoun *en* (which I have not distinguished from partitive *en*) strongly resemble those for the use of NP *pro*. Both can only occur in combination with quantifiers and/or with a restricted classes of adjectives, i.e. with D-partitives and N-partitives. I have shown that in other Romance languages pronominal NPs are also licensed by partitivity, although there is some variation among the Romance languages with respect to the classes of licensing elements. I have proposed a hierarchy of four classes of licensors. The main difference between French and most other Romance languages is that in French adjectives of quality can license NP pronominals whereas in other languages this is often impossible. I suggested that the adjectives of quality that can license NP pronominals in French belong to universal semantic types with clearly distinguishing properties (class three). Class four

adjectives only license pronominal NPs if there is an implicit or explicit contrast. I proposed that *en* is the overt counterpart of NP *pro*, which explains why they are licensed by the same classes of elements. I proposed that *en* is only used if a derivation with NP *pro* risks crashing because the DP does not have a specific interpretation.

“Substantivized” Adjectives

0. Introduction

In the previous chapters, I have claimed that in French (and other languages) empty nouns are formally licensed by partitivity. In this chapter I show that partitivity also is important for the licensing of empty nouns at the lexical level. I will propose that cases of phrasal lexical structures in French involving a base-generated empty noun licensed in this way are what in traditional grammars have been called “substantivized” adjectives such as *le malade* ‘a sick person’ and *l’important* ‘the important thing’.

In traditional grammars and in dictionaries, these cases are generally considered to be nouns. However, within a generative framework, it has recently been proposed that “substantivized” adjectives are not nouns, but adjectives that license an empty noun at the syntactic level see e.g. Hietbrink (1993a) and Kester (1996) for Dutch and Hietbrink 1993b for French). In this chapter I investigate how French “substantivized” adjectives can best be analyzed, as nouns or as adjectives licensing an empty noun at the syntactic level, and I explore whether their analysis as nouns or as adjectives can be related to the analysis proposed in the previous chapter for noun ellipsis cases.

The result of the discussion will be that I assume that a syntactic analysis of “substantivized” adjectives in French cannot be motivated. However, I argue that at a lexical level both the “human” type (*le malade*) and the “abstract” type (*l’important*) in French have phrasal structure involving a base-generated empty noun. I claim that just as in the case of empty NPs at the syntactic level, empty nouns at the lexical level are also licensed by partitivity, which supports recent assumptions about the extension of syntactic processes to the lexicon (cf. Borer 1991; Hale & Keyser 1993).

This chapter is organized as follows. In §1 several analyses of the “le malade” type (the “human” type) are briefly presented. In §2 Kester’s (1996) (syntactic) analysis of the “human” type in Dutch is presented. In

§3 I argue against a syntactic analysis of the “human” type in French. In §4 a distinction is made between “substantivized” adjectives of the “human” type and other “substantivized” adjectives with a concrete interpretation. In §5 semantic analyses of the “human” type by Klein (1975) and Winther (1980) are presented. In §6 a derivation involving an empty noun at the lexical level is proposed for the “human” type in French. In §7, I present several analyses that have been proposed in the literature for the “l’important” type (the abstract type). In §8 I propose an empty noun analysis for this type of derivation as well. In section §9 the results of this chapter are summarized.

1. “Substantivized” adjectives

In traditional grammars adjectives as in (1) and (2) are often called “substantivized” adjectives:

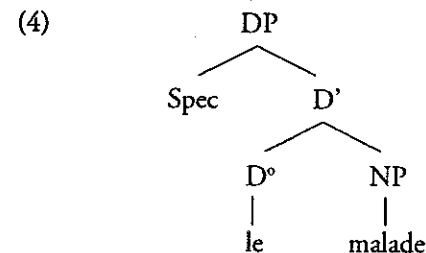
- (1) Le malade doit garder le lit.
the sick must keep the bed
‘The patient has to stay in bed.’
- (2) L’important, c’est d’agir vite.
the important, that is of act quickly
‘What is important, is to act quickly.’

In (1), *le malade* refers to a sick person. In (2), *important* has the abstract meaning ‘the important thing’.

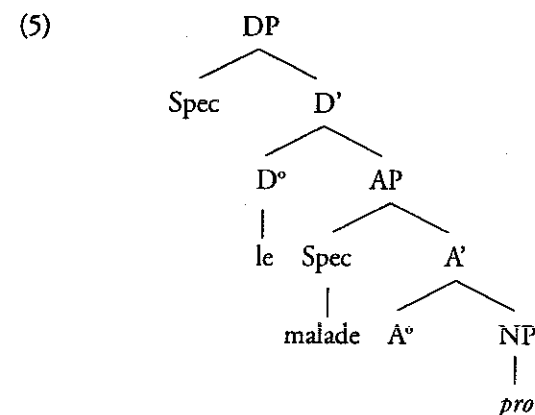
It should be noted that these cases are distinct from the noun ellipsis cases discussed in chapter 2. Whereas the “substantivized” adjective in (1) always has human reference and that in (2) always has an abstract meaning, ellipted nouns receive their interpretation from a noun in the context, which can be human or non-human:

- (3) De ces maisons, je préfère la grande.
of these houses, I prefer the big
‘Of these houses, I prefer the big one.’

In traditional grammars *malade* in (1) and *important* in (2) are generally considered to be nouns and not adjectives:



In recent linguistic literature, on the other hand, substantivized adjectives of this type have been analyzed as adjectives licensing an empty noun of the *pro* type:



In this chapter I discuss these two alternatives with respect to French.

In the next section I discuss the possible types of “substantivized” adjectives in French.

2. “Le malade”, “l’important” and “la capitale”

Zwanenburg (1986) distinguishes three types of substantivized adjectives in French: the type referring to human beings, as in (6), the neutral type, as in (7), and a type with all kinds of references (8):

- (6) un avare, un malade
a miser, a sick person

- (7) le beau, le vrai, l'intérieur de l'église, le curieux de l'affaire, le piquant de la chose
the beauty, the truth, the inside of the church, the strange thing about that matter, the piquancy of the thing
- (8) une capitale, une canine, une berceuse, un pliant
a capital city, a canine tooth, a lullaby, a folding chair

Zwanenburg argues that both the first type ((9)-(10)) and the second type (11) are adjectives, because both types can be combined with adverbs:

- (9) les très grands
the very tall
'very tall people'
- (10) les plus malades
the most sick
'the sickest people'
- (11) le plus drôle de l'affaire
the most funny of the story
'the funniest thing about it'

On Zwanenburg's view the third type is a noun because it cannot be combined with an adverb:

- (12) *une très canine
a very canine

Zwanenburg shows that these three types of "substantivized" adjectives also differ from a semantic point of view. First, type (6) always refers to humans and type (7) always has an abstract meaning. Type (8) refers to various kinds of objects:

- (13) une lettre capitale
a letter capital
'a capital (letter)'
- (14) une ville capitale
a city capital
'a capital (city)'
- (15) une dent canine
a tooth canine
'a canine tooth'

Second, whereas the human type has both a masculine and a feminine form ((16)-(17)) and the abstract type always a masculine form ((18)), the "la capitale" type is either masculine or feminine ((19)-(20)):

- (16) un malade, une malade
a sick (man), a sick (woman)
- (17) un beau, une belle
a handsome (man), a handsome (woman)
- (18) le vrai, *la vraie
the truth
- (19) *un capitale, une capitale
a capital city
- (20) un pliant, *une pliant
a folding chair

In the following sections I discuss the "human" type. I first discuss Kester's (1996) syntactic analysis of the "human" type in Dutch and subsequently I explore whether Kester's analysis can be extended to French.

3. The "human" construction in Dutch

Zwanenburg's (1986) view that "substantivized" adjectives of the human type, i.e. the *le malade* type are adjectives is shared by among others Kester (1996), who discusses similar cases in Dutch and other Germanic languages. Kester gives several arguments in favor of her claim that "substantivized" adjectives of the human type in the Germanic languages are adjectives and not nouns. First, they can be modified by an adverb, as the following Dutch example shows:

- (21) de hier aanwezigen
the here present
'those who are here'

Second, (prenominal) adjectives in the Germanic languages are preceded by their complement (22), whereas nouns are always followed by their complement (23). "Substantivized" adjectives are preceded by their complement (24):

- (22) de hiervan afhankelijke vluchtelingen
the here-on completely dependent refugees
'the refugees completely dependent on this'
- (23) het boek van Jan
the book of John
'John's book'
- (24) de hiervan afhankelijken
the here-on dependent
'the people completely dependent on this'

Third, "substantivized" adjectives of the human type do not allow diminutive suffixes:

- (25) de blinde
the blind (person)
- (26) *het blindetje
the blind DIM

In this respect, the adjectival construction referring to humans clearly contrasts with "true" nominalizations:

- (27) de ronde
the round
- (28) het rondetje
the round DIM
'the small round'

Fourth, the "human" construction forms the plural by means of the suffix *-n*, whereas "true" nominalizations take *-s*:

- (29) twee blinden
two blind PL
'two blind persons'
- (30) twee rondes
'two rounds'

On the basis of this evidence, Kester claims that the "human" construction involves an adjective that licenses an empty noun, which she assumes to be of the small *pro* type. She proposes that in this type of construction, *pro* is inherently endowed with the feature [+human]. She claims that whereas *pro* is formally licensed by the inflection on the adjective (the schwa), it is

identified either by the plural morpheme *-n* ((29)), or by the determiner ((25)).

In the following section I investigate whether a syntactic analysis involving an empty noun can also be defended for French "substantivized" adjectives of the "human" type.

4. The "le malade" type

Whereas Kester presents several pieces of evidence for an adjectival analysis of "substantivized" adjectives of the "human" type, I argue in this section that such an analysis cannot be motivated for French.

Of the four tests used by Kester to decide whether an adjective has really been nominalized or not, three cannot be used for French. First, adjectives preceding nouns in French cannot be combined with a complement (second test). Second, French does not have a (productive) diminutive suffix (third test). Third, both adjectives and nouns in French take the inflectional affix *-s* in the plural form (fourth test). Therefore, the only test that can be applied to French is the first one. The following examples show that the use of an adverb in the "human" construction is far less acceptable in French than in Dutch:

- (31) Tu es un lâche.
you are a cowardly
'You are a coward.'
- (32) *Tu es un très lâche.
You are a very cowardly
- (33) les fous
the mad
'madmen'
- (34) *les très fous
the very mad

In §2 we saw that the combination of an adjective of the "le malade" type with an adverb is possible according to Zwanenburg, and that this was a reason for him to assume that this type is not substantivized but involves an empty noun at the syntactic level. The relevant examples are repeated below:

- (35) les très grands
the very tall
'the very tall people'

- (36) les plus malades
the most sick
'the sickest people'

But whereas Zwanenburg claims that the combination of a "substantivized" adjective of the "human" type with an adverb is possible in French, I have shown that the combination of the "human" construction with an adverb is not always possible. I suggest, therefore, that in (35) and (36) we are dealing with cases of noun ellipsis as discussed in chapter 2 and not with the "le malade" type. This is motivated by the fact that the combination with a following adjective is not possible here, just as in the case of ellipsis, whereas in the case of the "human" type it is:

- (37) les grands bruyants
the tall noisy
'the noisy tall ones'
- (38) *les très grands bruyants
the very tall noisy
- (39) les malades fâchés
the sick angry
'the angry sick people'
- (40) *les plus malades fâchés
the most sick angry

Notice that in both examples there is a "classifying" adjective (*grand* in (35) and a superlative in (36)), which, as we saw in chapter 2, can license ellipsis of the noun. But these cases are different from the noun ellipsis cases discussed in chapter 2. The noun ellipsis cases in chapter 2 always referred to an antecedent in the linguistic or pragmatic context. The examples (35) and (36), on the other hand, have a generic interpretation (although this is not necessary). For example the meaning of (35) is 'all very tall people'. There is no antecedent in the linguistic (or pragmatic) context, as in the normal case of noun ellipsis. I propose that although there is no superset in the context, there is a presupposed (familiar) superset consisting of all human beings, not in the linguistic or pragmatic context but on a conceptual level, viz. in the knowledge store of the speaker. This gives these cases a generic interpretation.

Since I have argued that in French the "substantivized" adjectives of the "le malade" type cannot be combined with an adverb, the analysis for Dutch cannot be applied to French.

There is more evidence that French has to be analyzed in a different way than Dutch. In chapter 2 I showed that French adjectives that license *pro*

cannot be followed by another intransitive adjective, because this intransitive adjective, which would be generated in a position in between the potential licenser and the NP, would block the licensing of *pro* by the first adjective. This is also the case in Dutch. In the previous section we saw that "substantivized" adjectives take an inflectional *-n* in the plural form. The following examples show that the "substantivized" adjective has to be adjacent to the empty noun:

- (41) de arme blinden *pro*
the poor blind.PL
'poor blind persons'
- (42) *de armen blinde *pro*
the poor blind.PL

In French an adjective of the "le malade" type can be followed by another, intransitive, adjective. Recall that I assumed, following Valois (1990, 1991), that in French all attributive adjectives are generated within functional projections of NP, just as in Dutch:

- (43) un extrémiste intelligent
an extremist intelligent
'an intelligent extremist'
- (44) un savant respectueux
a scholar respectable
'a respectable scholar'
- (45) les antinazis allemands
the anti-Nazis German
'the German anti-Nazis'

Furthermore, even transitive adjectives occur in this construction, with their complements. In chapter 2 I assumed that transitive adjectives are generated in a postnominal position, from which they cannot license ellipsis of the noun. This implies that in the case of transitive adjectives of the "human" type, a syntactic analysis involving *pro* is not possible:

- (46) le chargé d'affaires
'the chargé d'affaires'
- (47) un amputé du bras
an amputee of the arm
'someone whose arm has been amputated'

- (48) un assoiffé de lecture
a thirsty for reading matter
'someone who is hungry for reading'

These three points make a syntactic analysis of "substantivized" adjectives involving *pro* rather unattractive for French. I therefore reject an analysis like (5) for French and adopt the analysis in (4), with *malade* as a noun instead of an adjective. However, in §3 we saw that the "le malade" type, the first type of "substantivized" adjectives that Zwanenburg distinguishes, differs in two ways from the "la capitale" type, the third type. First, the "le malade" type always has "human" reference, whereas the "la capitale" type can refer to various kinds of objects. Second, "substantivized" adjectives of the "human" type generally have both a masculine form and a feminine form, whereas "substantivized" adjectives of the "la capitale" type have just one form. In the next section I show furthermore that the "le malade" type generally has an antonymic meaning, whereas the "la capitale" type does not.

5. Antonyms

Klein (1975) examines the relation between the substantivization of adjectives of the "le malade" type and their meaning. Klein observes that the negative element of an antonymic pair of adjectives can far more easily be substantivized than the positive element. He reports that, according to the Petit Robert, 40 (= 50%) of 79 pairs of antonymic adjectives of which the negative element has a negative prefix (*amoral*, *désordonné*, *impoli*, *malfaisant*, *méconnu*) can be substantivized. Only 9 (= 11%) of the positive elements, however, which do not have this prefix or have a positive prefix (*moral*, *ordonné*, *bienfaisant*, *reconnu*) can do so. Of the 9 positive elements that can be substantivized, 5 have a negative counterpart that can be substantivized, whereas 4 have a negative counterpart that cannot be substantivized. Some of Klein's examples are listed below:

table 5.1 Only the negative element can be substantivized

| | | | |
|------------------|-----------------|--------------|----------------|
| anormal (S) | 'abnormal' | normal | 'normal' |
| déséquilibré (S) | 'unbalanced' | équilibré | 'balanced' |
| désordonné (S) | 'chaotic' | ordonné | 'organized' |
| impoli (S) | 'impolite' | poli | 'polite' |
| imprévoyant (S) | 'thoughtless' | prévoyant | 'cautious' |
| maladroit (S) | 'clumsy' | adroit | 'handy' |
| malveillant (S) | 'malevolent' | bienveillant | 'benevolent' |
| méconnu (S) | 'misunderstood' | reconnu | 'acknowledged' |
| méfiant (S) | 'suspicious' | confiant | 'trusty' |
| etc. | | etc. | |

table 5.2 Only the positive element can be substantivized

| | | | |
|-----------|---------------|--------------|-------------|
| immodéré | 'immoderate' | modéré (S) | 'moderate' |
| inélégant | 'inelegant' | élégant (S) | 'elegant' |
| invaincu | 'unbeaten' | vaincu (S) | 'beaten' |
| malvenu | 'inopportune' | bienvenu (S) | 'opportune' |

table 5.3 Both elements can be substantivized

| | | | |
|----------------|---------------|-------------|-------------|
| illettré (S) | 'unlettered' | lettré (S) | 'lettered' |
| impatient (S) | 'impatient' | patient (S) | 'patient' |
| imprudent (S) | 'uncautious' | prudent (S) | 'cautious' |
| incroyant (S) | 'unbelieving' | croyant (S) | 'believing' |
| malheureux (S) | 'unhappy' | heureux (S) | 'happy' |

table 5.4 Neither element can be substantivized

| | | | |
|-------------|--------------|-------------|--------------|
| amoral | 'immoral' | moral | 'moral' |
| impopulaire | 'unpopular' | populaire | 'popular' |
| impudique | 'immodest' | pudique | 'modest' |
| malfaisant | 'maleficent' | bienfaisant | 'beneficent' |
| etc. | | etc. | |

Klein shows furthermore that the ability of an adjective to be substantivized is not determined by the presence of a negative prefix, but is a purely semantic matter. Of 155 adjectives with a negative meaning, 73 (= 47%)

can be substantivized, whereas of their 80 positive antonyms, only 10 (= 12,5%) can be substantivized. Some examples are given below:

table 5.5 semantic antonyms

| positive meaning | negative meaning |
|------------------------------|--|
| affectueux 'affectionate' | dur, froid, malveillant (S) 'hard', 'cold', 'malevolent' |
| célèbre 'famous' | ignoré, inconnu (S), obscur (S) 'ignored', 'unknown', 'obscure' |
| calme 'calm' | agité (S), excité (S) 'lively', 'excited' |
| modeste (S) 'modest' | orgueilleux (S), prétentieux (S), vaniteux (S) 'haughty', 'pretentious', 'vain' |

The fact that in this case the negative elements can also be far more easily substantivized than the positive elements, shows that the ability of antonymic adjectives to be substantivized is a semantic rather than a morphological matter.

According to Klein, the explanation for the differences observed must be sought in human psychology rather than in linguistics. Adjectives with a negative meaning can more easily be substantivized than their positive counterparts because one more easily characterizes defaults than normal situations.

According to Winther (1980), however, there is a linguistic explanation for Klein's results. The adjectives that can be lexicalized as nouns contain either the feature [+ distinctive] and form classifying nouns (*grand* 'tall', *petit* 'small', *gros* 'thick', *maigre* 'thin', *bossu* 'hunch-backed', *boiteux* 'lame', *blond* 'blond', *chauve* 'bald' etc.), or one of the features [+ pejorative] or [+ laudative] and form qualifying nouns (*fou* 'mad', *sage* 'sensible', *ignorant* 'ignorant', *savant* 'learned', *lâche* 'cowardly', *brave* 'brave', *naïf* 'naïve', etc.).¹ If an adjective has one of these features it is marked with respect to an implicit norm. Adjectives which are not marked cannot be lexicalized. Winther gives the following tables. The marked values (+ and -) in table 5.6 produce classifying nouns, whereas the marked values in table 5.7 produce qualifying nouns:

table 5.6 classifying nouns

| - | non-marked | + |
|---------------------------|----------------------|------------------------------|
| petit 'small, young' | | grand 'tall, old' |
| maigre 'thin' | | gros 'thick' |
| pauvre 'poor' | | riche 'rich' |
| chauve 'bald' | chevelu 'with hair' | chevelu 'with a lot of hair' |
| invalid 'invalid' | valide 'able-bodied' | |
| déséquilibré 'unbalanced' | équilibré 'balanced' | |

table 5.7 qualifying nouns

| - | non-marked | + |
|------------------------------|--------------------------|-------------------|
| fou 'mad' | | sage 'sensible' |
| ignorant 'ignorant' | | savant 'wise' |
| lâche 'cowardly' | | brave 'brave' |
| naïf 'naïve' | | malin 'malicious' |
| anormal 'abnormal' | normal 'normal' | |
| impoli 'impolite' | poli 'polite' | |
| imprudent 'imprudent' | prudent 'prudent' | |
| indiscipliné 'undisciplined' | discipliné 'disciplined' | |

This system of antonymic adjectives consisting of three values (negative, neutral and positive) can thus explain why negative adjectives can more easily be lexicalized as a noun than positive adjectives. Negative adjectives are often marked in this system, whereas positive adjectives are often unmarked.

Within this system, we expect either the negative adjective or the positive adjective of an antonymic pair or both to be capable to be lexicalized as a noun. However, table 5.4 shows that sometimes neither appears as a noun in the dictionary. Winther therefore notes that the system presented above only predicts which adjectives are *susceptible* to be lexicalized as nouns. Although adjectives may be susceptible to be lexicalized, it may happen that they are never used as nouns. In that case, they will not be mentioned as nouns in the dictionary. It is also possible that an adjective is occasionally converted into a noun, which is possible if the adjective becomes marked by being used in certain contexts. Winther observes that in (49), the positive adjective *normal*, which cannot be lexicalized as a noun because it has an

¹ Note that Winther's use of the notion *classifying* differs from the way in which it was defined in chapter 4 (§4).

unmarked value, can be used as a noun because it is explicitly opposed to its antonym:²

- (49) Ceux qui parlent d'anormaux se situent toujours parmi les normaux.
 those that speak of abnormal themselves find always among the normal
 'Those that talk about abnormal people always find themselves among the normal people.'

In (50), the unmarked adjective *prudent* becomes marked, because of the exclamation mark:

- (50) Vous le connaissez mal: c'est un prudent!
 you him know badly: it is a cautious
 'You do not know him very well. He is such a cautious person!'

According to Winther this example must therefore be opposed to (51), in which *prudent* has its normal, neutral, value:

- (51) *Oui, je le connais, c'est un prudent.
 yes, I him know, it is a cautious
 'Yes, I know him, he is a cautious person.'

The marked value of the adjectives that can occasionally be used as nouns supports Winther's claim that there is a relation between the classifying or marked value of an adjective and its ability to become a noun. An investigation among the 1000 adjectives beginning with *a-* in Le Nouveau Petit Robert (1993) shows that indeed more than 20% of the 150 adjectives that can also be used as nouns referring to human beings, are classifying in a geographical sense (*Africain* 'African', *Algérien* 'Algerian', etc.); more than 20% is classifying in a medical or psychological sense (*aveugle* 'blind', *arriéré* 'behindhand', etc.); 20% refers to a follower of a doctrine (*avant-gardiste* 'avantgardiste', *anticommuniste* 'anticommunist', etc.); 10% is classifying in another way (*allié* 'ally', *anglophone* etc.), 20% denotes a positive or a negative quality (*avare* 'miser', *appelé* 'one with a calling' etc.), and a small number are difficult to classify (*abonné* 'subscriber', *assuré* 'insured person').

Apart from these 150 adjectives, 75 adjectives can be applied to human beings, but these are not lexicalized as nouns. In some cases we do not expect lexicalization (*adorable*, *affectueux* 'affectionate'); in other cases we expect the adjective to become lexicalized in the future (*affairé* 'busy', *agressif* 'agressive', *assidu* 'assiduous'). Most of the adjectives that have not yet been lexicalized as nouns referring to human beings denote a quality, which means that they belong to the class in which adjectives somehow have an intermediate status between a marked and a non-marked value.

My analysis of the 1000 adjectives beginning with *a-* supports Winther's conclusion: there is a relation between the classifying and/or marked character of adjectives and their ability to be substantivized as nouns denoting human beings.

In this section and the previous section we have seen that the "le malade" type differs in three respects from the "la capitale" type. First, the "le malade" type always has human reference. Second, "le malade" type has a masculine and a feminine variant. Third, "le malade" type generally has an antonymic meaning. Because of this, I propose in the next section that the "le malade" type has to be distinguished with respect to its derivation from the "la capitale" type. Whereas I propose that both the "la capitale" type and the "le malade" type involve an empty noun at the lexical level, I assume that in the first case the empty noun is the result of a deletion operation, whereas in the second case there is a base-generated empty noun. I propose that the empty noun in the last case is licensed by partitivity, relating its analysis to the analysis of syntactic empty nouns in French.

6. Derivation

I have argued that in the "le malade" type, there is real substantivization, i.e. there is an operation corresponding to a nominalization process. Since there is no overt suffix, it seems as if the adjective is changed into a noun simply by conversion.

However, in the previous two sections, I showed that the "le malade" type differs from cases like "la capitale" in three important ways: its human reference, the double gender and its antonymic meaning. If there was simply the conversion from one category (the adjective) into another (the noun), as in (52), the double gender would be a problem:

- (52) A → N

² In chapter 2 (footnote 3) and in chapter 4 (§4) we saw that a clear opposition can also make an adjective acceptable in the case of noun ellipsis.

- (53)
- ```

 N
 |
 A
 |
beau
belle

```

Almost all substantivized adjectives of the human type have a masculine and a feminine form (except for cases such as *barbu* 'wearing a beard', which, because of its meaning, only refers to males, and cases such as *malade*, in which the difference in gender is not expressed by the substantivized adjective, but instead by the determiner: *le malade* (m.) versus *la malade* (f.)). In most cases, the feminine form differs from the masculine form by the presence of a final (written) *-e*, (for example *le surveillant*, *la surveillante* 'the supervisor'), but sometimes the root form also differs (*le beau*, *la belle*). In all cases, the masculine form of the noun corresponds to the masculine form of the adjective and the feminine form of the noun to the feminine form of the adjective. The simplest way to account for the difference between the masculine and the feminine forms is to relate the masculine noun to the masculine form of the adjective and the feminine noun to the feminine form of the adjective:

- (54)
- |         |   |         |
|---------|---|---------|
| masc. A | → | masc. N |
| ↓       |   |         |
| fem. A  | → | fem. N  |

However, within morpheme-based approaches, in which word structure is built up out of smaller morphological units (e.g. Selkirk 1982), it is generally assumed that inflection cannot precede derivation. On such an approach, we would have the derivation in (55):

- (55)
- |         |   |         |
|---------|---|---------|
| masc. A | → | masc. N |
| ↓       |   | ↓       |
| fem. A  |   | fem. N  |

This is an undesirable derivation, because in general, non suffixed nouns in French do not have a special feminine form (*enfant* 'child', \**enfante*), apart from some exceptions (*ami* 'boyfriend', *amie* 'girlfriend').

Since only suffixed nouns can generally have a feminine form in French (*conducteur* 'conductor', *conductrice* 'conductrice'), it is not desirable to derive feminine converted nouns (*la grande* 'tall, old ones') from masculine converted nouns (*le grand*). Therefore, simple conversion as represented in (53), cannot account for the case of de-adjectival nouns of the "le malade" type.

What I would like to propose instead is that at a lexical level there can also be syntactic phrases and that syntactic processes such as inflection can also apply at this level (see e.g. Di Sciullo & Williams 1987; Borer 1991; and Hale & Keyser 1993). Within such an approach, "substantivized" adjectives will have a (lexical) structure such as in (56). I suggest that at the lexical level there are no functional projections:

- (56)
- ```

      N
      |
      NP
     /  \
    AP    N
    |     |
petite  e
'small, young'

```

With this structure, it becomes clear why the "le malade" type and the "la capitale" type differ in the three respects mentioned above. First, in (56), the base-generated empty noun can be assumed to bear the feature [+human]. Although I assume that the "la capitale" type in (53) also has phrasal structure and an empty noun at the lexical level, I assume that in this case the empty noun is the result of the deletion of the noun to which the substantivized adjective refers (e.g. *ville* 'city'). Second, with the structure (56), masculine nouns are derived from masculine adjectives and feminine nouns from feminine adjectives, as desired. Third and most importantly, since structure (56) involves an empty noun, now we can also account for the fact that the "le malade" type generally is derived from adjectives with an antonymic meaning. In chapter 2 I claimed that ellipted nouns can be licensed by antonymic adjectives. I propose that in the case of lexical phrasal empty noun constructions, such as in (56), the base-generated empty noun

is also possible because of the antonymic meaning of the adjective, so that at a lexical level partitivity also plays a role in the licensing of empty nouns. Here a subset of a larger set is also formed, viz. the set of human beings. In this case, however, the class of antonymic adjectives is much larger than in the case of noun ellipsis because it also contains adjectives which denote human qualities such as *malade*, *mécontent* etc., which cannot license ellipted nouns (unless they are used in a contrastive way). I suggest that the class of antonymic adjectives is larger in the case of lexical structures involving an empty noun, because the adjective does not need to have a "specific" reading in order to relate the empty noun to an antecedent. We have seen that the "human" type can also involve transitive adjectives which are not possible in the noun ellipsis construction (see (46)-(48)). I proposed that transitive adjectives cannot license an empty noun at the syntactic level because they have argument structure and can therefore not be generated within the extended projections of NP, which is necessary for a proper government relation. Since "substantivized" adjectives of the "human" type can be transitive adjectives, this suggests that at a morphological level no distinction is made between predicates and attributes.

Whereas a syntactic analysis for "substantivized" adjectives in Dutch seems to be the most plausible analysis, I proposed above that "substantivized" adjectives in French should be analyzed as phrases involving an empty noun at the lexical level. This is not surprising, given the fact that French has many compounds with phrasal structure (see e.g. Di Sciullo & Williams 1987; Zwanenburg 1992), whereas Dutch does not:

- (57) la petite-fille
the granddaughter
(58) les coffres-forts
the safes

This difference between French and Dutch motivates a difference in analysis.

After having extensively discussed the human reference type, I now turn to another class of "substantivized" adjectives, viz. those with an abstract meaning (Zwanenburg's second type of "substantivized" adjective, see §3), which in Kester's (1996) analysis involve the feature [+abstract]. Also for (some of) the adjectives of this type I propose that they involve a base-generated empty noun at the lexical level, which is licensed by partitivity.

7. The "Important" type

In the previous two sections, I discussed the analysis of two types of "substantivized" adjectives: the "le malade" type and the "la capitale" type. The third type of "substantivized" adjective that Zwanenburg distinguishes (see §3) and which I discuss in this section and the following one, is the neutral type, as shown in (59) and (60):

- (59) L'important, c'est de les aimer.
The important, it is of them love
'What is important is to love them.'
(60) Le curieux, c'est qu'il n'en savait rien.
the strange, it is that he neg of it knew nothing
'What is strange is that he knew nothing of it.'

In several linguistic studies it has been proposed that in the case of substantivized adjectives with a neutral meaning, we are dealing with real adjectives and not with nouns.

Kester (1996) analyzes (Dutch) substantivized adjectives of the neutral type as adjectives (cf. §3 for the human type). She assumes that the empty NP within the DP is of the small *pro* type, which bears the feature [+abstract]. She provides two arguments in favor of an adjectival analysis. First, the adjective can be preceded by an adverb:

- (61) het buitengewoon aantrekkelijke
the extraordinarily attractive (thing(s))

Second, the adjective is preceded by its complement, which suggests that we are dealing with a prenominal adjective and therefore with an empty noun:

- (62) het hiervan volkomen afhankelijke
the here-on completely dependent
'the thing(s) completely dependent on this'

Just as in the case of the human type, Kester claims that the inflectional schwa on the adjective formally licenses the empty noun. Abstract *pro* is identified by the (neutral) article.

Hietbrink (1993a,b) argues that neutral type "substantivized" adjectives are adjectives at the syntactic level, both in Dutch and in French. In the spirit of Fabb (1984), he proposes that in Dutch the schwa morpheme is inserted in the nominal head position in a syntactic structure and that this way it nominalizes an AP. He proposes that French neutral type "substantivized"

adjectives involve a zero suffix instead of a schwa which nominalizes an AP at the syntactic level in the same way as in Dutch.

Whereas Hietbrink and Kester explicitly argue that substantivized adjectives of the neutral type are APs, in dictionaries such as *Le Petit Robert* they are generally considered to be nouns. In the next section I discuss these two approaches.

8. Analysis of the neutral type

In the previous section we saw that substantivized adjectives of the neutral type can be analyzed in different ways. First, it is possible to analyze them as nouns. Second, they can be analyzed as adjectives at the syntactic level.

In §2 I proposed several arguments against an adjectival analysis of substantivized adjectives referring to human beings. Several of these arguments can also be used against an adjectival analysis of substantivized adjectives of the neutral type. A first argument against an adjectival analysis concerns the combination with adverbs. There is only a small number of cases in which the adjective can be combined with an adverb:

- (63) l'infiniment petit
the infinitesimally small
'the infinitesimal'
(64) l'infiniment grand
the infinitely big
'the infinite'

Even superlatives are rarely possible in the neutral reading. Dubois & van Bellen (1970) observe that instead of a neutral superlative one rather uses *ce qu'il y a de* or *ce que* + verbe + *de*:

- (65) *Le plus clair, c'est qu'il ne veut pas payer.
the most clear, it is that he neg wants neg pay
(66) Ce qu'il y a de plus clair, c'est qu'il ne veut pas payer.
what there is of most clear, it is that he neg wants neg pay
'The most obvious thing is that he does not want to pay.'
(67) *Il lui confia le plus précieux.
he him entrusted the most precious

- (68) Il lui confia ce qu'il possédait de plus précieux.
he him entrusted what he owned of most precious
'He entrusted him his with most precious possession.'

According to Dubois & van Bellen, there is only a small number of cases in which a superlative with a neutral meaning can be used:³

- (69) Le plus sûr / le meilleur est de rester.
the most safe / the best is to stay
'The safest thing / the best thing to do is to stay.'
(70) Le pire / le plus drôle / le plus beau de l'affaire, c'est que ...
the worst / the most funny / the most beautiful of the story,
it is that ...
'The worst/the funniest/the most beautiful thing of the story
is that ...

Second, in French the neutral type is not so productive as it is in Dutch. Whereas almost all adjectives in Dutch can be used in the neutral type, this is not the case in French. Most of the Dutch examples that Kester gives are not possible in French:

³ The non-productivity of this type of substantivization is also demonstrated by the behavior of frequently used adjectives such as *seul*, *même*, *premier*, etc. With these adjectives, the neutral substantivization strategy is not possible. Instead, they have to be combined with the noun *chose* 'thing' in order to have neutral reference:

- (i) *C'est le seul qui me gêne.
it is the only that me bothers
(ii) C'est la seule chose qui me gêne.
it is the only thing that bothers me
(iii) *Ce n'est pas le même.
it neg is neg the same
(iv) Ce n'est pas la même chose.
it is not the same thing
(v) *C'est le premier à faire.
it is the first to do.
(vi) C'est la première chose à faire.
it is the first thing to do

- (71) het besprokene
 (72) *le discuté
 the talked-about
 'the matters talked about'
- (73) het interessante
 (74) *l'intéressant
 the interesting aspect
- (75) het originele
 (76) *l'original
 the original (thing(s))
- (77) het aantrekkelijke
 (78) *l'attrayant
 the attractive (thing(s))

A syntactic analysis of the neutral type cannot explain why the neutral substantivization strategy is so rarely used in French colloquial speech.⁴

⁴ It is important to distinguish neutral superlatives from adjectives preceded by the adverbial expression *le plus* or *le moins*, because otherwise it would seem that there were many more neutral superlatives. In (i), it seems as if we are dealing with a neutral superlative:

- (i) Qu'est-ce qui est le plus difficile? Le crawl ou le bras papillon?
 what is the most difficult? The crawl or the butterfly stroke
 'Which one is the most difficult style of swimming? The crawl or the butterfly stroke?

Hanse (1987) observes that *le plus* and *le moins* can be used as an adverbial expression with the meaning 'in an extremely high or low degree'. In that case, the article always takes the masculine singular form, cf. (ii) (noun ellipsis) and (iii) (adverb + adjective):

- (ii) Elle est la moins capable de toutes.
 she is the least capable one of all
- (iii) C'est avec son personnel qu'elle est le moins capable.
 it is with her personnel that she is the least capable
 'she is not very capable with her personnel.'

In (i), *le plus* is such an adverbial expression. In (i), *difficile* is not "substantivized" but functions as an adjective in syntax, just as in (iv) or (v):

- (iv) Qu'est-ce qui est difficile?
 what is difficult

Because of these arguments I assume that we are always dealing with real nouns in the case of substantivized adjectives with a neutral meaning.

In the case of substantivized adjectives of the "human" type, I have distinguished two cases: lexical phrasal structures involving a base-generated empty noun ("le malade") or a deleted noun ("la capitale"). I would like to propose that in the case of the neutral type these two cases also have to be distinguished. An analysis of the thousand adjectives with an initial *-a* in Le Nouveau Petit Robert (1993) reveals that there are only 18 neutral type substantivized adjectives. Some of these substantivized adjectives resemble the "la capitale" type. These are substantivized adjectives which denote a style, a register, or a taste, such as in (79):

- (79) l'ancien, l'audible, l'aigre
 the ancient style, the audible register, the sour taste

So whereas in cases such as "la capitale", nouns referring to various kinds of objects can be added, as we saw in §2 (une *ville* capitale, une *dent* canine), in the case of the neutral type substantivized adjectives several kinds of nouns can also be added. In (79) we can add words like 'style', 'register', and 'taste':

- (80) le style ancien, le registre audible, le goût aigre
 the ancient style, the audible register, the sour taste

Since cases such as in (79) are associated with cases such as "la capitale", I propose that they are substantivizations that result from the deletion of a noun (e.g. *style*) in the (lexical) NP structure. This analysis is motivated by the fact that in this case the adjective can also take the feminine form if a feminine noun (e.g. *manière* in (81)) is deleted:

- (81) blanquette de veau à l'ancienne
 ragout of veal at the ancient
 'veal ragout in the old fashioned way'

Besides these cases, there are cases where the adjective always has a neutral meaning:

- (v) Qu'est-ce qui est plus difficile?
 what is more difficult

- (82) L'admirable, c'est que...
the admirable thing, that is that...
'What is admirable is that ...'
- (83) savoir distinguer l'essentiel de l'accessoire
know distinguish the essential from the accessory
'to be able to distinguish what is essential from what is accessory.'

I propose that this type involves a base-generated empty noun bearing the feature [+abstract] at the lexical level, which is again licensed by partitivity. This type of substantivized adjective generally has a contrastive meaning or a marked meaning deviating from the norm (see §5), just like the "human" type. As for the adverb + adjective cases ((63), (64), (69) and (70), I assume that here we are also dealing with phrases at the lexical level. Again, the empty noun is licensed by partitivity, expressed by "classifying" adjectives such as *grand* and *petit*, or by a superlative. Since we are dealing with derivations in the lexicon instead of syntactic derivations, the process may not be entirely productive, in contrast to the Dutch type.

I proposed that there are two types of neutral substantivized adjectives in French, one involving a base-generated empty noun in its lexical phrasal structure and one which is the result of the deletion of a noun. I proposed that the base-generated empty noun is licensed by partitivity, just as in the case of the "human" type, which relates both types to the syntactic noun ellipsis cases discussed in the previous chapters.

9. Conclusion

In this chapter, I investigated whether a syntactic analysis involving an empty noun can be assumed for "substantivized" adjectives. As for "substantivized" adjectives of the "human" type such as "le malade" or "substantivized" adjectives of the "neutral" type such as "l'important", I proposed that there only is an empty noun at a lexical level, which is licensed by the marked or contrastive value of the adjective, relating these cases to the syntactic noun ellipsis cases discussed in the previous chapter. I claimed that base-generated empty nouns are licensed by partitivity, not only at the syntactic level, but also at a lexical pre-syntactic level. This way the proposed analysis confirms the proposal made in the literature that morphological (i.e. lexical) processes reflect syntactic processes.

Conclusion

The goal of this study was to explore how empty nouns are licensed in languages in which adjectival inflection does not seem to be responsible for the licensing, such as French and other Romance languages.

Two chapters were devoted to the licensing of base-generated empty nouns, which I have assumed to be of the small *pro* type. I have adopted a DP analysis, and I assumed that all elements that license empty nouns are generated within the extended projections of NP. I proposed a hierarchy of functional projections and I showed that elements that license empty nouns can be generated in most of the functional projections. I showed that most elements that are generated within the extended projections of NP can license empty nouns, with the exception of adjectives of quality in most languages. It was shown that French is rather exceptional in that some adjectives of quality can license empty nouns. I claimed that besides quantifiers and adjectives, pronouns are also generated within the extended projections of NP, and involve an empty noun which they license.

I proposed that in French and other Romance languages, empty nouns are licensed by being properly governed by an element with a partitive meaning within the extended projections of NP. A distinction was made between D-partitives and N-partitives. I called all elements generated within the extended projections of NP which do not denote a property themselves and which therefore cannot function as predicates D-partitives. Since they do not denote a property themselves, they can only denote a subset of some larger set. This means that they have inherently a partitive meaning. D-partitives include all quantifiers, all lexical pronouns, superlatives, ordinals and adjectives such as 'sole', 'other', 'same', 'preceding', 'previous', and 'next'. I called all (attributively used) adjectives that denote a property themselves N-partitives, which create a subset of a larger set (denoted by the noun) via intersection. This way N-partitives resemble D-partitives, which also create subsets of larger sets. The difference, however, between

D-partitives and N-partitives is that D-partitives are inherently partitive, whereas N-partitives are not.

It was proposed that D-partitives license empty nouns in all languages that were considered in this dissertation, i.e. in Romance, in Germanic and in the Scandinavian languages. Adjectives of quality, on the other hand, do not license empty nouns in all languages that have been considered. A distinction was made between languages in which all adjectives license empty nouns, languages in which adjectives do not license empty nouns, and languages in which N-partitives license empty nouns. I assumed (following Olsen 1987; Kester 1996, and others) that in the first group of languages (Germanic and Scandinavian languages) the inflection on the properly governing adjective licenses empty nouns. For the second group of languages, I claimed that D-partitivity licenses empty nouns. In the third group of languages, besides D-partitives, N-partitives also license empty nouns. It was proposed on the basis of data in French and Sardinian that in languages in which only some adjectives of quality license empty nouns, the adjective has to make a cognitively relevant distinction. This cognitively relevant distinction makes the adjective "partitive enough" to license empty nouns. These adjectives are N-partitives.

The notion *partitivity* has been used in the sense of "properly or improperly included in". Whereas N-partitives and most D-partitives create a subset that is properly included in the superset, a small number of the D-partitives creates a subset that is identical to the superset and is therefore improperly included in the superset. These D-partitives are personal pronouns and floating quantifiers. Since in that sense they can be considered to have a partitive meaning, I proposed that they license empty nouns the same way as N-partitives and as other D-partitives do, viz. by means of partitivity.

Since I claimed that empty nouns are licensed by partitivity, I have departed from earlier studies on the licensing of empty nouns, in which the licensing of empty nouns was related to the licensing of empty subjects (by "rich inflection") and in which it was claimed that empty nouns are expressed by inflection or features that can be expressed in a morphological way. I suggested that empty nouns can only be licensed by adjectival inflection in languages with a special DP-internal agreement system (i.e. most Germanic languages and the Scandinavian languages). The adjectival inflection is "rich enough" to license empty nouns because of the DP-internal agreement system. I suggested that in languages which do not have such a special DP-internal agreement system (i.e. the Romance languages and English), but in which attributes and predicates agree in the same way with the noun, adjectival inflection does not play a role in the licensing of empty nouns. I claimed that in these languages empty nouns can only be

licensed by partitivity. I showed that besides adjectival inflection, partitivity also plays an important role in the licensing of empty nouns in the first group of languages, i.e. those with a special DP-internal agreement system. In this group of languages, non-inflecting D-partitives such as the cardinals, also license empty nouns. I proposed that these elements license empty nouns because of their partitive meaning. This means that whereas in Romance and in English only one licensing mechanism is available, viz. licensing by partitive elements, in other Germanic languages and in the Scandinavian languages, two mechanisms are available, viz. licensing by adjectival inflection and licensing by partitivity.

Whereas I departed from other studies by claiming that morphology does not need to play a role in the licensing of empty nouns, I assumed, just as is done in most other studies, that the element that licenses the empty noun (by partitivity or by adjectival inflection) has to properly govern the empty noun. I showed that because of the proper government requirement, adjacency of the licenser and the pronominal NP is necessary.

In studies on the licensing of *pro*, a distinction is generally made between the formal licensing of *pro* and its identification. The formal licensing requirement concerns the structural relation between *pro* and its licenser, an X^0 whose category and type may differ from language to language. I claimed (at least for Romance and English) that base-generated empty nouns of the small *pro* type are formally licensed by elements belonging to various kinds of categories, but which all bear the feature [+partitive]. The identification requirement concerns the recoverability of *pro*'s semantic content from the context. I claimed that specificity serves to identify empty nouns. DPs with a specific reading are linked to an antecedent in the domain of discourse and contain familiar information. DPs with a non-specific reading are not linked to an antecedent in the domain of discourse and contain new information. Since nounless DPs necessarily have a familiarity reading, they need to have a specific interpretation. I assumed that a number of factors contribute to a specific/non-specific reading of the nounless DP, viz. a position outside VP at S-structure, the presence of strong quantifiers or D-linked pronouns within the DP, the presence of a partitive PP. In these cases the base-generated empty noun is identified by specificity.

I accounted for the well-known subject-object asymmetry between indefinite nounless DPs (without a partitive PP) with the specificity requirement. Whereas indefinite nounless DPs are possible in subject position, they are not possible in object position, unless a quantitative pronoun is used. I attributed this difference to specificity. Since indefinite DPs in object position generally have a non-specific reading, they are not linked to an antecedent. If they contain an empty noun, the empty noun cannot recover its semantic content from another noun in the domain of

discourse. There is, however, a way to save the derivation, which is to use an overt quantitative pronoun, which is anaphoric itself and therefore can establish a relation with a noun in the context. I have proposed that overt quantitative pronouns are only used if a derivation risks crashing because an empty noun in a non-specific DP cannot be linked to an antecedent. This way I excluded its use in DPs with a specific reading, i.e. in combination with definite determiners or D-linked pronouns. I proposed that base-generated empty nouns only have to be identified by specificity in languages with an overt quantitative NP pronoun. This way I could account for the fact that in languages without overt NP pronouns, indefinite nounless DPs (without a partitive PP) are possible even in object position.

The idea that overt NP pronouns are simply anaphoric (i.e. specific) overt counterparts of empty NP pronouns and are only used if a derivation risks crashing, made it possible to account for the fact that both types are licensed by the same class of elements: by D-partitives in Italian and Dutch and by D-partitives and N-partitives in French.

Besides identification by specificity, I distinguished another way of identifying base-generated empty nouns. I proposed that empty nouns cannot only be identified by the feature [+specific] but also by the features [+human], [-human] or [+abstract]. I proposed that the personal pronouns, except for the nominative and accusative third person clitics, identify their empty NP complement by means of the features [+human] or [-human]. They formally license the empty NP by means of the feature [+partitive] (improper inclusion). The nominative and accusative third person clitics formally license their empty NP complement by means of the feature [+partitive] and identify it by means of their specificity features, just as D-linked pronouns do. I proposed that besides (some of the) personal pronouns, there are other pronouns that do not license their empty NP complement by means of the feature [+specific]. These are pronouns such as 'nobody' and 'nothing' in which the missing noun cannot be interpreted by a noun in the context. I proposed that, in these cases, the empty noun is identified by the features [+human] or [+abstract] and again formally licensed by partitivity.

Finally, I argued that partitivity can play an important role in the licensing of empty nouns even at the lexical level. I showed that "substantivized" adjectives generally have a marked (contrastive) meaning in French and I proposed therefore that at least in French, "substantivized" adjectives have phrasal structure at the lexical level and involve an empty noun licensed by an adjective with a partitive meaning.

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Samenvatting

Het belangrijkste doel van deze studie is te laten zien dat lege nomina in het Frans alleen mogelijk zijn als ze “properly” geregeerd worden door een element met een partitieve betekenis.

Lege nomina kunnen basisgegenereerd zijn of het gevolg zijn van verplaatsing. In het eerste geval neem ik aan dat het lege nomen tot het kleine *pro*-type behoort. Dit wordt de N-ellipsis constructie genoemd. In het tweede geval is er een spoor van de verplaatsing van het kwantitatieve pronomen *en* ‘er’:

- (1) Des livres de Zola, je n’ai lu que le troisième *pro*.
van-de boeken van Zola, ik niet heb gelezen dan het derde
‘Van Zola’s boeken heb ik alleen het derde gelezen.’
- (2) J’en ai lu un troisième *t*.
ik er heb gelezen een derde.
‘Ik heb nog een derde gelezen.’

Het theoretisch kader is dat van de generatieve grammatica. In hoofdstuk één zet ik uiteen dat het onderzoek op twee manieren bijdraagt tot de theorievorming. In de eerste plaats wordt de zgn. DP-analyse van substantiefgroepen verdedigd en met name het idee dat zowel “prenominaal” als “postnominaal” adjectieven in het Frans in functionele projecties van NP gegenereerd worden. In de tweede plaats draagt deze studie bij aan de discussie over het licensiëren van lege categorieën.

In hoofdstuk twee wordt de constructie met een basisgegenereerd leeg nomen, de zgn. N-ellipsis constructie, besproken. Deze constructie is in het Nederlands mogelijk met adjectieven, mits ze het flexiemorfeem *e* bevatten:

- (3) Zij heeft een zwarte auto, maar ik heb een groene *pro*.
- (4) *Zij heeft een zwart hek, maar ik heb een groen *pro*.

Er wordt daarom over het algemeen aangenomen dat in het Nederlands N-ellipsis gelicenseerd wordt door de flexie van adjectieven. Dit wordt ook aangenomen voor de meeste andere Germaanse talen, die vergelijkbare feiten hebben.

In dit proefschrift laat ik zien dat voor het Frans daarentegen het niet aannemelijk is dat N-ellipsis gelicenseerd wordt door flexie. Zin (5) is ongrammaticaal, hoewel het adjectief geflecteerd is; zin (6) is grammaticaal, hoewel het adjectief niet geflecteerd is:

- (5) *Malheureusement je n'ai pas entendu l'intéressante *pro*.
helaas ik niet heb niet gehoord de interessante VRL ENK
'Helaas heb ik de interessante niet gehoord.'
- (6) De ces chiens, je préfère le grand.
van deze honden, ik prefereer de grote MNL ENK
'Van deze honden geef ik de voorkeur aan de grote.'

In het Frans is N-ellipsis alleen maar mogelijk met een beperkte groep adjectieven: superlatieven zoals *le plus intéressant* 'de interessantste', rangtelwoorden zoals *le premier* 'de eerste', kleuren zoals *rouge* 'rood', de adjectieven *seul* 'enige', *autre* 'andere', *même* 'zelfde', *précédent* 'vorige', *suivant* 'volgende', *prochain* 'volgende' en enkele andere adjectieven, waaronder *grand* 'groot' en *petit* 'klein'. Dit zijn allemaal adjectieven met een duidelijk classificerende betekenis.

N-ellipsis is niet alleen mogelijk met adjectieven, maar ook met hoofdtelwoorden:

- (7) J'ai lu deux *pro* de ses livres.
ik heb gelezen twee van zijn boeken
'Ik heb twee van zijn boeken gelezen.'

Hoofdtelwoorden geven aan dat er uit een grotere verzameling een deelverzameling gevormd wordt bestaande uit een x aantal elementen. Dit wordt partitiviteit genoemd.

Daar er in het geval van de classificerende adjectieven in het Frans die N-ellipsis licensiëren ook altijd een deelverzameling gevormd wordt, is er ook hier sprake van partitiviteit. In het Frans kunnen dus alleen maar elementen met een partitieve betekenis, dat wil zeggen een betekenis die hen in staat stelt een deelverzameling te vormen, N-ellipsis licensiëren.

Ik maak een onderscheid tussen twee soorten partitiviteit. D-partitieven zijn elementen die noodzakelijkerwijs partitief zijn. Het zijn elementen wier functie het is een deelverzameling te vormen. N-partitieven zijn elementen die niet noodzakelijkerwijs partitief zijn, maar die ook zelf een verzameling

kunnen karakteriseren zonder dat er sprake is van een deelverzameling. N-partitieven zijn adjectieven die een kleur aanduiden en adjectieven zoals *grand* en *petit*. Alle andere bovengenoemde adjectieven zijn D-partitieven. Ook hoofdtelwoorden zijn D-partitieven.

Ik laat zien dat er nog meer talen zijn dan het Frans waarvoor het aannemelijk is dat N-ellipsis gelicenseerd wordt door partitiviteit. Dit zijn met name het Engels, het Italiaans en het Spaans. Maar terwijl in het Frans zowel D-partitieven als N-partitieven N-ellipsis kunnen licensiëren, is in het Engels, het Italiaans en het Spaans N-ellipsis voornamelijk mogelijk met D-partitieven. Ook voor het Nederlands neem ik aan dat naast flexie, D-partitiviteit een rol speelt bij het licensiëren van N-ellipsis. Net als in het Frans, is in het Nederlands N-ellipsis mogelijk met hoofdtelwoorden. Daar hoofdtelwoorden geen flexiormorfem bevatten, wordt N-ellipsis hier niet gelicenseerd door flexie. Ik neem daarom aan dat er in het Nederlands een tweede strategie is om N-ellipsis te licensiëren, nl. (D-)partitiviteit:

- (8) Ik heb vier *pro* van zijn boeken gelezen.

Ik neem aan dat N-ellipsis alleen maar gelicenseerd kan worden door elementen die het lege nomen "properly" regeren. Ik neem daarom een DP-structuur aan met het lege nomen als NP en de licensiërende elementen in functionele projecties van NP. Daar in het Frans ook "postnominale" adjectieven zoals de kleurenadjectieven N-ellipsis kunnen licensiëren, neem ik aan dat ook zij in een functionele projectie van NP gegenereerd worden, waar ze het lege nomen kunnen licensiëren. Als er een gevuld nomen is ontstaat de "postnominale" positie van adjectieven in het Frans door verplaatsing van het nomen.

In hoofdstuk drie stel ik voor dat pronomina, zoals *celui* 'deze, die', *le mien* 'de mijne', *lequel* 'welke' enz., ook als DPs met een lege NP geanalyseerd worden. Ik stel voor dat de pronomina zelf in functionele projecties van NP gegenereerd worden, waar ze het lege nomen licensiëren op dezelfde manier als hoofdtelwoorden en een beperkte groep adjectieven in het Frans, nl. door partitiviteit. Ik laat zien dat pronomina D-partitieven zijn. Ze vormen noodzakelijkerwijs een deelverzameling van een grotere verzameling. Ik maak een onderscheid tussen twee soorten D-partitieven: partitieven die een eigenlijke deelverzameling vormen, zoals *celui* 'deze, die', en partitieven die een oneigenlijke deelverzameling vormen. In het laatste geval is de deelverzameling gelijk aan de hele verzameling. Dit is wat gebeurt bij pronomina zoals *tous* 'alle(n)' en de persoonlijke voornaamwoorden.

Het licensiëren van lege nomina bestaat uit twee onderdelen. Het lege nomen moet *formeel* gelicenseerd worden en het lege nomen moet geïdentificeerd worden. Wat de formele licensiëring betreft, neem ik voor

het Frans aan dat partitiviteit een belangrijke rol speelt. Het lege nomen moet gelicenseerd worden door een element met een partitieve betekenis waardoor het "properly" geregeerd wordt. Wat de identificatie, dat wil zeggen de interpretatie, van het lege nomen betreft, stel ik in hoofdstuk twee voor dat alleen elementen met een "specifieke" interpretatie de identificatie van het lege nomen mogelijk maken. In het Frans hebben onder andere DPs in subjectpositie wel een "specifieke" interpretatie, maar (indefinite) DPs in objectpositie niet. In hoofdstuk drie laat ik zien dat hetzelfde aangenomen kan worden met betrekking tot pronomina. Alleen met pronomina met een "specifieke" interpretatie is identificatie van het lege nomen mogelijk. Hiermee verklaar ik waarom pronomina met een inherente "specifieke" betekenis, zoals *le tien* 'de jouwe', in elke positie mogelijk zijn, maar pronomina met een niet inherente "specifieke" betekenis, zoals *quelques-uns* 'enkele', alleen als ze op een bepaalde manier (bijv. door een subjectpositie) een "specifieke" betekenis krijgen:

- (9) J'ai lu le tien.
ik heb gelezen de jouwe
'Ik heb de jouwe gelezen.'
- (10) *J'ai lu quelques-uns.
ik heb gelezen enkele
'Ik heb enkele gelezen.'
- (11) Quelques-uns méritent d'être lus.
enkele verdienen van worden gelezen
'Enkele zijn het waard om gelezen te worden.'

In hoofdstuk drie stel ik ook voor dat naast specificiteit een inherente "menselijke", "niet menselijke" of "abstracte" betekenis het lege nomen kan identificeren. Dit gebeurt bij pronomina zoals *personne* 'niemand' en *rien* 'niets' en bij een gedeelte van de persoonlijklijke voornaamwoorden.

Hoofdstuk vier gaat over het kwantitatieve pronomen *en* 'er', zoals in voorbeeld (2) hierboven. Voor het kwantitatieve *en* (en ook z'n Italiaanse equivalent *ne* en z'n Nederlandse equivalent *er*) neem ik aan dat het wordt gebruikt als een derivatie met *pro* niet mogelijk is omdat *pro* niet geïdentificeerd kan worden, zoals in voorbeeld (10). *En* is dan de overte variant van *pro*. Een ander verschil tussen deze twee pronomina is dat *en* wordt verplaatst vanuit de NP-positie, maar *pro* niet:

- (12) J'en ai lu quelques-uns *t_i*.
ik er heb gelezen enkele
'Ik heb er enkele gelezen.'

Ik laat zien dat de aanname dat *en* de overte variant van *pro* is gemotiveerd wordt door het feit dat kwantitatieve pronomina op dezelfde manier gelicenseerd worden als lege nomina: door D-partitieven en N-partitieven in het Frans en alleen door D-partitieven in het Italiaans en het Nederlands.

Ik hoofdstuk vijf laat ik zien dat het aannemelijk is dat zelfs op woordniveau lege nomina door elementen met een partitieve betekenis gelicenseerd kunnen worden. Ik stel voor dat "gesubstantiveerde" adjectieven zoals *le malade* 'de zieke' en *l'important* 'het belangrijke' een woordinterne syntactische structuur hebben, bestaande uit een adjectief en een leeg nomen. Ik laat zien dat adjectieven die "gesubstantiveerd" kunnen worden een partitieve betekenis hebben, waardoor ze het lege nomen kunnen licensiëren. Ik laat ook zien dat het Frans hierin verschilt van het Nederlands. Terwijl ik voor het Frans beargumenteer dat "gesubstantiveerde" adjectieven nomina zijn met een syntactische structuur, is het voor het Nederlands aannemelijker dat "gesubstantiveerde" adjectieven op het niveau van de syntaxis adjectieven zijn die een leeg nomen licensiëren door middel van hun flexie, net als in het geval van N-ellipses. Het verschil met N-ellipses is echter dat er inherente identificatie is.

Het proefschrift wordt besloten met een conclusie, waarin de resultaten opgesomd worden.