RECONSIDERING SUBEXTRACTION: EVIDENCE FROM SPANISH*

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ABSTRACT. This paper argues that so-called subextraction (e.g., Who_i has John seen a picture of t_i ?; cf. Corver 2006 for recent discussion) does not involve movement of a whphrase to a DP internal escape hatch position before reaching the CP layer. Instead, we claim that apparently subextracted wh-phrases are actually direct dependents of the verb after a process of reanalysis (or readjustment; cf. Chomsky 1977, Kayne 2002) applies. Our proposal rethinks an old (Bach & Horn 1976) idea, reframes it in modern terms and argues against the cyclic status of DPs (cf. Bruening 2009, Leu 2008, Ott 2008, and references therein), by leaning on new evidence from Spanish. The non-cyclic status of DPs is a fairly standard idea ever since clausal properties were assumed to hold for nominal domains (cf. Chomsky 1970, Brame 1982, Abney 1987, and much subsequent literature).

Keywords. subextraction; cyclic domain; escape hatch; island; reanalysis

1. Introduction

Locality conditions have been the focus of much research in Generative Grammar (cf. Boeckx 2003, Chomsky 1977, 1986, Huang 1982, Stepanov 2001, and Ross 1967, Takahashi 1994, among many others). Work on movement transformations early showed that they should be strictly local, targeting dedicated positions, now standardly known as *escape hatches* (or *edges*):

(1)
$$\left[\operatorname{CP} \operatorname{XP} \dots \left[\operatorname{CP} t_{\operatorname{XP}} \dots \left[\operatorname{CP} t_{\operatorname{XP}} \dots \left[\operatorname{CP} t_{\operatorname{XP}} \dots \left[\operatorname{CP} t_{\operatorname{XP}} \dots t_{\operatorname{XP}}\right]\right]\right]\right]\right]$$

Although the exact nature of this locality constraint is under debate (cf. Abels 2003, Abels & Bentzen 2009, Boeckx 2007), there is robust evidence that [Spec, CP] and [Spec, vP] qualify as cyclic positions (cf. Barss 1986, Chomsky 1977, Fox 2000, Legate 2003, and others). Assuming that CPs and vPs are the relevant cyclicity checkpoints, two questions arise: (i) What do they have in common? (ii) Is there any other domain that behaves like CP and vP?

Ever since the late 70s and early 80s (cf. Abney 1987, Brame 1982, Cinque 1980, Davies & Dubinsky 2003, Dean 1988, Demonte 1987, Elliot 1984, Emonds 1985, van Riemsdijk 1978, among others), many proposals have accumulated in favor of the

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idea that DPs and PPs have a syntactic functioning analogous to that of CPs and vPs (but see Bruening 2009, Leu 2008, and Ott 2008). As a matter of fact, a key assumption behind most subextraction accounts is that, before reaching its final landing site, the wh-phrase passes through [Spec, DP], a "escape hatch" position for successive cyclic movement. The existence of such 'transit' positions was argued for by Chomsky (1977, 1986) for clausal domains (i.e., [Spec, CP] and [Spec, VP]), and it seemed natural to extend it to the nominal domain, given the well-known syntactic similarities between clauses and nominals. This entails that extraction from DPs should target the [Spec, DP] position, as indicated in (2b):

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(2) a. ¿[CP Qué libro; crees [CP t; [C' que Juan escribió t; ]]]? (Spanish) what book think that Juan wrote 'What book do you think that Juan wrote?'
b. ¿[CP De qué actor; leyó Juan [DP t; [D' D [NP algunas ... (Spanish) of what actor read Juan some ... críticas t; ]]]]? critiques 'Whose actor did Juan read some critiques?'
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This paper focuses on the allegedly cyclic status of DPs. We will argue that, contrary to current assumptions, (2b) is not a correct syntactic representation, and also that extraction out of DPs is not possible, as Bach & Horn (1976) first argued on independent grounds. Developing Bach & Horn (1976)'s proposal, we will argue that apparent subextraction cases involve a reanalysis process whereby the 'extracted' constituent starts off as a noun complement, and then moves to [Spec, vP].

The outline of the paper is as follows: in section 2 we summarize a number of problems raised by subextraction-based accounts, some of them already known, and others not previously noticed. In section 3 we outline two alternative analyses to subextraction. Section 4 develops some pieces of evidence suggesting the most appropriate alternative to handle subextraction; in section 5 we implement reanalysis as a substitute for subextraction in DPs. In section 6 we summarize the main conclusions. The paper contains an appendix in which we sketch possible extensions of reanalysis to complements of non-nominal categories; we suggest that those extensions should be further investigated, but we will not develop them in this article. All along the paper, we concentrate on data from English and Spanish, but we will suggest that the main conclusions hold generally.

2. Problems with subextraction accounts

In this section we point out eight problems that directly derive from the very existence of subextraction processes. In the last section we argue that our theory explains all of them in a rather simple way, but it is worth pointing out that any theoretical substitute would have to account for them in one form or another, since they stand out as direct consequences of the very syntactic nature of the subextraction structure in (2b).

² On this relationship, see Abney (1987), Brame (1982), Chomsky (1970), Cinque (2002), Hiraiwa (2005), Szabolcsi (1981, 1983/1984, 1992), Zamparelli (2000), and much related literature.

¹ See Bennis, Corver, & den Dikken (1998), Giorgi & Longobardi (1991), Takahashi (1994), Corver (2006), and references therein.

2.1. Problem 1. Movement to (and through) the escape hatch position.

Wh-movement must target the escape hatches. This seems correct in the case of CPs, in both local and non-local configurations:

(3) a. Juan dijo [CP quéi hizo María ti] (Spanish) what did María Juan said 'Juan said what María did' b. Juan dijo [CP quéi piensa Pedro [CP ti que hizo María ti]]] (Spanish)

what thinks Pedro that did María Juan said 'Juan said what Pedro thinks that María did'

Unexpectedly, DPs show a different behavior:

(4) a. *Juan vio [DP de quéi fotos ti] (Spanish) of what pictures Juan saw 'Juan saw what pictures of'

b. *Juan escuchó [DP] de $qué_i[DP]$ D rumores $_i$ de $[fotos\ t_i]$ (Spanish) of what Juan heard rumors of pictures 'Juan heard what rumors of pictures of'

c. *¿[CP De quién; escribiste [DP artículos sobre [fotografías ti]]]? (Spanish) of who wrote papers about pictures 'Who did you write articles about pictures of?'

d. *¿[CP Sobre qué recibiste [DP peticiones para [artículos t_i]]]? (Spanish) about what received requests for articles 'What did you receive requests for articles about?'

The English version of (4b) was provided by Chomsky (1973), who argued that extraction was ruled out "because of the absence of a COMP node in noun phrases." This option clearly departs from most current analyses, which, as just noted, assume that DPs are equipped with an escape hatch.³

One might be tempted to argue that the data in (3)-(4) could be explained on selectional grounds: wh-phrases can only stop if the relevant selectional conditions are met. But this line of reasoning would have to face the question of why the relevant conditions are *never* met with DPs. In other words, why can't we have interrogative DPs just like we have interrogative CPs? In fact, we do have interrogative DPs (what book, which picture, etc.), but we do not have them in a successive cyclic scenario, and this introduces an unexpected asymmetry. We can of course blame the special properties of DPs for the divergence, but this does not seem to qualify as a genuine explanation.

Another side of the asymmetry is provided by the fact that there is no problem for a non-selected PP to raise to [Spec, CP] in clausal environments:

(5) veo [CP [PP de qué trucos]; se sirven ti] (Spanish) of what tricks 'I see what tricks they make use of' veo [PP de esos trucos] (Spanish) of those tricks already see

³ Other indirect empirical evidence for the presence of successive cyclic movement (agreement, inversion, morphological change in the D head etc.; see Boeckx 2007 for discussion) is found in DPs either, to the best of our knowledge.

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'I already see of those tricks'

As one may see, *ver* (Eng. 'see') does not select for a PP in (5), but it is nonetheless possible to have (5a). Now, this is never found in the context of the DP, as already noted for (4a):

(6) *Juan vio [DP de qué fotos]

Juan saw of what pictures

'Juan saw of what pictures'

(Spanish)

In the same vein, Cinque (2012) attributes examples similar to those in (7) to Giusti (1996), taking them to indicate that [Spec, DP] is an A, not an A', position. He further provides the examples in (7), from Belletti (1982/1983), to show that the reciprocal element *l'uno* (Eng. 'the one') in the left edge of the DP occupies an A position, since it participates in binding calculation:

- (7) a. Quei reporters ammiravano [DP l'uno [le foto de l'altro]] (Italian) those reporters admired-3.PL the one the pictures of the other 'Those reporters admired each other's pictures'
 - b. *Quei reporters ammiravano [DP l'uno [le tue foto de l'altro]] (Italian) those reporters admired-3.PL the one the your pictures of the other 'Those reporters admired each other's pictures of you'

[from Cinque 2012: 6]

We would like to point out that these contrasts are clearly at odds with the hegemonic view that phase edges are A'. We are thus forced to conclude that either DPs are not phases or else that the A' nature of edges can be parametrized.⁴

Consider, finally, the fact that A/A-bar movement might be said to occur DP internally with possessives such as *whose* and *his*:⁵

⁵ One might apparently argue that the fact that demonstratives block subextraction is a signal that they occupy an edge position, hence an argument for cyclic status of subextracted DPs:

(i) ¿De qué autor me dijiste que habías leído varias novelas? (Spanish) of what author to-me said that had read various novels 'What author did you tell me that you had read books by?'

(ii) *¿De qué autor me dijiste que habías leído estas novelas? (Spanish) of what author to-me said that had read these novels 'What author did you tell me that you had read these books by?'

But this is not the necessary conclusion to be obtained from contrasts such as these, even if demonstratives are heads, rather than specifiers (cf. Roca 1996 on arguments for each option). More interestingly, demonstratives allow subextraction in similar structures:

(iii) ¿De qué autor solo has leído estas dos novelas? (Spanish) of what author just have read these two novels 'What author have you read only these two books?'

⁴ An anonymous reviewer suggests an alternative, pointing out that the same happens in the vP, where the first specifier is an A position, and the outer specifiers are A-bar positions. According to this, the behavior of the vP seems to depend on argument structure properties (and is only relevant with external arguments). Notice that, even if we considered such a solution, we would still lack an explanation as for why CPs do not manifest a similar behavior.

(8) $[DP \{Whose/His\}_i D [NP pictures t_i]]$

Notice that, if movement from within the DP were a possibility, the natural questions is why (9) cannot be formed:

(9) $*[DP Whose_i [NP catalog [of [DP pictures t_i]]]]$

This asymmetry is further confirmed by Ian Roberts (p.c), who points out that escape hatch problems also hold for AP fronting. That is, no principled account seems to be able to exclude the possibility that the degree phrase *how good* modifies *boy* in (10), rather than just *story*, as it happens to occur:⁶

(10) How good a story about a boy did John tell?

We then conclude that evidence for an escape hatch is unclear in DPs, which suggests that DPs are not cyclic nodes.⁷

2.2. Problem 2. No scope taking position

Movement to [Spec, CP] and [Spec, vP] has been related to scope taking phenomena (cf. Fox 2000, Nissenbaum 2000). It is unclear why [Spec, DP] is not a valid scope taking position, provided it is an escape hatch for subextraction purposes. Also

The focus adverb *solo* (Eng. 'only') in (iii) is key in licensing wh-movement. Interestingly enough, the same happens in structures where wh-movement has not taken place, as in (iv):

(iv) ?(Solo) He leído de Vargas Llosa estas novelas only have read of Vargas Llosa these novels 'By Vargas Llosa, I have only read these books'

Notice that it would be rather odd to argue that this property of demonstratives, as blockers of wh-phrases in edge positions, is overridden by focal adverbs. Whatever the role of demonstratives in extraction phenomena may be, we take these data to indicate that it is not obviously related to edge positions blocking subextraction.

- ⁶ A morpho-phonological explanation might hold that *whose* is not be able to move for it is a complex element (who + 's), perhaps a proclitic. But notice that this line of reasoning could not be applied to (10), whose structure would be as in (i), not (ii):
- (i) $[CP [DP [DegP How good] a story [PP about a boy]]_i did John tell t_i]$?
- (ii) $\left[\bigcap_{P} \bigcap_{P \in P} How \text{ good} \right]_i$ a story $\left[\bigcap_{P} about \text{ a boy } t_i \right]_i$ did John tell t_i ?

(i) There was a flag in front of every building

We suppose the reviewer is mentioning (i) in order to suggest that P is a cyclic node, and possibly D too. We don't believe (i) forces such conclusion upon us. For the most part, it is not clear that a pit-stop in [Spec, PP] is necessary for the relevant reading to arise (with *every building* outscoping *a flag*). One could just argue that the QP moves to the edge of the vP. Also, it is unclear that c-command is necessary in order to obtain the intended readings (cf. Gutiérrez-Rexach 2003, Barker 2012).

⁷ A reviewer asks whether examples like (i), attributed to Robert May, may be relevant for our discussion:

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unclear is why (11a) could not be generated with the interpretation given in (11b), assuming that wh-movement takes place covertly:

(11) a. *John saw [DP whoi pictures of ti]
b. for what x, x = human, John saw pictures of x.

To be sure, it might be argued that (11a) is excluded for reasons unrelated to A'-binding, namely the lack of the appropriate categorial features in *who* as a nominal premodifier. But it is implausible that such a gap is just an accident of English, since we do not know of any language in which the equivalent of (11a) obtains. This suggests that the problem with (11a) is deeper, namely the lack of an appropriate landing position for the wh-phrase in [Spec, DP].

2.3. Problem 3. Apparent lexical restrictions

If subextraction is a syntactic process, then it is unclear why some verbs (*read*, *see*, *take*, etc.) license it, while others (*destroy*, *request*, *lose*, etc.) do not, as Bach & Horn (1976:276, 280) early noticed:

(12) a. Who_i did you {see/hear/take} [DP a picture of t_i]? b. *What_i did you {request/destroy/lose} [DP an article about t_i]?

Similar lexical restrictions hold for prepositions. While (semantically vacuous) of and about allow subextraction, others (on, from, against, etc.) do not. We exemplify these contrasts with data from Spanish:⁹

(13) a. ¿{De / Sobre} quién; has leído [DP un carta ti]? (Spanish) of about who have read a letter 'Who did you read a letter about?'

b. *¿{Contra / Para} quién; has leído [DP una carta ti]? (Spanish) against for who have read a letter 'Who did you read a letter against/for?'

Similar facts hold for English, as Bach & Horn (1976) noted:

a. *[CP About whati did Einstein attack [DP a theory ti]]?
b. *[CP Over whati did Kissinger prevent [DP a war ti]]?
c. *[CP Into which cityi did Jack search for [DP a road ti]]?
[from Bach & Horn 1976: 280]

Again, it is rather unclear how wh-movement would be allowed or blocked in all

(ii) Mary read in the evening

⁸ Notice that the ungrammaticality of (11a) is also mysterious if the raising analysis of relative clauses (cf. Vergnaud 1974, Kayne 1994) is correct.

⁹ Notice that there is no reason to sustain that *about* introduces adjuncts, as opposed to *of*, especially if we think of so-called 'information names:' A {book, movie, program, *table, *hat, etc.} about John. On similar grounds, if the PPs in italics below were equally adjunct-like, then it is not clear why the cases that align with (i) form a restricted paradigm, unlike those that align with (ii):

⁽i) Mary read about fishing

these cases depending on lexical restrictions on V or P. On the contrary, lexical factors are entirely expected in a process of reanalysis, as we will argue below.

2.4. Problem 4. Argument-adjunct asymmetries

Adjuncts (non-governed dependents) are well-known to be islands for extraction (cf. Chomsky 1986, Huang 1982, Stepanov 2001, and Uriagereka 1999). The examples in (15) are taken from Lasnik & Saito (1992: 42,12):

(15) a. [CP Whoi did you hear [DP a story about ti]]? b. *[CP Which booki did John go to class [PP after he read ti]]?

Let us now try to apply the distinction to DP complements. The situation seems to be somehow murky, since, first off, there is no consensus as to whether nouns should take *bona fide* syntactic arguments (some authors claim that they do not, cf. Hale & Keyser 1993, Mateu 2002, and Kayne 2011; cf. also Adger 2013, Alexiadou 2001, and Alexiadou & Grimshaw 2008, and fn. 9). 10

But even if the argument-adjunct distinction is relevant here, it is not clear how to derive the existence of apparent argument-adjunct asymmetries in the structures obtained when extraction from DP takes place. We can exemplify them with data from Spanish. The PP *de la nevera* ('of the fridge') could be argued to be an argument in (16a), since it is built up out of an integral part-whole relation (cf. Uriagereka 2002):¹¹

(16) a. La puerta de la nevera (Spanish) the door of the fridge 'The fridge's door' b. La botella de la nevera (Spanish) the bottle of the fridge

On the contrary, this same PP is arguably an adjunct in (16b), since this DP means 'the bottle in the fridge' or 'the bottle which is in the fridge.' Now notice that, apparently, extraction of the PP complement is possible in the former case, not in the latter:

(17) a. La nevera [CP de la que abrí [DP la puerta ti]]] (Spanish) the fridge out-of which I-opened the door 'The fridge I opened the door of'

b. *I a povera [de la que abrí [la betella till] (Spanish)

b. *La nevera [$_{CP}$ de la que_i abrí [$_{DP}$ la botella $_{t_i}$]] (Spanish) the fridge out-of which I-opened the bottle 'The fridge I opened the bottle of'

A very similar asymmetry is found in (18a-b):

'The fridge's bottle'

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¹⁰ An anonymous reviewer points out that Adger's (2013) treatment of nouns could be relevant here. Be that as it may, we will remain agnostic as to what the particular implementation of the argument / adjunct status is within the nominal domain (to the extent that it holds at all, to begin with, as we pointed out above).

¹¹ There are different approaches to whole-part relations in the literature. For the purposes of our argument, it is not crucial what the specific implementation is: all that matters is that there is an argument-adjunct asymmetry (parasitic on the 'integral' status of the predication; cf. Hornstein, Rosen & Uriagereka 1994) affecting subextraction.

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(18) a. ¿De qué periódico conoces al director? (Spanish) of what newspaper know to-the chief editor 'Which newspaper do you know the chief editor of?'

b. *¿De qué periódico conoces a la mujer? (Spanish) of what newspaper know to the woman

'Which newspaper do you know the woman of?'

That is, *periódico* (Eng. 'newspaper') seems to an argument of *director* (Eng. 'director') in (18a) – inheriting this property from the verb *dirigir* (Eng. 'direct') –, but the PP complement is only an adjunct in *la mujer del periódico* (Eng. 'the newspaper woman'). Notice that Huang's (1982) Condition on Extraction Domain (CED) cannot explain these asymmetries. The reason is simply that CED prevents extraction out of adjuncts, but it does not preclude the extraction of adjuncts out of arguments. Presumably, some version of the ECP could be relevant here (cf. Chomsky 1981), but it is unclear what the status of such principle is in current theorizing.

We then conclude that an argument-adjunct asymmetry in extraction from DP is unexpected. Below we argue that the solution to the paradox is straightforward: we will suggest that there is, in fact, an argument-adjunct asymmetry in these cases, but, contrary to appearances, it is not found in a subextraction structure, but rather in a process of complex predicate formation. This makes the asymmetry natural.

2.5. Problem 5. A condition on specificity

Specific DPs are known to block subextraction (cf. Alexiadou 2004, Bach & Horn 1976, Fiengo & Higginbotham 1981, Uriagereka 1993, Yoshida 2003, among many others). Consider the examples in (19):

(19) a. *What did you read the/those/Bill's books about t?

b. What did you read a book/ books about t?

[from Yoshida 2003:548]

Facts like those in (19) have been related to the so-called Specificity Condition¹² (see

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(i) ¿De qué autor has leído los libros? (Spanish) of what author have read the books 'What author have you read the books of?'

(ii) *¿De qué cantante salieron publicadas las fotos? (Spanish)
of what singer came-out published the pictures
'Which singer were the pictures of published?' [from Ticio 2010: 97]

Ticio (2010) accounts for the contrast above by combining anti-locality and the idea that the weak determiner occupies an Agr^o node. Given the logic of our proposal, (i) and (ii) are better couched in a theory where reanalysis (not subextraction) is allowed if the relevant D is absent (or weak). This makes sense if reanalysis is akin to complex predicate formation (weak or zero determiners rendering the DP more predicative like; cf. Longobardi 1994 and subsequent litera-

¹² Ormazabal's (1992) account of definiteness (not specificity) effects is based on a parallelism between *that*-trace effects and D-trace effects. Although such a connection is consistent with approaches where DPs behave like CPs, we find the basic idea far-fetched: *that*-trace effects are absent in Romance, and even in English they seem to be subject to dialectal variation. To the best of our knowledge, current approaches to islands do not provide an analysis of such facts. The basic relevant asymmetry in Spanish is that in (i) and (ii), which shows the existence of two types of definite articles (a strong one and a weak one; cf. Ticio 2010: 107 and ff.):

(20); cf. Chomsky 1973, Fiengo & Higginbotham 1981, Mahajan 1992, among others):

(20) The Specificity Condition
No specific DP may contain a free variable

Though descriptively adequate, it is not obvious what (20) amounts to, technically. To make things worse, the formulation above is problematic on mere descriptive grounds. Consider the following examples:

- (21) a. Which city_i did you witness the enemy's/the destruction of t_i?
 - b. Who; did you meet the brother of t;?

[from Yoshida 2003:548]

These counterexamples have been tackled by assuming that extraction is possible because *which city* and *who* are arguments of *destruction* and *brother* respectively. This brings us back to the murky issue whether nouns take arguments like verbs do (a controversial issue, as noted in the previous section; cf. Hale & Keyser 1993, Mateu 2002, and Kayne 2011). If those dependents are *bona fide* arguments, then it is not clear why they can be dropped in (19) (for similar examples, cf. Grimm & McNally 2013).

- (22) a. The destruction was terrible in all the area
 - b. John is not the brother, but the father

To be sure, the retrieval of the missing complements may be more or less felicitous depending on their accessibility in the previous context, but even this will not be enough why this is generally possible with nouns (cf. Gallego 2014 for discussion). On the other hand, Yoshida (2003) notes that even alleged argument-taking nouns rule out subextraction:¹³

- (23) a. ??Which city_i did you witness the invasions of t_i?
 - b. Which city; did you witness the invasion of t_i?
 - c. ??Which man; did you visit the brothers of t; ?
 - d. Which man_i did you visit the brother of t_i?

[from Yoshida 2003:551]

Spanish provides additional evidence that definite DPs do not always prevent subextraction. The data in (24), with PPs subextrated from definite DPs, provide fully grammatical examples (on the relevance of *solo* in (24a) see fn. 5 and section 4.5):

ture). This said, as noted above, there may well be additional factors licensing reanalysis with definite determiners, like focus (recall fn. 5):

(iii) ¿De qué autor has leído *(solo) este libro? of what author have read only this book

(Spanish)

'What author have you read only this book?'

¹³ The argument is in the spirit of accounts where extraction is blocked because of argument hierarchy constraints (cf. Alexiadou 2001, Alexiadou & Wilder 1998, Ormazabal 1992, Ticio 2005, and Torrego 1985), in the sense that the presence of more than one argument blocks subextraction processes. But, again, this is unexpected, for no hierarchical constraints appear to be relevant in CPs or vPs (putting aside weak island effects, which are subject to parametric variation). Cf. Grimm & McNally (2013).

- (24) a. El libro del que solo pude leer el prólogo¹⁴ (Spanish) the book of-the that just could read the foreword 'The book I could only read the foreword of'
 - b. ¿De qué especie de artrópodos dices que se ignoraba ... (Spanish) of what species of arthropod you-say that SE was-ignored ... la existencia?

 the existence
 - 'Of what species of arthropods are you saying that existence was unknown?'
 - c. «[...] vivimos circunstancias extraordinarias, de las que, ... (Spanish) live circumstances extraordinary of the that por supuesto, nadie quiere reconocer la responsabilidad» of course nobody want admit the responsability (EL PAÍS, February 9th, 2012, p. 15)

'We live in extraordinary circumstances, the causes of which nobody is willing to recognize'

Yoshida (2003) convincingly argues that the absence of subextraction from DPs can be accounted for if a maximality-inducing covert quantifier occupies [Spec, DP] in the relevant cases. However, and putting aside why extraction cannot resort to multiple specifiers (cf. Chomsky 2004), the question arises as to why the same kind of explanation cannot be applied to CPs and vPs, given that they are cycles too.

2.6. Problem 6. A trace between P and D?

Let us now consider a morphophonological argument against subextraction in Spanish. It is well-known that subject traces of wh-movement block want + to (wanna) contraction in ECM contexts (cf. Chomsky & Lasnik 1978, Barss 1995, Boeckx 2000):

(25) a. [CP Whoi do you want [TP to hire ti]]?
> Whoi do you wanna hire?
b. [CP Whoi do you want [TP ti to ti hire Bill]?
> *Whoi do you wanna hire Bill?

Consider (26) now, an apparent case of subextraction in Spanish:

(26) El hotel [CP del que [TP conozco a [DP ti [D' el [NP dueño ti]]]]] (Spanish) the hotel of which know to the owner 'The hotel whose owner I know'

First of all, notice that problem 5 (previous section) applies here as well, since (26) is an apparent example of subextraction from a definite DP. But there is another problem. In (26) a trace appears in [Spec, DP], right between the preposition a and the

¹⁴ Although it is sometimes argued that subextraction in the context of a relative clause should yield a better outcome, this is not accurate in our cases, since, as (i) shows, an interrogative version of (24a) is fine too.

(i) ¿De qué libro solo pudiste leer el prólogo? (Spanish) of what book only could read the foreword 'What book could you read just the foreword of?'

article el, that is, before the a+el contraction gives rise to al. In fact, this contraction is obligatory, so that al (lit. 'to the') is the appropriate substitute for a el. Thus, we get, El hotel del que conozco al $due\~no$, after the contraction takes place. Rather surprisingly, this outcome is not degraded at all. The natural prediction is that it should be ungrammatical, just as wanna is not possible in (25b). More generally, we know of no syntactic structure in which wh-traces allow for the morphological contraction of the elements they separate. ¹⁵

2.7. Problem 7. Subject-object asymmetries

It is well-known that subjects, unlike objects, rule out subextraction (cf. Huang 1982, Uriagereka 1999). The examples in (27) are from Lasnik & Saito (1992:42):

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(27) a. [CP Whoi did you hear [DP a story about ti]]? b. *[CP Whoi did [DP a story about ti] amuse you]?
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The [Spec, DP] position is available in both cases, which makes the contrast unexpected. One might try to explain data like (27) by invoking some version of Huang's (1982) CED, under the assumption that subjects are specifiers—thus ungoverned dependents. But it is not clear that any such formulation would be helpful, since it is known that the Subject Condition is circumvented in several languages. One of them is Spanish, which apparently allows subextraction from subjects as long as these remain in a post-verbal position:

```
conferenciantes; te
                                                                          (Spanish)
(28)
       ¿[cp De qué
                                              parece
                                                          que . . .
           of what speakers
                                       to.you seem-3.SG that
       a. . . . (?) me
                      van
                              a impresionar [las propuestas t<sub>i</sub>]]?
               to.me go-3.PL to impress-INF the proposals
       b. . . . * [ las propuestas t_i] T me
                                                   a impresionar ]?
                                          van
                the proposals
                                   to.me go-3.PL to impress-INF
      'Which speakers does it seem to you that the proposals by will impress me?'
                                                        [from Uriagereka 1988:118]
```

It is not immediately obvious what difference the position of the subject makes if all that matters for subextraction is the availability of an escape hatch, which is arguably there in both situations. The asymmetry in (28) falls into place under a proposal where subextraction is actually reanalysis, under the assumption that the subject is in a postverbal position, and thus in the complement domain of the verb, once the latter has raised to T (or C). This predicts that preverbal subjects, although not absolute islands in some languages, are always worse extraction sites, as the pair above shows.

2.8. Problem 8. An unexpected thematic asymmetry

Consider next the examples in (29), where the semantic relation between the verb and the head of the internal argument is different.

to the right, this would not mess with the hierarchical dependency (asymmetric c-command) between the moved elements and their traces—at least under an approach where linear order does not interfere with syntactic dependencies.

An anonymous reviewer notes that the argument does not go through if the escape hatch of DPs surfaces to the right of the DP. We disagree. Even if the escape hatch of DPs was placed

(29) a. He leído el último libro de este autor have read the last book of this author

'I have read the last book by this author'

b. He leído al autor de este libro (Spanish) have read to-the author of this book 'I have read the author of this book'

Interestingly, subextraction from the direct object yields different outcomes, as a reviewer points out:

(30) a. ¿De qué autor has leído el último libro? (Spanish) of what author have read the last book 'What author did you read the last book?'

b. *¿De qué libro has leído al autor? (Spanish) of what book have read to-the author 'What book did you read the author?'

This is already noted by Chomsky (2008), who attributes the effect to the possibility of having a relative clause paraphrase: the book who is of the author vs. *the author who is of the book. In Chomsky's (2008) proposal, extraction is (dis)allowed depending on the internal structure of the DP. In the account we pursue here (see below), extraction can only take place if the head of the internal argument is able to establish a cognation dependency with the root that incorporates into the light verb: read a book (assuming that a book is a type of reading) vs. read an author.

2.9. Interim conclusions

Here is what we have so far. Subextraction from DPs is subject to a number of intricacies that either are unexpected, given the unconstrained nature of syntactic processes, or require additional unwanted machinery, such as lexical constraint on movement operations and other similar implausible requisites. Worse yet, these subextraction intricacies signal non-trivial differences between CPs and vPs on the one hand and DPs on the other.

Launching in different arguments, Bach & Horn (1976), and later on Chomsky (1977), reached the natural conclusion that subextraction from DP does not exist. They argued that DPs (NPs at the time) had no escape hatch, thus qualifying as inherent islands. Cinque (1980) departed from both Bach & Horn's (1976) and Chomsky's (1977) conclusion, developing an extraction-based account for DPs that became predominant in the literature, and still is. This analysis was further reinforced by the countless comparisons between clauses (CPs) and nominals (DPs) (cf. Abney 1987, Brame 1982, Chomsky 1970, Cinque 2002, Hiraiwa 2005, Szabolcsi 1981, 1983/1984, 1992, and Zamparelli 2000). Needless to say, although it is not impossible to come up with ways out to the eight problems we have just reviewed (just to maintain the said theoretical parallelism between vP, CP, and DP), it does seem unlikely that a unitary solution is possible. Most importantly for our purposes, even if such a unitary solution existed, the non-trivial asymmetries between CP, vP, and DP would remain. This is what should make us cast doubt on the popular idea that nominals are cyclic domains, just as clauses. 16

¹⁶ Some other arguments against subextraction from DPs are found in Broekhuis (2005) and references therein. Since we cannot possibly review the huge literature in this topic, we limit

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The (certainly minority) line of research that we would like to defend here is based on the idea that the early analysis by Bach, Horn, and Chomsky was basically correct, so that subextraction never takes place from within a DP. The natural question then is how sentences such as *Who did you see pictures of?* are possible in the first place. We will present an answer to this question in the next sections, based on the idea that the phenomena that subextraction is supposed to account for are better understood inside a theory of reanalysis and complex predicate formation. We will also show that the eight problems for subextraction observed above naturally dissolve if this approach is adopted.

3. Introducing reanalysis as a substitute for subextraction

In a largely uncredited paper, Bach & Horn (1976: 277-278) point out that the basic facts about subextraction have "nothing to do with subjacency." Instead of resorting to escape hatch-based proposals to account for the data, Bach & Horn (1976) put forward what they call *NP Constraint*, a specific restriction that amounted to the claim that DPs are inherent islands:

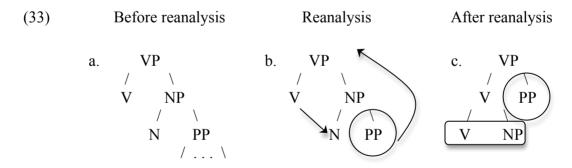
(31) NP Constraint

No constituent that is dominated by NP can be moved or deleted from that NP by a transformational rule.

Bach & Horn (1976) argued that no movement takes place from within the relevant DP (NP at that time) in sentences like (32):

(32) What; did Mary read books about t;?

Instead, a VP-internal reanalysis rule operates, roughly turning (33b) into (33c):



As can be seen, as a consequence of reanalysis, the extracted element in (33b) ceases to be a noun dependent and becomes a verb dependent. But the process had to be restricted somehow, they argued, since (32) clearly contrasted with sentences such as (34):

(34) *What_i did Mary destroy books about t_i?

This amounts to saying that the conditions under PPs become verbal dependents must be provided. There are two options that one might consider:

ourselves to a restricted number of empirical arguments that cast doubts on the unquestionably elegant (and often taken from granted) parallelism between CPs and DPs.

a. Option A: Some predicates have two subcategorization frames in the lexicon
 b. Option B: Some predicates deploy a process of reanalysis that modifies structural dependencies.

Bach & Horn (1976) endorsed Option A. We will depart from them at this point and we pursue option B instead. As is clear, subextraction is possible in Option A because verbs like *read* have two subcategorization frames in the lexicon, as in (36):

```
(36) a. read_1: [VP V [NP N [PP P NP]]] b. read_2: [VP [V [V V NP] [PP P NP]]]
```

Bach & Horn (1976) gave three arguments to support lexical duplicity. The first argument was based on quantifier scope ambiguity. According to them (Bach & Horn 1976:282), the scope of the quantifier *first* in (37) includes *books* on one reading and *books about Nixon* on the other.

(37) John wrote his first five books about Nixon in 1965

This is expected if *read* can resort to the two structures in (36). The second argument comes from pronominalization. As (38) shows, the nominal can be substituted by a pronoun in the cases under consideration, which is barred under some circumstances. The following contrast is adapted from Bach & Horn (1976:283):

(38) a. John destroyed a book about Nixon \rightarrow *John destroyed *it* about Nixon b. John wrote a book about Nixon \rightarrow John wrote *it* about Nixon

Finally, the third argument concerns passivization. As can be seen in (39), adapted from Bach & Horn (1976:281), the NP can be A-moved to the subject position, stranding the PP modifier, which again is not possible in all cases:

- (39) a. John destroyed a book about Nixon
 - \rightarrow *A book; was destroyed t; about Nixon by John
 - b. John wrote a book about Nixon
 - → A book_i was written t_i about Nixon by John

Option A can handle these facts. The main problem with it, we believe, is the fact that it requires two lexical entries for a large number of verbs, which raises acquisition concerns and involves massive lexical duplicity with unclear interpretive consequences. In fact, a lexical analysis implies that *read* is interpreted differently in (36a) and (36b), but it is not evident that this is the case.¹⁷

But if option A is wrong, something must be said about the evidence for it provided in (37)-(39). These data are consistent with the availability of the two structures that

¹⁷ An alternative to the duplication of lexical entries would be an "argument alternation," as a reviewer suggest. We do not object to this option, which is not against the spirit of our proposal, but it is not quite clear to us how exactly the alternation is to be encoded in the lexicon as an option that avoids duplication of lexical entries. The reviewer argues that a transformational account would violate Chomsky's (2008) *No Tampering Condition* (NTC), but we take it to be a minimal departure from the logic of NTC, also violated by operations like feature inheritance or subject raising, as acknowledged in Chomsky (2008).

Bach & Horn (1976) argued for, but it is not obvious that the duplicity has to be determined *in the lexicon*. The alternative we favour is that (36a) is the syntactic source of (36b), rather than a second lexical entry for the verb *read*.¹⁸ By adopting such an analysis, we are not saying that the structural duplicity that Bach & Horn (1976) defended is to be discarded, but rather that it is not to be stated as a lexical fact.

Our alternative assumes, in brief, reanalysis. Under such an approach, subextraction is possible because verbs like *read* can display two structures by means of a reanalysis process. It is worth recalling that, while considering Bach & Horn's (1976) proposal, Chomsky (1977) argued precisely for a reanalysis-based ("readjustment," in his terms; cf. Kayne 2002) approach. As he noted, base-generation of two different structures is worth considering in some cases, but not in others. Chomsky (1977:114) capitalized on the fact that pronominalization is not possible in cases such as (40a) through (40c), whereas subextraction is:

- (40) a. Who did you see a picture of? *He saw it of John
 - b. Who did he find a picture of? *He found it of John
 - c. What books did he write reviews of? *He wrote *them* of three novels

These facts¹⁹, Chomsky suggested, show that question formation and pronominalization do not always correlate. He then postulated a "readjustment rule" (Chomsky 1977:114) that extraposed the PP, thus transforming (41a) into (41b):

(41) a. He saw [NP a picture [PP of John]] before readjustment b. He saw [NP a picture till [PP of John]i after readjustment

We will adopt a different "readjustment process," namely the creation of a com-

- (i) John gave a present to Mary
- (ii) John gave Mary a present

The relevant issue in (i)-(ii) is whether or not the prepositional and non-prepositional variants are derivationally related (we defend a positive answer in the reanalysis cases we are considering; cf. Ormazabal & Romero 2010), but we know of no proposal in which the asymmetry above is captured by postulating two different lexical entries for *give*.

¹⁹ It may well be that the problem of (40) is ultimately morpho-phonological. In languages like Catalan and Spanish, the relevant examples are possible (Carme Picallo and Emma Ticio, p.c.):

(i) Las vio de Juan CL-them saw-3.SG of Juan '(S)he saw them of Juan'

(ii) En vaig veure una del Joan (Catalan) CL-of them AUX-1.SG see one of-the Joan 'I saw one of Joan'

As it is obvious, these examples require the appropriate contexts. For example, (i) might be possible if we start out of an utterance such as *El doctor vio dos radiografías de Juan, no de los demás pacientes* (Eng. 'The doctor saw two of Juan's radiographies, not of the other patients'). Even so, cliticization is not always optimal (??*La encontré de Juan*, Eng. 'I found it of Juan's), which requires further investigation.

¹⁸ Similarly, we do not believe that *give* must be assigned two independent lexical entries building on the fact that it can participate in two stuctures, (i) and (ii):

plex predicate to which a former complement of a DP becomes attached. It is worth pointing out that reanalysis processes are independently needed in the syntax in order to account for several phenomena, including verbal restructuring, incorporation, conflation, and transfer. A partial list of implementations of various forms or reanalysis attempting to account for these phenomena in several languages includes the proposals by Baker (1988), Burzio (1981), Catell (1984), Cinque (2006), Grimshaw & Mester (1988), Guasti (2006), Hale & Keyser (2002), Hornstein & Weinberg (1981), Manzini (1983), Kayne (1975), Rizzi (1982), Sáez (1993) and Stowell (1982). Abeillé & Godard (2010) provide further references, and an excellent overview of complex predicate formation in the Romance languages.

We hasten to add that the very concept of 'reanalysis' does not have a clear place in current minimalist theorizing (cf. Svenonius 2008), and also that there are reasons to be cautious about the very nature of this theoretical tool, as Baltin & Postal (1996) pointed out years ago. In any case, the large number of syntactic processes for which consistent analyses have been defended by postulating the need for readjustment, as well as the restructuration of lexical and or syntactic dependencies, suggest that our proposal does not stand isolated in an abandoned railway.

If the relevant structural change we refer to is to take place in the syntax, as a substitute for subextraction, one should be able to determine why it can apply to *read*-type verbs but not *destroy*-type verbs. The natural question to be raised, then, is what is in the lexical structure of verbs of *read*-type verbs that allow for reanalysis. Since the process clearly affects the selectional properties of the predicate, something must be said on the characteristics of its argumental structure and its relationship with the lexical properties of the verb. We will do this in the next section.

4. Grammatical and lexical clues for reanalysis. A parallelism between light verbs, subextraction predicates, and secondary predication

In this section we will show that subextraction structures display an interesting parallelism with secondary predication configurations and, specially, light verb complexes. These two are straightforward examples of syntactic structures in which verbal dependents have to be associated with nominals inside DPs (more specifically, inside DPs which happen to be arguments of those very verbs). The relevant association is "predication" in the former case and "complementation" in the latter, but there is little doubt that a particular "double grammatical association" holds in both cases. This fact is quite significant for our reformulation of subextraction as reanalysis.

4.1. Subextraction structures and secondary predication

Although secondary predication is traditionally exemplified with adjectives, it also extends to PPs. Here are some examples:

(42) {Compré / pedí / preparé } el bocadillo de salchichón (Spanish) bought ordered prepared the sandwich of sausage 'I {bought / ordered / prepared} a sausage sandwich'

The PP *de salchichón* (Eng. 'of sausage') is a secondary predicate in one of the two readings of the sentences in (42). In the other reading, it is a PP modifier inside the DP. In the former interpretation (the only one relevant here), this PP can be preposed and the DP can be pronominalized, which provides an interesting connexion with the examples in (38)-(40) above:

(43) a. Compré de salchichón el bocadillo (Spanish)

bought of sausage the sandwich

'I bought the sandwich made of sausage'

b. Lo compré de salchichón

it bought of sausage

'I bought it made of sausage'

Now, not all verbs accept this kind of depictive secondary predication. In fact, verbs barring reanalysis do not:

(Spanish)

(44) *Lo {estropeé / tiré / robé / perdí } de salchichón it wasted throw stole lost of sausage
'I { wasted / throw / stole / lost } it made of sausage'

The data in (42)-(44) are revealing, it seems to us, since there is little doubt that secondary predicates are verbal dependents. At the same time, they are excluded with verbs which reject reanalysis, and (apparently) lexically block subextraction configurations. The specific process of complex predicate formation necessary for secondary predication does not concern us here, but the very fact that it exists introduces a clear parallelism with our structures.

4.2. Subextraction structures and light verb complexes

We have not been able to find a mention (even less so a discussion) in the literature of the fact that subextraction structures display a remarkable resemblance to light verb predicate complexes. This similarity is, we claim, strong enough as to suggest a parallel treatment. The parallelism that we want to establish is as follows: much like in light verb constructions (e.g., *take a walk*, *give an answer*, *do a report*, *have doubts*) a nominal dependent becomes a verbal dependent, in the reanalysis structures we are considering a nominal dependent (within a PP) becomes a verbal dependent. We have found six clear-cut analogies between light verbs (LVs) and verbs subject to reanalysis (RVs) as a substitute for subextraction. We discuss them below.

4.2.1. Double segmentation

LVs are traditionally assumed to be subject to a double segmentation, as shown in (45) and (46) (cf. Cattell 1984, Grimshaw & Mester 1988).

- (45) a. She [$_{VP}$ took a [$_{DP}$ walk [$_{PP}$ to the beach]]] b. She [$_{VP}$ took [$_{DP}$ a walk]] [$_{PP}$ to the beach]
- (46) a. Tengo [QP muchas [NP ganas [PP de verte]]] (Spanish)
 have many desires of see-you
 'I'd love to see you'
 b. Tengo [QP muchas [NP ganas]] [PP de verte]
 have many desires of see-you

Interestingly, subextraction of the relevant constituent is possible in both cases—before and after reanalysis operates:

(47) a. [DP] What a walk to the beach $]_i$ she [VP] took $[t_i]$!

'I'd love to see you'

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b. [DP] What a walk] she [VP] took $[t_i]$ [PP] to the beach]!

(48) a. ¡[DP Qué ganas de verte]; [VP tengo ti]! (Spanish)
how-many desires of see-you have
'How much I would like to see you!'
b. ¡[DP Qué ganas]; [VP tengo ti] [PP de verte]
how-many desires have of see-you
'How much I would like to see you!'

This double segmentation, which Catell (1984) traces back to traditional grammar as a syntactic property of light verb constructions, has some obvious consequences for the identification of the constituents targeted by wh-movement. That is, wh-movement in (47b) and (48b) takes place from within a V-dependent position, rather than out of a N-dependent complement, and in so doing the nominal dependents (the PPs to the beach and de verte) are stranded. This is unexpected if these dependents are really nominal, but it naturally follows from the idea that they are (that is, become) verbal dependents.²⁰

4.2.2. The role of prepositions

In both LVs and RVs structures, prepositions are selected by inner nouns. So, for instance, in examples like *a walk to the beach* or *book about something*, the preposition is determined by the nouns, but they have to be compatible with the verb as well (*read about something* vs. **destroy about something*). Since the Spanish preposition *a* does not match this double compatibility (it is compatible with *criticas*, but not with *leî*), wh-movement is excluded in (49b), putting aside an uninteresting (V-dependent) benefective interpretation, as in *read something to someone*.

(49) a. Leí las críticas {de / a} Chomsky
read the critiques of to Chomsky
I read the critiques about / to Chomsky
b. El autor {del / *al} que leí las críticas (Spanish)

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These asymmetries are expected in our theory (since *saludar* does not display the properties of reanalysis verbs), and would also be expected in any theory that makes Z extraction from [X [Y Z]] (Y being different from V) dependent on the lexical relation between X and Y.

[X [Y Z]] (Y being different from V) dependent on the lexical relation between X and Y. ²¹ If nouns do not take arguments (as argued for by Mateu 2002, Gallego 2014, and Kayne 2011), then one could argue that no inheritance process is at stake. From this perspective, the preposition would be inserted at PF to satisfy the Case Filter (a dissociated morpheme), manifesting itself as a maximally underspecified form—an aboutness preposition. We return to this in the next section.

²⁰ Notice that, according to standard subextraction analyses, a PP complement of a DP argument can be subextracted, regardless of the particular relationship that might hold between V and N. In fact, in these analyses there is no reason to expect any difference in pairs such as (i)-(ii), given that the two inner DPs are definite:

⁽i) El libro del que apenas pude leer la portada. (Spanish) the book of-the that barely could read the cover 'The book which I could barely read the cover of'

⁽ii) *El libro del que apenas pude saludar al autor
the book of-the that barely could greet the author
'The book which I could barely greet the author of'

the author of-the to-the that read the critiques
The author about which / towards which I read the critiques

Notice that this double dependency (V- and N-) is incompatible with subextraction altogether, since subextration is a syntactic process sensitive to only local and categorial restrictions. In fact, a condition on the compatibility of prepositions cannot be formulated in a subextraction analysis of these data.

4.2.3. Aboutness dependents

PP complements (so-called 'aboutness dependents') in both LVs and RVs may appear in projections higher than ForceP, or the relevant illocutionary-force-encoding projection. A natural option would be base generation of these PP complements in a topic position, under the assumption that movement cannot cross ForceP. We illustrate this with Spanish examples (cf. Bosque & Gutiérrez-Rexach 2009 for additional discussion):

- (50) a. Hemos tomado algunas fotos de este barrio [light verb construction] have taken some pictures of this neighborhood 'We have taken some pictures of this neighborhood'
 - b. He leído un par de novelas de Vargas Llosa [reanalysis construction] have read a couple of books of Vargas Llosa 'I have read a couple of books by Vargas Llosa'
- of this neighborhood, who have taken pictures 'Of this neighborhood, who has taken pictures?'
 - b. De Vargas Llosa, lee por favor un par de novelas. [PP above ForceP] of Vargas Llosa read please a couple of books 'Of Vargas Llosa, please read a couple of books'

4.2.4. Restrictive modifiers and subextraction

Definiteness restrictions on nouns in both LVs and RVs are subject to similar discourse factors, specifically those favouring verbal dependencies when the nominal referents are more clearly identifiable in context (cf. Alexiadou 2004, Tellier 2001). The following data show that apparent subextraction is ameliorated whenever we add a restrictive modifier (to either LVs or RVs) if it helps make the DP reference more precise:

- (52) a. El autor del que leí {un/??el} libro (Spanish) the author of-the that read a the book 'The author of whom I read a / the book'
 - b. El autor del que leí {un/el} libro que me habían recomendado (Spanish) the author of-the that read a the book that to-me had recommended 'The author of whom I read the book that they had recommended to me'
- (53) a. Ayer di {un / ??el} paseo por la playa yesterday gave a the walk by the beach 'Yesterday, I have a / the walk by the beach'

b. Ayer di el paseo por la playa de todos los domingos yesterday gave the walk by the beach of all the Sundays 'Yesterday, I took every Sunday's walk on the beach'

In section 2.5. we argued that, since extraction out of definite DPs is possible in a number of contexts, it seems unlikely that the grammatical features of a definite article in a head position might block the DP wh-phrase in its specifier. The well-known fact that definiteness is a property of DPs related to the contextual identification of their referents makes it entirely expected that contextual referents for abstracts nouns may be hard to provide. In any case, readers should keep in mind that we are arguing for a reanalysis process that makes a PP become a verbal dependent, not for a N-to-V incorporation structure.

4.2.5. Lexical quirks

Traditionally, V-DP lexical complexes have been accepted as plausible explanations for a series of apparent counterexamples to subjacency, at least since Cinque (1980). The contrasts in (54)-(55) naturally follow from the analysis of Engl. *make an attempt* or Sp. *tener la intención* (Eng. 'have the intention') as complex predicates approximately equivalent to *attempt* and *intend* respectively. On the contrary, Engl. *cancel* or Sp. *negar* ('deny') do not participate in any such restructuring process, and wh-movement is barred:

- a. She {made/ cancelled} a desperate attempt to break the record
 b. {Tenía / Negaba} la intención de corregir el libro (Spanish)
 had denied the intention of correct the book
 'She had / denied the intention to correct the book'
- a. The record that she {made/ *cancelled} a desperate attempt to break
 b. El libro que {tenía / *negaba} la intención de corregir (Spanish) the book that had denied the intention of correct
 'The book I had / denied the intention to correct'

The line of analysis that we pursue is directly connected to this approach, since we

(i) ¿De qué autor has leído varias veces los mismos cuentos? (Spanish) of what author have-you read several times the same short-story 'What author have you read several times the same short stories by?'

Cliticization of the inner nominal, standard in V-N light structures and also our configurations, is another obvious difference.

²² A reviewer notes that s/he cannot say *Dio este paseo* (Eng. 'S/he took this walk') or *Tenia las ganas* (Eng. 'S/he had the interest'), without restrictive modifiers. For us, it is perfectly fine to utter the former expression when pointing to a map with a dotted line. It is also possible to say *Tenia el deseo desde hace tiempo* (Eng. 'S/he has had the desire for a long time') or *Hizo la mención en ese preciso momento* (Eng. 'S/he mentioned it at that particular moment'), again with the relevant background.
²³ The possibility of adjunct interpolation is another clear difference between these two process-

The possibility of adjunct interpolation is another clear difference between these two processes. The interpolation of an adverbial between V and N is not expected in a V-to-N incorporation process (in Baker's 1988 sense), but there is no reason to exclude them from our complex predicates:

want to argue that the key to the *read-destroy* asymmetry is the capacity of the former verb to create a complex predicate, as opposed to the latter.

To these six clear-cut differences between LVs and RVs structures we might add VP idioms, also subject to subject-objects asymmetries,²⁴ and, crucially, the complex predicates characteristic of Hale & Keyser (1993, 2002)'s articulated structures (cf. Marantz 1997). The natural option, then, seems to be to derive RV's subject-object asymmetries from lexical configurations, instead of postulating them as peculiar properties of subextraction processes.

The parallelism between verbs allowing reanalysis (RVs) and light verbs (LVs) that we are pointing at is not without problems, of course. Certainly, verbs like *read* are in principle unlikely to be candidates to enlarge the list of light verbs. But the notion of "light verb" allows for various interpretations (cf. Harley 1995, Larson 1988, Saito & Hoshi 2000, and references therein). In fact, there is a number of unlikely candidates for light verbs that nevertheless happen to fit the standard criteria for this class. This paradigm is basically formed by verbs that add lexical content to be basic notions denoted by HAVE or DO, such as the English verbs *cast, conceive, plan* or *maintain,* or the Spanish verbs *albergar* (Eng. 'cast') or *emprender* (Eng. 'set out for'). We elaborate on these matters in the remainder of the paper.

5. Implementing reanalysis as a substitute for subextraction

In the previous section we introduced a number or arguments that relate subextraction structures to well-known cases of double segmentation or double grammatical dependency. In the present section we would like to provide a syntactic implementation of those parallelisms. The intuition we want to pursue is the following: in a similar way to that in which the lexical structure of verbs such a Fr. se promener or Sp. pasear (Eng. 'take a walk') corresponds to a traditional «light verb + inner noun» configuration, as their English translation shows, a book in John read a book can be interpreted as the complement of an inner noun in the lexical structure of read. This strongly recalls the structures in which the English gerundive nominals reading and writing allow for DP complements, as in You have to do some reading of the details or I am planning to do some writing of music articles in the coming years.

The hidden transitive structures we argue for are those present in so-called unergative verbs (cf. Hale & Keyser 1993, 2002, among many others). For the purposes of this paper, we assume that there are two ways in which unergative verbs can manifest

'The unemployed population, a good percentage of which does not receive any kind of subsidies'

It must be noticed, in any event, that the subject in (i) is not a canonical external argument (it is not an agent, so it does not obviously occupies the [Spec, vP] position). Whatever the explanation to (i) may be, it may well be related to this interpretive / structural fact (cf. Chomsky 2008, Gallego 2010, and references therein). Cf. Contreras (1994), Jiménez (2009), and Bosque & Gutiérrez-Rexach (2009), Haegeman et al. (2014) for additional discussion.

²⁴ There seem to be some exceptions to these asymmetries. In certain cases, Spanish seems to allow subextraction even from subjects (cf. Uriagereka 1988 for similar data):

 ⁽i) ... la población desempleada, [de la quei [un buen porcentaje ti ... (Spanish) the population unemployed of which a good percentage
 ... [no recibe subsidios de ningún tipo]]] not receives subsidies of any kind
 'The unemployed population, a good percentage of which does not receive

themselves. For ease of exposition, we will refer to these varieties as "unergative-1" and "unergative-2:"

a. Unergative-1 (or STANDARD UNERGATIVES), such us *snore*, *talk*, *telephone*, *bark*, and the like, which typically do not manifest the internal argument overtly.
 b. Unergative-2 (a subtype of traditional TRANSITIVES), such as *read*, *write*, *eat*, *drink*, and the like, which can manifest the internal argument overtly, as regular transitives do.

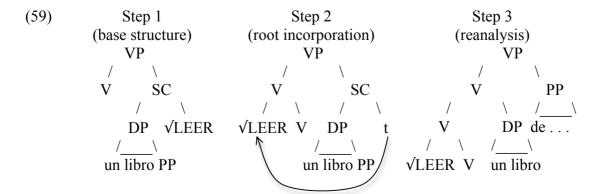
That is, verbs under the "unergative-1" label are transitive in their sublexical structure, an assumption now widely accepted. Our "unergative-2" is a group of overtly transitive verbs that somehow parallel light predicates at lexical structure. We tentatively assume that the distinction between these groups follows from the (conceptual) content associated to the lexical \sqrt{ROOT} , in the sense of Maranz (1997, 2001) and Harley (2005). For ultimately conceptual reasons, some roots (\sqrt{READ} , \sqrt{WRITE} , \sqrt{EAT} , etc.) can license direct objects in sentential syntax, if the latter can be interpreted as synonyms (as in *food* somehow standing for 'eaten things' in *eat food*) or hyponyms (as in *a sandwich* standing for 'some type of food' in *eat a sandwich*) of the root.

As is well-known, the roots of unergatives-1 do not license direct objects, putting aside literary (stylistically highly marked) uses, as in *She snored a couple of sentences* or in *He barked his complaint*. Interestingly for our purposes, RVs typically coincide with unergatives-2, which in turn pattern with so-called absolute transitives (e.g., *read, sing*), whose direct objects can be omitted, and, traditionally, are said to be recovered from the content of the verb itself. In our analysis, the direct objects of unergatives-2 are base-generated, together with the $\sqrt{\text{ROOT}}$ occupying the internal argument position. This gives rise to a small clause configuration, a bare (exocentric) small clause, in Moro's (2000) sense:

(57) $[_{VP} V [_{SC} DP \sqrt{ROOT}]]$

In (57), the $\sqrt{\text{ROOT}}$ incorporates into V in a way somehow reminiscent of what clitics do in doubling structures. The DP within the SC becomes the would-be direct object in unergative-2, as in Eng. *John ate a sandwich*, or an arbitrary *pro* with an indefinite reading (in Rizzi's 1986 sense) in absolute transitives, as in Sp. *Juan cantó*, *pero no sé qué* (Eng. 'Juan sang, but I don't know what'). The step-by-step process of our analysis of (58) is depicted in (59):

(58) Juan leía un libro de Vargas Llosa (Spanish)
Juan was-reading a book of Vargas Llosa
'Juan was reading a book by Vargas Llosa'



Technically, there are two ways to reach step 3 of the analysis:

(60) a. V-DP reanalysis (as suggested by Bach & Horn 1976)b. PP extraposition (as suggested by Chomsky 1977)

We will pursue option (60a) here, under the assumption that the dependents involved in reanalysis establish a more intimate dependency that those relevant for extraposition. As is well-known, DPs and verbs establish a series of dependencies (theta-role assignment, agreement, Case, etc.) that suggest their closeness. This property is relatively easy to motivate on syntactic grounds, regardless of the specifics our approach endorses. PP extraposition, on the other hand, though not implausible (cf. Baltin 1983, Culicover & Rochemont 1990, and others), seems to us to be harder to motivate. Certainly, this would be a plausible option if we postulate some EPP feature to trigger the operation, but there does not seem to be any independent argument in favor of that move.

We claim that non-RVs deploy a more complex VP internal structure, involving a resultative (complex) small clause (cf. Mateu 2002, 2005, 2008, and references therein). In fact, we assume this complex structure prevents V-DP reanalysis.

Why should reanalysis be blocked in these cases? One possibility is that UG somehow constrains the number of reanalysis applications that can take place (cf. Mateu & Acedo-Matellán 2012, and references therein; see fn. 21 in particular). Another option is to capitalize on the fact that the DP in (61) occupies a specifier position, which is known to block incorporation-like processes (cf. Hale & Keyser 1993, Espinal & Mateu 2008, etc.). The examples in (62), taken from Hale & Keyser (1993:63), illustrate the problems that specifiers pose to incorporation.

(62) a. *She metaled flat b. *He speared straight

- (i) A review of Chomsky's book appeared
- (ii) A review appeared of Chomsky's book

Unlike in the cases we are considering, the PP of Chomsky's book cannot become a dependent of the verb, since we do not have an unergative predicate. Consequently, we expect extraction to be ruled out, as is the case:

(iii) *Which book did a review of appear?

²⁵ There are other differences between reanalysis and extraposition. We assume that the latter has phonological-oriented nature (like "NP Shift"). Consider, for instance, (i) and (ii), taken from Baltin (1983):

c. *They screened clear

Consider now the Catalan data in (63), from Espinal & Mateu (2008:15). Here we have different verbal structures in which a nominal head (*nen* and *finestra* – Eng. 'boy' and 'window') occupies a specifier position. Given that incorporation of bare nouns is typically possible, the outcome in (63) is unexpected.

(63) a. *Va morir nen
AUX die child

(Catalan)

'Child died'

'Window closed'

b. *Hem tancat finestra (Catalan) have closed window

The oddity goes away the moment we take into consideration that the verbs in (62) and (63) deploy the template in (61). Again, here we are in front of a structure whereby the relevant N element cannot incorporate (for whatever reasons specifiers fail to incorporate; cf. Hale & Keyser 1993).

The options we are considering are not necessarily mutually exclusive. Therefore, we expect for the number of reanalysis processes that can take place within a VP to be limited, just as the number of components (manner, motion, etc.) that can be incorporated into verbs are. Interestingly, some DPs in complement position undergo reanalysis, as in (64a), but PPs within those DPs do not, as (64b) shows. This means that in (64b) *del autor de qué novelas* (Eng. 'of the author of what novels') can be reanalyzed with *leer* (Eng. 'read'), but not the PP within.

- (64) a. De qué autor leíste las últimas tres novelas? (Spanish) of what autor read.2.PAST the last three novels 'Of which author did you read the last three novels?'
 - b. *De qué novelas leíste los últimos tres libros del autor? (Spanish) of what novels read.2.PAST the last three books of-the author? 'Which novels did you read the last three books of the author of?'

Reanalysis is an optional operation, as has been repeatedly noted in the literature (cf. Larson 1988, Haumann 2007, and references therein), even if – as we have already pointed out – its status in the minimalist architecture is unclear. Under the assumption that optional operations have an effect on the outcome (cf. Chomsky 2001, Fox 2000, Reinhart 2006), the natural question is what exactly we get by applying a process of reanalysis to a given syntactic structure.

We assume that the effect of reanalysis is interpretive. In particular, we would like to argue that, by becoming a verbal dependent, the PP becomes a so-called "aboutness dependent" (remember section 4.2.3). As the following data indicate, this can be tested by placing the PP in different positions in scenarios without standard instances of movement transformations (e.g., wh-movement, focus fronting, topicalization):

(65) a. Leí muchas novelas *de ese autor* read many novels of that author 'I read many novels by that author'

b. Leí *de ese autor* muchas novelas read of that author many novels (Spanish)

'I read many novels by that author'
c. *De ese autor*, leí muchas novelas
of that author read many novels
'I read many novels by that author'

(Spanish)

The syntactic mobility that the PP displays in (65) is not expected of a DP-internal PP complement. Binding relations provide another argument against PP subextraction from DP, and favour the formation of aboutness PPs. Notice that, under standard assumptions on subextraction, the asymmetry shown in (66) is equally unexpected:

- (66) a. ¿De qué autor te encantan sus últimas novelas? (Spanish) of which author to you love his last novels 'Of which author do you love the latest novels?'
 - b. *Me encantan sus últimas novelas de Vargas Llosa (Spanish) to.me love his last novels of Vargas Llosa 'I love his last novels by Vargas Llosa'

Since possessive doubling is not grammatical in standard Spanish (although it is attested in Mexican Spanish and other varieties; cf. Company 1993, 2002), the ungrammaticality of (66b) reduces to that of *Su casa de Juan (Eng. 'His house of John's'). Now, if the PP de qué autor were a complement of novelas in (66a), as is generally assumed, this sentence would be as deviant as (66b) is. On the contrary, and as one might expect, V-dependent complements (as in (67), after reanalysis) are unaffected by the doubling configuration, just as topics are. Both of them may, thus, freely contain antecedents of possessives, a subtype of pronominals in classical Binding Theory:

(67) $[v_P]_{v'}$ v-encantan_i $[s_C t_i]$ sus últimas novelas]] de qué autor_i]?

In the abundant literature on wh-movement, the aboutness interpretation has often been thought of as an "unwanted structure," not to be confused with DP subextraction (cf. Cinque 1980). That is, if we wanted to be sure that real extraction from DP takes place, we should leave aside the "aboutness interpretation," which constitutes a completely different structure that should not interfere. Rather surprisingly, no analysis was ever offered of this other peculiar parallel structure, nor – crucially – any explanation for why it is not obtained with the verbs that reject subextraction from DP (the *destroy* type). For unknown reasons, this situation has remained until present day.

An anonymous reviewer provides the example in (i), which is judged as fully grammatical, even if *destrozar* (Eng. 'smash') is a paradigmatic example of verbs that reject reanalysis:

(i) ¿De qué escultor me has dicho que han destrozado varias obras? (Spanish) of what sculptor to-me have said that have destroyed various works 'What sculptor have you told me that various works by have been detroyed?'

We agree with the judgment, but the reviewer is putting aside two important aspects. On the one hand, the verb *decir* (Eng. 'say') allows for a third argument that can display an aboutness dependency. If so, the PP is actually a dependent of *decir*, as in *decir algo de alguien* (Eng. 'say something about someone'). On the other hand, even if this interpretation is discarded, there are reasons to suspect that the wh- PP is not a modifier of *obras* (Eng. 'works') in a standard wh- movement structure. The fact that this sentence is pronounced with a marked final tonal rising suggests that it is affected by an echo reading. If the reviewer were right,

This discussion can be related to D'Introno & Lorenzo's (1995) claim that aboutness dependents are "thematic adjuncts," as a way to imply that they are somewhat in between arguments and adjuncts. Remember that, in our list of similarities between light verbs (LVs) and reanalysis verbs (RVs), we introduced a double structure dependency for selected prepositions (see section 4.2.2 above). It would certainly be odd to argue that nominal arguments become verbal adjuncts. The natural answer, we suggest, is simply that such categorial dependency (PPs that are nominal dependents first and then become verbal dependents) does not change the basic predicate's structure, as standardly assumed for light verbs. If this is on the right track, the so-called "aboutness interpretation" is not a property of some parallel structure that we must not confuse with a subextraction configuration, but rather an interpretive effect of reanalysis.²⁷

6. Consequences

Linguistics is not the only domain of inquiry in which good perspectives on theoretical problems are sometimes abandoned for unclear reasons. Some insightful analyses are put aside because they are perceived as incomplete, or because they do not seem to allow us to reach the broader desirable generalizations. Some other times, they are dropped when they are proven to be incompatible with current assumptions at some particular point in the history of the field. But time shows that abandoned paths are not necessarily wrong. Our topic seems to be an example of this situation. In this paper we have argued that Bach & Horn (1976)'s old case against subextraction, accepted by Chomsky (1977) and nowadays completely forgotten, merits attention.

Our proposal leads to two both empirical and theoretical sorts of consequences. The main empirical consequence is the following: the conjunction of the process of reanalysis and the non-cyclic nature of DPs explains the parallelisms between light verb structures and so-called subextraction configurations. A not minor advantage of our analysis is the fact that it naturally dissolves the eight empirical problems of subextraction noted at the outset. It does so in the following way:

then the grammaticality of (i) would not change if the CP were embedded. But embedded interrogatives block echo effects, and – crucially – (i) seems to be affected by them as well:

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(ii) ?*Me pregunto [CP de qué escultor te han dicho que han ... (Spanish) to.me wonder of what sculptor to.you have said that have ... destrozado varias obras ]
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destroyed various works

'I wonder what sculptor they told you that various works by have been destroyed'

More generally, contrasts of the *read* vs. *destroy* type were noted by Bach & Horn (1976) and apply to other languages.

²⁷ Interestingly, reanalysis has some effects in light verb constructions as well, mostly related to lexical aspect. For example, the V-N complex may be compatible with accomplishment readings, which are rejected by its lexical outcome altogether, as in (i)-(ii):

- (i) Di un paseo por la playa en media hora (Spanish) gave-1.SG a walk for the beach in half hour 'I took a walk in the beach in half an hour'
- (ii) *Paseé por la playa en media hora (Spanish) walked-3.SG for the beach in half hour 'I walked in the beach for half an hour'

- Problems 1 and 6 are crucially related to the presence of an escape hatch for wh-movement in DPs. Since there is no subextraction, no escape hatch position is available and these three problems cease to exist.
- Problem 2 is similar, since the relevant configuration only arises if a whoperator binds its variable inside a DP. Since our analysis implies that this configuration does not obtain, the problem dissolves.
- Problem 3 disappears as well: lexical conditions are expected in reanalysis processes, not in wh-movement configurations.
- Problem 8 is also lexical. It is solved if VPs such *as read a book* (as opposed to *read an author*) include a quasi-cognate inner nominal, as explained in the text. Note that problems 3 and 8 are hard to address in frameworks that keep syntax absolutely opaque to lexical structure. This would not change if some alternative is worked out which uses abstract nodes different from the roots we have postulated here.
- Problem 4 and 7 are also gone, since complex predicates are built out of complements, not adjuncts (problem 4) nor subjects (problem 7).
- Finally, problem 5 is, first, hard to formulate on syntactic grounds, since there is no such a thing as a "syntactic constraint on definite DPs" in subextraction phenomena. Second, we have shown that these DPs are subject to discourse factors, which crucially change the grammaticality of the relevant patterns. Even so, it might be that specific DPs block reanalysis, presumably because they involve a richer structure, just like CPs block restructuring, unlike TPs or VPs. These are interesting lines of research that are worth exploring, but fall beyond the scope of this paper.

The main theoretical consequences are two. On the one hand, a welcome conclusion is that this approach to subextraction (now a particular case of restructuring in complex predicate formation patterns) helps understand the notion of reanalysis in the context of minimalism. If correct, it is an optional operation with an effect on the outcome (it generates "aboutness" dependents). Our proposal has, on the other hand, some consequences for phase theory. If DPs lack an escape hatch, then they fail to constitute a cyclic category (a 'phase;' cf. Chomsky 2000 *et seq.*). This goes against a well-established claim in the literature that – we think – should also be dismissed in the case of PPs (*contra* van Abels 2003, van Riemsdijk 1978).

Although much discussion has recently emerged on what a phase is (cf. Gallego 2012 and references therein), we want to argue, if nothing else, that the existence of escape hatches (perhaps the most important clue to signal syntactic cycles) cannot be invoked in order to defend the phasal/cyclic status of DPs, and plausibly, other non-verbal lexical categories.

Appendix: Possible extensions

We have argued that subextraction from DP does not exist. One may wonder whether subextraction from other lexical categories, distinct from V, is possible at all. The expected answer, we suggest, is negative. Since we will not be able to develop all these extensions here, this appendix – concentrated on Spanish – is indented to be a presentation of a number of arguments in favour that the generalization we defend holds beyond DPs; that is, subextraction out of XP (where $X \neq V$) is not allow in the syntax.

Consider extraction from AP first. Strong evidence from reanalysis in the AP domain in Spanish is presented in Sáez (1993). He shows that adjectives become clitics of the copula, leaving behind their PP complement as V-dependents, a structure that

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could not be obtained if the adjective did not formed a complex predicate with the copulative verb. Here is an example: since the adjective and the verb *ser* (Eng. 'be') form a constituent after (1a) is converted into (1b), the cliticization of the adjective (*adicto* > lo), shown in (2), is expected. The PP complement is now dependent of the new verbal complex. Consequently, no subextraction from inside AP takes place:²⁸

- (1) a. Era [adicto a las anfetaminas] (Spanish)
 was addicted to the amphetamines
 'He was addicted to amphetamines'
 b. [Era adicto] a las anfetaminas (Spanish)
 was addicted to the amphetamines
 'He was addicted to amphetamines'
- (2) Era adicto a las anfetaminas, pero no lo era a la cocaína (Spanish) was addicted to the amphetamines but no it was to the cocaine 'He was addicted to the amphetamines, but no so to cocaine'

Non-copulative verbs of change of state do not allow for clitics in predicative structures, but the restructuring process takes place in these cases as well, so that (3a) changes into (3b). Verbs of change of state are good examples of this. Thus, whmovement of *a las que* (Eng. 'to which') takes place in (3c) from inside a verbal complex, not from within an AP:

- (3) a. Se volvió [AP adicto [PP a las anfetaminas]] (Spanish)
 SE became-3.SG addicted to the amphetamines
 'He became addicted to amphetamines'

 1. [Contact of the last of the
 - b. [VP Se volvió [AP adicto]] [PP a las anfetaminas] (Spanish)

 SE became-3.SG addicted to the amphetamines

 'He became addicted to amphetamines'
 - c. Las anfetaminas [$_{CP}$ a las que $_{i}$ [$_{VP}$ [se volvió [$_{AP}$ adicto]] t_{i}] (Spanish) the amphetamines to the what SE became-3.SG addicted 'The amphetamines to which he became addicted'

One might also consider extraction from PP. As D'Introno (2001) pointed out for Spanish, extraction of a PP contained in another PP is impossible.

a. Estoy hablando de [un libro [sobre las islas mediterráneas]] (Spanish) be.1.SG speaking of a book on the islands Mediterranean 'I am speaking of a book on the Mediterranean islands' b. *¿Sobre quéi estás hablando de [DP un libro ti]? (Spanish) on what be.2.SG speaking of a book 'What are you talking about a book?'

One may now wonder why *hablar* and *de* do not form a complex predicate in (4b), provided the preposition is lexically selected by the verb. The natural answer is that, even if they do, the reanalysis process cannot apply to the output, since extraction of the DP complement would require a second process of reanalysis: the one necessary to create the bracketing in *[hablar de un libro] [sobre las islas meditarrénas]. The structure obtained is basically the one that prevents reanalysis in (64b) (in the main

²⁸ Cf. Bosque (2001) on the relationship between copulative verbs and light verbs in Spanish.

text of this paper), that is, a restriction against an operation of reanalysis applied to the outcome of this very process.²⁹

But PPs are not strong islands necessarily, particularly in P+CP configurations. Remember that the output of reanalysis is the input of wh-movement. We suggest that extraction from CP in P+CP structures is possible in Spanish because "V + [P + CP]" configuration can be reanalyzed as "[V + P] + CP". The bracketing in (5) reflects the P+CP structure:

- (5) a. ¿Qué obligaciones_i te resistes [PP a [CP que te impongan t_i]]? (Spanish) what obligations you refuse-2.SG to that to you impose-3.PL 'What obligations do you resist that they impose on you?'
 - b. Los hijos [CP a los quei no me arrepiento . . .

the children to the that not me regret-1.SG

'The children who I do not regret giving freedom to act'

- c. Las medidas [que_i les urgimos a ustedes [$_{PP}$ a [$_{CP}$ tomar t_i]]] (Spanish) the measures that to you urged-1.PL to you to take-INF 'The measures we urged you to take'
- d. Qué ventajas_i renunciaste [PP a [CP que te concedieran t_i]]? (Spanish) what advantages refused-2.SG to that to you give 'Which are the advantages you refused for them to give you?'

All these CP complements contain subjunctive or infinitival complements. We have observed that indicative complements are more resistant to this process. This rejection seems to correspond with Torrego & Uriagereka (2002) suggestion that indicative complement are not true sentential arguments, or, at least, require other, more complex syntactic structure than standard internal propositional complements. The

(i) De García Marquez, lee por favor un par de críticas de Vargas Llosa (Spanish) of García Márquez read please a couple of critiques of Vargas Llosa 'Of García Márquez, please reed a couple of critiques of Vargas Llosa'

(ii) ¿De quién has leído un par de críticas de Vargas Llosa? (Spanish) of whom have read a couple of reviews of Vargas Llosa 'By whom have you read a couple of reviews of Vargas Llosa?'

The reviewer is correct about the asymmetry, which has been pointed out in the literature (cf. Ormazabal 1992, Ticio 2010, among others). We suggest that a point worth to be investigated is why reanalysis cannot apply to PPs that are somehow close to the noun if there is some other PP that is far from it. Intuitively, the relevant restriction precludes taking more than one aboutness dependent. In fact, this predicts that (iii) is ruled out, as it happens to be: (cf. Kayne 1994 for discussion on similar matters):

(iii) *De esos niños, de sus amigos, no he hablado nunca about those kids about in Madrid not have talked never 'About those kids, about their friends, I have never talked'

²⁹ A reviewer provides the data in (i) and (ii), noting that there is an interesting interpretive asymmetry: in (i), the PP can be the theme or the agent of the critique, but in (ii) it can only be the author:

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contrasts in (6)-(7) show that the preposition en ('in') is not indispensable in the declarative utterances, but it is strongly rejected if wh- movement takes place:

- (6) a. Pienso que muchos estudiantes suspenderán el curso (Spanish) think-1.SG that many students will-fail-3.PL the course 'I think that many students will fail the course'
 - b. Pienso en que muchos estudiantes suspenderán el curso (Spanish) think-1.SG in that many students will-fail-3.PL the course 'I am thinking of the fact that many students will fail the course'
- (7) a. Los muchos estudiantes que pienso que suspenderán el curso (Spanish) the many students that think-1.SG that will-fail-3.PL the course 'The several students that I think will fail the course'
 - b. *Los muchos estudiantes que pienso en que suspenderán el curso (Spanish) the many students that think-1.SG in that will-fail-3.PL the course 'The several students that I think will fail the course'

The question to be asked now is why wh- movement is possible at all out of CPs complementing P, whereas it is not possible out of DPs complementing P. The natural answer is cyclicity: CP is a cyclic category, thus providing an escape hatch for the wh-phrase, whereas DP (we claim) is not, and PP is not either. In a V + [P + CP] configuration, reanalysis of [V + P] creates a complex predicate which takes a sentential complement. This sentence is V-dependent and movement out of it is expected. On the contrary, movement of PP is not possible in a V+P+[DP-PP] configuration. Even if V+P were reanalyzed into a complex predicate, the PP inside DP would lack an escape hatch. The conjunction of reanalysis and cyclicity is, thus, sufficient to explain these DP-CP asymmetries, assuming the non-cyclic nature of DPs that we have defended in this paper.

Other lexical factors might be needed to account for reanalysis process as substitutes for subextraction from PP, especially so since this variety of subextraction has not been studied in detail, as opposed to DP subextraction.

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