

A generalization concerning DP-internal ellipsis*

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In this article I consider a particular generalization concerning ellipsis within the extended nominal projection: ellipsis can target a nominal modifier only if all constituents below it are also elided.

Building on an analysis of ellipsis grounded on movement to left edges I suggest that this generalization follows from a condition on DP-internal movement proposed in Cinque (2005).

key words: ellipsis, nominal phrases, movement

In this article a particular generalization will be discussed that concerns ellipsis within the extended projection of the NP: nominal modifiers can be *silent* (present but unpronounced) only if the NP and the extended projection of the NP below them are also silent (cf. Kayne's 2012, (47) of §4 on cardinal numerals¹). Building on Ntelitheos's (2004) insight that nominal ellipsis crucially involves raising of the NP, I suggest that this generalization follows from a condition on DP-internal movement proposed in Cinque (2005), to the effect that only constituents containing the (unmoved) NP can licitly move (and in the case at hand be unpronounced as a consequence of that).²

* Andrew Radford's work and friendship has accompanied me for almost four decades, since the early '70's, when we first met and started exchanging our ideas. This article is dedicated to him with esteem and affection.

I would also like to thank Paola Benincà, Ángel Jiménez, Richard Kayne and an anonymous referee for their comments.

¹ "Numerals cannot be left silent unless their (following) associated noun is also left silent". The generalization discussed here can in fact be seen as generalizing this observation to all nominal modifiers (including apparent complements) and making non-pronunciation of a modifier dependent on the non-pronunciation of the extended projection below the non-pronounced modifier.

² In Cinque (2005) this condition constrained the derivation (from a universal structure of Merge) of possible canonical orders of demonstratives, numerals (cardinals), adjectives and nouns in the languages of the world. Here it is made to constrain ellipsis within the nominal phrase (under a movement theory of ellipsis).

1. A movement approach to ellipsis.

In a number of works, deletion of a constituent (or its non-pronunciation) has been taken to depend on the prior movement of that constituent to a left-peripheral position (Jayaseelan 1990, Rizzi 1994, Johnson 2001, Ntelitheos 2004, Kayne 2006, 2012).

There is some suggestive evidence for that from a number of phenomena.

One is represented by the German “Vorfeld-deletion” pattern in (1) (Ross’s 1982), also known as “Topic Drop”,

(1)a. Ich habe ihn schon gesehen

I have him already seen

b. *Ich habe __ schon gesehen

I have already seen

c. Ihn habe ich schon gesehen

Him have I already seen

d. __ Habe ich schon gesehen

Have I already seen

‘I have already seen him’

and the similar pattern found in Dutch (cf. (2) - Koopman 2000,352) (and other Germanic languages - Sigurðsson 2011,§2)³

³ The fact that a constituent may move to a left edge inside the nominal extended projection is no guarantee that it can also be elided. This may depend on properties of the landing site, which may be different in the overt and in the null (elided) cases, as noted in Koopman (2000, Chapter 11,fn.11) for the overt and null topics in both German and Dutch. Also, neither in Modern Greek, where APs can front within the DP (see (i)b) and even extract from the DP (see (i)c) (perhaps an instance of remnant movement – cf. Androutsopoulou 1997), nor in English, where DP-internal fronting of certain adjectival phrases is also possible (see (ii)), can these phrases be silent (see (iii) and (iv)). I thank Marika

(2)a. [ik [weet [dat niet

I know that not

b. *[ik [weet [___ niet

I know not

c. [dat [weet [ik niet

that know I not

d. [___ [weet [ik niet

know I not

‘I don’t know that’

As (1) and (2) show, in German and Dutch it is not possible to delete a DP in situ, but deletion becomes apparently possible when the first position of the clause, which must otherwise be filled by a constituent, is not filled. This becomes understandable, as the works cited suggest, if deletion

Lekakou and Richard Kayne for the relevant judgments. Kayne (2006) in effect claims that silent elements can never be in the same position as their pronounced counterparts.

(i)a. Agorase [to forema **to kokkino**]

He.bought the dress the red

b. Agorase [**to kokkino** to forema *t*]

He bought the red the dress

c. **to kokkino** agorase [*t* to forema *t*]

the red he.bought the dress

(ii) He bought [too old a *t* chair]

(iii) Agorase to kokkino to forema ke (~~*to kokkino~~) to mandili

Bought.3rdSg the_N the red dress_N and (~~*the red~~) the_N scarf_N

‘She bought the red dress and the (~~*red~~) scarf

(iv) He bought too old a chair and (~~*too old~~) a table

Also see Cardinaletti (1990), Kayne (2006), Sigurðsson (2011) and references cited there.

(non-pronunciation) of the DP in (1)d, (2)d occurs after (a silent counterpart of) the DP has raised to the first position of the clause.

Another piece of evidence for the same general conclusion comes from an exception to the clitic second requirement on clitics such as the auxiliary *bych* or the reflexive pronoun *si* in Czech. They may occur in first position when a pronominal *to* ‘it’ (or the adverbial *tak* ‘so’) is missing, but understood as present. See (3)a and b:⁴

(3)a. *Bych netvrdil.*

would.1sg not.claim

‘I wouldn’t claim it’

b. *Si myslíš*

REFL think.2sg

‘That’s what you think’

As explicitly observed in Toman (1996) this should be related to the possibility of non pronouncing the pronominal *to* after moving it to first position as in (4), a fact which recalls, he notes, the German Vorfeld-deletion illustrated in (1) above:⁵

(4)a. *To bych netvrdil (= (3)a)*

b. *To si myslíš (= (3)b)*

⁴ As Richard Kayne observed, these examples are a good argument against a purely phonological approach to ‘second-position’ clitics that would take them to be necessarily phonologically enclitic to the first word.

⁵ As with Germanic “Vorfeld-deletion”, crucially, *to* in Czech cannot be deleted in situ; namely when some other constituent fills the first position. See (i), kindly provided by Lucie Medová:

(i)a. **dnes bych _ netvrdil*

today would.1sg not.claim

‘Today I wouldn’t claim it’

b. **dnes si _ myslíš*

today REFL think.2sg

‘Today that’s what you think’

Additional evidence comes from the Principle C effects observed for Chinese, Japanese, Korean and Brazilian Portuguese in Huang (1984,538ff). For example, the impossibility of understanding the unpronounced object in (5)a as referring to the same individual as the matrix subject can be made sense of if the object is \bar{A} -moved to a topic position of the matrix clause as a prerequisite for its non pronunciation, as illustrated in (5)b (for, in that case, the variable left by the movement of the object ends up being A-bound by the subject):⁶

(5)a. João disse que Pedro viu *e* (cf. Huang 1984,541)

João said that Pedro saw

(ungrammatical if understood as ‘João_{*i*} said that Pedro saw him_{*i*}’; grammatical if *e* is understood as referring to an individual mentioned in the previous discourse)

b. *[*e_i* [João_{*i*} disse que Pedro viu *e_i*]]

Related evidence that ellipsis involves the previous movement of the elided material is the fact that (at least certain types of) ellipses appear to be constrained by conditions on movement like those responsible for islands. This is in fact the case for the non pronunciation of the object in Portuguese seen in (5), which cannot be found within islands (see Raposo 1986,381ff).⁷ It is also apparent in the fact, noted in Rizzi (1982,75fn32), that (verbal) gapping in Italian can affect the second conjunct of two coordinated *indirect questions* (extraction out of indirect questions is possible in Italian) but cannot affect the second conjunct of an otherwise formally identical conjunction of *free relatives* (no extraction out of free relatives is possible in Italian). See (6)a-b (I assume that movement of the unpronounced phrase in (6) is to the edge of the second conjunct):

⁶ The same facts hold in European Portuguese. See Raposo (1986).

⁷ Raposo (1986,§3.6) also mentions that object deletion in Portuguese can license parasitic gaps, another indication that it involves \bar{A} -movement.

(6)a Non ho ancora capito [[_{CP} chi ha telefonato a Maria] e [_{CP} chi ____ a Giuliana]]

Not I have yet understood who has called M. and who G.

b *Ho punito [[_{DP}[_{CP} chi ha telefonato a Maria] e [_{DP}[_{CP}chi ____ a Giuliana]]]

I have punished who has called M. and who G.

DP-internal ellipsis is known to be subject to a number of restrictions; some universal and some language-specific.⁸ In this article, I will not be concerned with such conditions nor with the

⁸ One apparent universal requirement is that the DP containing the ellipsis may not c-command the antecedent (Kester 1996,188). See (i) and (ii):

(i)a. *These ~~books~~ are more expensive than those books.

b. Although she might order these [e], Mary won't buy those books on art history. (Kester 1996: p. 195)

(ii)a. Quei gattini sono più piccoli di questi ~~gattini~~

Those kittens are smaller than these

b. *Quelli ~~gattini~~ sono più piccoli di questi gattini

Those ~~kittens~~ are smaller than these kittens

c. Anche se quelli ~~gattini~~ non sono in vendita, questi gattini invece lo sono!

Even if those ~~kittens~~ are not for sale, these kittens instead are!

(but see the grammaticality of *The ones from New York are taller than the students from New Jersey* – from Panagiotidis 2003,§4; a problem, if *one* has a silent associate (here ~~students~~), which also moves, as suggested in Kayne 2009).

To the extent that it is genuine, this anti-c-command requirement may follow from Principle C of the Binding Theory if the to-be-elided constituent moves to the highest specifier, from where it c-commands outside the nominal projection (in Kayne's 1994 definition of c-command).

The presence of a contrast between the antecedent and the DP-internal remnant is often taken to be another necessary condition for DP-internal ellipsis (see Giannakidou and Stavrou 1999,305; Ntelitheos 2004; Corver and van Koppen 2009, 2012; Eguren 2010). Giannakidou and Stavrou (1999,305), for example, propose a specific condition ("The Contrast Condition on the Licensing of Nominal Subdeletion"), on the basis of such Greek examples as (iii)

(iii) I Maria ehi polus filus ke I aderfi tis exi ligus/*polus [~~filus~~].

Mary has many friends and her sister has a few/*many

However, I find comparable examples in Italian, where the remnant does not contrast with the antecedent, to be perfectly grammatical (which suggests that the presence of a contrast, where necessary, may be due to orthogonal requirements on the specific contexts involved):

(iv)a Molti studenti sono intervenuti ma molti ~~studenti~~ hanno deciso di non partecipare.

conditions that license or bar specific DP-internal ellipses in particular languages.⁹ I will rather concentrate on a specific, arguably universal, condition governing those DP-internal ellipses that abide to whatever principles regulate ellipsis in a certain language; a condition which ultimately determines the possible and impossible interpretations of such ellipses. In first approximation, the generalization, which I will later try to derive from a more general condition on DP-internal movement, is that the non-pronounced material obligatorily involves the NP, and optionally any constituent containing it (which is *non-distinct* from a comparable constituent of some “antecedent” DP¹⁰). In other words, some element can be silent only if the NP and the extended projection of the NP below it is also silent.

Many students have come but many have decided not to participate.

b. Tutti i passeggeri sono stati ripescati e tutti i ~~passeggeri~~, ora, sono fuori pericolo

All the passengers have been taken on board and now all ~~the passengers~~ are safe

Also see (v):

(v) (A: Lui ha letto due articoli di Frege) B: Due ~~articoli~~ di Frege li ho letti anch'io.

(A: He has read two articles by Frege) B: Two ~~articles~~ by Frege, I have read myself.

⁹ For discussion of these, see, among others, Jackendoff (1971), Ronat (1977), Dahl (1985), Brucart and Gràcia (1986), Contreras (1986), Radford (1989), Bernstein (1993), Sleeman (1993, 1996), Lobeck (1995), Kester (1996), Giannakidou and Stavrou (1999), Kester and Sleeman (2002), Llobart-Huesca (2002), Kornfeld and Saab (2004), Corver and van Koppen (2007,2009), Braver (2009), Eguren (2009,2010), Saab (2010), Watanabe (2010), among others.

¹⁰ That it is non-distinctness rather than strict morphosyntactic identity (Chomsky 1965,182) is apparently shown by cases like the following, in which non identity of Number and Case features does not block ellipsis (non-pronounced material is represented here in strikethrough, capitals representing focused (stressed) material):

(i)a. Mary bought three old books but I bought only one (~~old~~) ~~book~~ (Ntelitheos 2004,35)

b. Quei due bei gattini e questo (~~bel~~) ~~gattino~~ (Italian)

Those two nice kittens and this (= (nice) kitten)

c. Sinandise sto dromo dio filus ke meta mazeftikan spiti tu poli ~~filis~~ (Greek-Giannakidou and Stavrou 1999,306)

met.3sg in-the street two friends.ACC and then gathered.3pl house his many.NOM

‘He met two friends on the street, and then many gathered at his place.’

As Richard Kayne observed, in (i)a there might still be strict identity, if the plural ‘-s’ is higher than ‘old book’, and similarly for Case in (i)c.

In order to evaluate the correctness of the proposed generalization I will consider first the case of pre-nominal modifiers (§ 2), and then that of post-nominal modifiers (§ 3). In §4 a refinement of the generalization will be presented and some of its implications discussed.

Consider the following examples from Italian¹¹; for each I list the possible and impossible interpretations:

2. Pre-nominal modifiers.

2.1 Cardinal numerals

(7)a. Quei due studenti e questi ~~due studenti~~/ ~~studenti~~

Those two students and these ~~two students~~/~~students~~

b. Quei due studenti e questi *~~due~~ professori¹²

those two students and these *~~two~~ professors

2.2 Ordinal numerals

(8)a. La sua prima sconfitta e la mia ~~prima sconfitta~~/~~sconfitta~~ (non erano prevedibili)

His first defeat and mine ~~first defeat~~/~~defeat~~ (were not foreseeable)

b. La sua prima sconfitta e la mia *~~prima~~ vittoria (non erano prevedibili)

His first defeat and my *~~first~~ victory (were not foreseeable)

2.3 Multal/paucal quantifiers

(9)a. Con i suoi molti sostenitori e i tuoi ~~molti sostenitori~~/~~sostenitori~~...

With his many sustainers and yours ~~many sustainers~~/~~sustainers~~...

b. Con i suoi molti sostenitori e i tuoi *~~molti~~ seguaci...

¹¹ To judge from Laczkó (2007), a similar situation may hold in Hungarian.

¹² As noted, this fact is observed in Kayne (2012, §4).

With his many sustainers and your ~~*many~~ followers...

2.4 Pre-cardinal adjectives

2.4.1 *altro* 'other'

(10)a. Quelle altre due scarpe e queste ~~altre due scarpe/due scarpe/scarpe~~

those other two shoes and these ~~other two shoes/two shoes/shoes~~

b. Quelle altre due scarpe e queste ~~*altre *due~~ calze

those other two shoes and these ~~*other *two~~ socks

2.4.2 *prossimo/scorso* 'next/last'

(11)a. I loro prossimi due incontri e i nostri ~~prossimi due incontri/due incontri/incontri~~

their next two matches and ours ~~next two matches/two matches/matches~~

b. I loro prossimi due incontri e i nostri ~~*prossimi *due~~ allenamenti

their next two matches and our ~~next two~~ coachings

2.4.3 *solito* 'usual'

(12)a. i nostri soliti tre clienti e i vostri (~~soliti~~) (~~tre~~) ~~clienti~~

The our usual three customers and the your (~~usual~~) (~~three~~) ~~customers~~

b. i nostri soliti tre clienti e i vostri ~~*soliti *tre~~ fornitori

the our usual three customers and the your ~~*usual *three~~ suppliers

2.4.4 *solo/unico* 'only/unique'

(13)a. i vostri unici sostenitori e i nostri ~~unici sostenitori/ sostenitori~~

the your only supporters and the our only supporters/supporters

b. i vostri unici sostenitori e i nostri ~~*unici~~ amici

the your only supporters and the our ~~*only~~ friends

2.4.5 '*rimanente/restante*' 'remaining'

(14)a. Deve leggere tutti i rimanenti dieci capitoli e tutti (~~i rimanenti~~) (~~dieci~~) capitoli entro la prossima settimana

He must read all the remaining ten chapters and all (~~the remaining~~) (~~ten~~) chapters by next week

b. Deve leggere tutti i rimanenti dieci capitoli e tutti gli ~~*rimanenti~~ ~~*dieci~~ articoli entro la prossima settimana

He must read all the remaining ten chapters and all the ~~*remaining~~ ~~*ten~~ articles by next week

2.4.6 *pre-numeral descriptive adjectives*

In a somewhat special usage, (some) descriptive adjectives may precede cardinals (as well as ordinals). See (15)a. Yet, they cannot be left silent if a numeral and/or the NP are pronounced. See (15)b:

(15)a. Le splendide/terrificanti due settimane passate in montagna

The splendid/dreadful two weeks spent in the mountains

b. Le splendide/terrificanti due settimane passate in montagna e queste ~~*splendide/terrificanti~~ tre (settimane) passate in campagna

The splendid/dreadful two weeks spent in the mountains and these ~~*splendid/dreadful~~ three (weeks) spent in the countryside

2.4.7 Superlative adjectives

A similar situation is found with adjectives in the superlative form. They can either follow or precede cardinals (see (16)a). Yet, they too cannot be left silent when pre-numeral if the numeral (or the NP) is pronounced. See (16)b:

(16)a. I loro <più spettacolari> tre <più spettacolari> concerti dal vivo (sono questi)

The their most spectacular three live concerts (are these)

b. I loro più spettacolari tre concerti dal vivo e i suoi *più spettacolari due (concerti dal vivo)
(sono questi)

The their most spectacular three live concerts and his *most spectacular two (live concerts) (are these)

2.4.8 Demonstratives¹³

(17)a. All these bonuses are available and all ~~these bonuses~~/bonuses, incidentally, are completely free of charge

b. All these bonuses are available and all *~~these~~ offers are completely free of charge

2.4.9 Universal Quantifiers

Being the next to the highest modifier of the nominal extended projection (below integrated non-restrictive relative clauses – see §3.2.3), universal quantifiers of the *tutti* ‘all’ type, can never appear silent as there will always be a pronounced lower modifier (and/or the NP):

¹³ Given that in Italian a universal quantifier modifying a NP must be followed by either a definite article or a demonstrative, the ‘deletability’ of a demonstrative in the presence of a bare NP modified by a universal quantifier cannot be checked. English, however, allows one to construct the relevant context.

- (18) Tutti (e tre) quei bambini sono stati più fortunati di ~~*tutti (e tre)~~ questi (bambini)
 all (three of) those children have been luckier than ~~*all (three of)~~ these (children)

2.4.10 *Post-numeral (pre-nominal) adjectives*¹⁴

- (19)a. Le mie principali preoccupazioni e le sue ~~principali preoccupazioni/preoccupazioni~~
 My main worries and his ~~main worries/worries~~
 b. Le mie principali preoccupazioni e le sue ~~*principali~~ paure
 My main worries and his ~~*main~~ fears

3. Post-nominal modifiers.

3.1 *Post-nominal adjectives*

- (20)a. Le mie preoccupazioni principali e le sue ~~preoccupazioni principali/preoccupazioni~~
 My worries main and his ~~worries main/worries~~
 b. Le mie preoccupazioni principali e le sue paure ~~*principali~~
 My worries main and his fears ~~*main~~
- (21)a. Quei vasi cinesi lì e questi ~~vasi cinesi/vasi~~ qui
 Those vases Chinese there and these ~~vases Chinese/vases~~ here
 b. Quei vasi cinesi lì e questi quadri ~~*cinesi~~ qui
 Those vases Chinese there and these paintings ~~*Chinese~~ here

¹⁴ These correspond to those adjectives that in Cinque (2010) and references cited there are referred to as “direct modification” adjectives (arguably those not deriving from relative clauses).

3.2 Relative clauses

3.2.1 Restrictive relative Clauses

As Lobeck (1995,43) notes, “a [restrictive] relative clause can either be included in the ellipsis or can remain outside it.”. See (22)a-b and the corresponding Italian examples (23):

(22)a. Even though these cards that her students sent her were funny, Mary enjoyed [_{NP} those [e]] even more ([e] = cards (that her students sent her))

b. Even though these cards that her students sent her were funny, Mary liked [_{NP}those [e] that her parents gave her] even more ([e] = cards)¹⁵

(23)a. Anche se questi biglietti che i suoi studenti le hanno mandato erano divertenti, quelli biglietti lì (~~che i suoi studenti le hanno mandato~~) le sono piaciuti anche di più

b. Anche se questi biglietti che i suoi studenti le hanno mandato erano divertenti, quelli biglietti lì che le hanno dato i suoi genitori le sono piaciuti anche di più

3.2.2 Non-restrictive relative clauses

As noted in McCawley (1998,445), non-restrictive relatives, as opposed to restrictive relatives, cannot be interpreted as being part of an ellipsis site.¹⁶ Compare (22)a-(23)a with (24):

¹⁵ This and similar cases with other post-nominal modifiers recall Gapping in the clause; yet, while VP Ellipsis and (verbal) Gapping are subject to different conditions, the latter being arguably derived via Across-The-Board (ATB) movement (cf. Johnson 2009 and references cited there), Wang, Potter and Yoshida (2012) observe that DP-internal Ellipsis and Nominal Gapping are subject to exactly the same conditions, and show properties that cannot be derived via ATB movement but only by ellipsis (here, movement of the non-ATB type).

¹⁶ He gives the contrast between (i)a. and b.:

(i)a. Tom has a violin which once belonged to Heifetz, and Jane has one ~~violin which once belonged to Heifetz~~ too

b. Tom has a violin, which once belonged to Heifetz, and Jane has one ~~violin, *which once belonged to Heifetz~~, too

(24) Questo violino, che è probabilmente di Stradivari, è meno buono di quello ~~violino, *che è~~
~~probabilmente di Stradivari.~~

This violin, which probably is by Stradivari, is less good than that ~~violin, *which probably is by~~
~~Stradivari.~~

3.2.3. *Reduced relative clauses*

It seems that, whether interpreted restrictively or non-restrictively, reduced (participial) relative clauses can either be included in the ellipsis site or can remain outside it. See (25):

(25)a. Adesso sto leggendo questi giornali arrivati da poco, e poi leggerò gli altri ~~giornali (arrivati~~
~~da poco)~~

Now I'm reading these newspapers recently arrived and then I'll read the others ~~newspapers~~
~~(recently arrived)~~

b. Adesso sto leggendo questi giornali arrivati da poco, e poi leggerò gli altri ~~giornali~~ arrivati
ieri

Now I'm reading these newspapers recently arrived and then I'll read the others ~~newspapers~~
arrived yesterday

3.3 *Prepositional Phrases*

If Kayne (2008) is right, Ns do not take arguments, nor do they assign theta roles. Indeed, apparently selected PPs and non-selected (adjunct) PPs appear to behave alike with respect to ellipsis (in Italian): they cannot be silent by themselves (as opposed to clausal arguments, as seen above). Cf. (26) and (27)

(26)a. La sua descrizione della casa e la tua ~~descrizione della casa~~

the his description of.the house and the yours ~~description of.the house~~

b. La sua descrizione della casa e il tuo disegno (~~*della casa~~)¹⁷

the his description of.the house and the your drawing (~~*of.the house~~)

(27)a. Il vostro appartamento sul lago è più grande del loro appartamento (~~sul lago~~)

The your apartment on the lake is bigger than their apartment (~~on the lake~~)

b. Il vostro appartamento sul lago è più grande della loro casa (~~*sul lago~~)

The your apartment on the lake is bigger than their house (~~*on the lake~~)

This does not mean necessarily that apparently selected and non-selected PPs are merged in the same position. There seems in fact to be evidence that the former are merged lower than the latter (see §5 below, and McCawley 1998).

4. A refinement of the generalization and its derivation. All of the cases of pre- and post-nominal modifiers considered so far show that they cannot be silent unless the head N (more accurately, the NP) is also silent. But this is, strictly speaking, not sufficient, as the examples in (28), among others, show:

(28)a. I nostri soliti tre clienti e i vostri ~~*soliti~~ due ~~clienti~~

The our usual three customers and the your ~~*usual~~ two ~~customers~~.

b. I miei stessi cinque articoli e i tuoi ~~*stessi~~ due ~~articoli~~

the my same five articles and your ~~*same~~ two ~~articles~~

c. La loro altra vittoria esterna e la nostra (~~*altra~~) ~~vittoria~~ casalinga

the their other victory external and the our (~~*other~~) ~~victory~~ internal

¹⁷ Although it is pragmatically possible to interpret the drawing as referring to the house, this is difficult in any case, in contrast to (26)a, where reference to the house is virtually obligatory.

What all of these cases suggest is that:

(29) “A modifier cannot be left silent (*even if the head N (NP) is silent*) in case some other modifier which is merged lower in the nominal extended projection than the silent modifier is pronounced”.

In other words, a nominal modifier can be silent only if the NP and all other modifiers which are merged between the NP and the modifier in question are also silent (i.e., if it makes up a silent constituent with the NP and all other modifiers in between it and the NP).

Cardinals like *due* in (28)a are merged lower than the higher adjective *soliti*; hence also the cardinal must be silent for *soliti* to be understood as present. The same holds for *stessi* in (28)b and *altri* in (28)c. They cannot be understood as present because another modifier, which is merged lower than them (*due* and *casalinga*, respectively), is pronounced.¹⁸

Granting its correctness, why should this particular generalization hold?

We know that movement can only affect constituents, which makes a movement analysis of DP-internal ellipsis, where only constituents can be silent, naturally attractive (because of its unifying character). What remains to be understood is why of all DP-internal constituents only those that contain the (unmoved) NP can be silent.

I suggest that this is due to the same set of principles which I claimed in Cinque (2005) derive, through DP-internal movement, the possible canonical orders of Dem, Num, A and N in the languages of the world; namely the parameters in (30)b i) to iv), applied to a Merge structure like (30)a:

¹⁸ When *stessi* follows cardinals it means ‘themselves’.

(30)a. Order of Merge: [RC_{nonrestr.} [Q_{univ.} [Dem. [A. [Num_{ord.} [RC_{restr.} [Num_{card.} [A. NP]]]]]]]]¹⁹

b. Parameters of movement:

i) NP movement plus Pied-piping of the *whose picture*-type or

ii) NP movement without Pied-piping, or

iii) NP movement plus Pied-piping of the *picture of who*-type

iv) Neither head movement nor movement of a phrase not containing the (overt) NP are possible (except perhaps for special, focus-related, movements of phrases to a DP initial position in certain languages).

(iv) is in stark contrast with what we find in the CP domain, where no parallel requirement seems to hold (to the effect that *only* constituents containing the VP can move or be silent). Perhaps this is to be related to the general absence of a topic/focus field in the extended nominal projection (or, more generally, of a left periphery comparable to that found in the clausal domain) (cf. Szendrői 2010), except possibly in some languages, for which its presence has been postulated²⁰.

5. Other implications of the revised generalization. The fact that a non-restrictive relative clause cannot, as noted in §3.2.2, be silent (unpronounced but understood as present) follows from the

¹⁹ This is only a fragment of the internal structure of nominal phrases.

²⁰ See for a possible focus position in the Albanian DP Giusti (1996, 2002), though, as she notes, no (selected) *wh*-projection seems to be available in DPs cross-linguistically. As Richard Kayne notes, the left periphery of DPs must however be able to accommodate a raised quantifier, to account for the (somewhat marginal) acceptability of *no one* with narrow scope in 'The arrival of no one would surprise everyone', and similarly for 'The arrival of only John would surprise everyone'. Perhaps such quantifiers target positions which are lower than the left edge of the DP (cf. Beghelli and Stowell 1997).

refined generalization in (29) if (integrated) non-restrictive relative clauses²¹ are merged higher than all other nominal modifiers, as argued in Cinque (2008).

This because the remnant will necessarily contain a pronounced modifier which is lower than the non-restrictive relative clause.²²

As to restrictive and reduced relative clauses, although they can be part of the ellipsis site, as noted in §3.2.1 and §3.2.3, respectively, they cease to be understood as part of the ellipsis site if an adjective, i.e., a modifier merged lower than either of them, is present in the remnant. See (31)-(32):

(31) La ripresa economica che avevamo previsto e quella ~~ripresa~~ morale (~~*che avevamo previsto~~)

The recovery economic that we had foreseen and that ~~recovery~~ moral (~~*that we had foreseen~~)

(32)a. I nostri clienti occasionali appena usciti e i vostri ~~clienti occasionali appena usciti~~

The our customers occasional just gone and the yours ~~customers occasional just gone~~

b. I nostri clienti occasionali appena usciti e i vostri ~~clienti abituali~~ (~~*appena usciti~~)

Even if apparently selected and non-selected PPs behave alike when they are the exclusive target of ellipsis (recall §3.3 above), some ellipsis facts seem to indicate that they may be merged at different heights in the extended projection of the NP. For example, while the apparently selected PP *di*

²¹ These differ from *non-integrated* non-restrictive relative clauses, which appear to be outside of the DP they modify altogether (Cinque 2008).

²² The question remains why the entire DP cannot be elided under non-distinctness with an antecedent; namely, why (i) without a pronominal is illformed in Italian (despite the fact that it is a constituent containing the unmoved NP):

(i) Se quei tre ragazzi si comporteranno meglio, Gianni inviterà anche ~~*(loro)/quei tre ragazzi~~

If those three boys behave better, Gianni will invite (them)/~~those three boys~~

Perhaps, in such cases the entire extended projection containing the unmoved NP would have to raise (including the left edge which would allow a silent counterpart of the lexical material).

linguistica in (33)a is (virtually obligatorily) part of the ellipsis site, the adjunct PP *con invito* in (33)b is very marginally part of the ellipsis site, if at all:

(33)a. Gli studenti di linguistica con invito e quelli ~~studenti di linguistica~~ senza invito

The students of linguistics with an invitation and those ~~students of linguistics~~ without

b. Gli studenti di linguistica con invito e quelli ~~studenti~~ di chimica ??~~con invito~~

The students of linguistics with an invitation and those ~~students~~ of chemistry ??~~with an invitation~~

6. Apparent difficulties. A potential difficulty for (29) is provided by an example like (34) (from McCawley 1993), where a modifier (*few*) is silent despite the fact that the lower NP (*dogs*) is itself pronounced.

(34) Few dogs eat Whiskers or ~~few~~ cats ~~eat~~ Alpo.

Johnson (2000), however, argues that in such cases *few* is a single separate quantifier phrase, higher than the coordination of the VPs *dogs eat Whiskers and cats Alpo*, within an ATB derivation. If so, the generalization in (29) still holds.²³

A second potential difficulty for the same generalization comes from an observation that Radford (1989) attributes to David Kilby, according to which a sentence like *Jane has a big black dog, and Jean has a brown one* allows an interpretation on which *brown one* means ‘big brown dog’, where apparently a modifier (*brown*) lower than the silent one (*big*) is pronounced. This ceases to be a problem for the generalization in (29) if we either follow Radford in taking such an interpretation to be pragmatically determined rather than structurally grounded or if we think of it as deriving from a structure like *Jean has a brówn big one dog*, where *big dog* is a constituent, presumably after preliminary evacuation/raising of *one*.²⁴

²³ Richard Kayne points out that cases such as (34) are apparently acceptable only with coordination, as *People who have few dogs have little in common with people who have cats* can't possibly be understood to contain a silent 'few'.

²⁴ On apparent reversals of the unmarked order of adjectives in English see the discussion in Cinque (2010, Chapter 5).

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