

The Syntax of Little Things¹

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Many of the utterances we produce often consist of little things (DPs, VPs, APs, etc.) which, at least at the level of Phonological Form (PF), are non-sentential in nature. Here I adhere to the view that these little things do not derive from full sentences, i.e. they have little syntax. Specifically, I argue against the most recent and influential ellipsis analysis of these constructions developed in Merchant (2004) and explore some of the consequences of assuming the existence of non-sentential constituents for the theory of grammar from the perspective of Principles and Parameters. I also propose that non-sentential constituents are pure focus constructions built on the basis of numerations containing only lexical elements with the feature [+Focus], a hypothesis which allows us to explain many of the properties of non-sentential answers.

The paper is structured as follows. Section 1 introduces the basic facts and the approaches to non-sentential utterances proposed in the literature, concentrating on Merchant's (2004) movement plus ellipsis analysis. In section 2, I argue against movement in non-sentential utterances with assertive illocutionary force on the basis of a) general non-parallelism effects between non-sentential utterances and their corresponding fronted constructions, b) interpretive non-parallelism effects which could never be repaired by PF ellipsis, c) island insensitivity in non-sentential answers, d) the fact that non-sententials do not license VP-ellipsis in following discourse and e) the existence of individuals who, as a result of an impaired theory of mind, do not accept fronting strategies but produce and understand non-sentential constituents. Section 3 introduces evidence against (movement and) ellipsis in non-sentential questions and imperatives, the least studied types of non-sentential utterances. Section 4 is devoted to the analysis of the consequences that assuming the existence of non-sententials has for our conception of the principles which govern the grammar of natural languages under Principles and Parameters, concentrating on checking theory and theta-theory. Here I also propose an algorithm for the interpretation of non-sentential answers. In section 5 I argue that non-sententials are pure focus constructions resulting from numerations containing only lexical items which are [+Focus]. Non-sententials which contain more than [+Focus] lexical items -those cases in which focus is not so pure- are argued to be a consequence of the need to insert pronouns derivationally as a Last Resort operation in order to avoid a non-convergent derivation. The concluding remarks are given in section (6).

1. Approaches to the analysis of non-sentential utterances

Non-sentential utterances can be found in both discourse-initial contexts [1] and short answers to questions [2].

- (1) a. The honorary consul of Japan. (An usher announcing the arrival of the guests at a reception)

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- b. Cheap T-shirts! Beautiful blouses! (A vendor in a street market shouting his products out)
 - c. Andrew! (vocative)
 - d. A tiger! In Africa! (exclamation)
 - e. Home! Straight away! (Angry father to his children)
 - f. A cup of tea? (A host to his/her guest)
 - g. Two pints of lager and a packet of crisps. (A customer in a pub)
- (2)
- a. A: What are you drinking?
B: A lager. DP
 - b. A: What did you do yesterday?
B: Clean the carpet. VP
 - c. A: Was he upset?
B: Very. AdvP
 - d. A: Where did you put the scissors?
B: In the drawer. PP

1.1 The “traditional” ellipsis analysis

In pioneering work by Morgan (1973), these sequences are argued to be the result of deleting material from full sentences. Under this view, the answer in (2aB) is derived from the full sentence of which the sequence *I am drinking* is deleted at some point in the derivation [3].

- (3) [~~I am drinking~~] a lager.

An obvious advantage of this analysis is that the grammar does not have to be “enriched”; no additional mechanisms are required to explain the thematic or Case properties of non-sentential DPs like *a lager* in (3), for instance. Those properties, like in full sentential answers, simply derive from the presence of theta-role and case assigners/checkers in the elided sentential structure. The main objection to this analysis, under the standard assumption that operations of the computational component can only target constituents, is that the strings of words deleted do not form a constituent.²

1.2 The non-ellipsis approach

Others (Yanofsky (1978), Barton (1990), Valmala (1999), Stinton (2005) among others) argue that non-sentential utterances are just non-sentential maximal projections. Under this conception, the non-sentential answer (2B) is syntactically a DP [4B].

- (4) A: What are you drinking?
B: [DP a lager]

² An alternative ellipsis approach which would circumvent this problem is that in which multiple deletion operations target different constituents which are part of the presupposition, but this would wrongly predict the grammaticality of (iB) below, which would result from deleting the DP in subject position, Infl and the DP in object position (ii).

- (i) A: What will he do to the car?
B: *Total.
- (ii) ~~He will~~ total ~~it~~.

The obvious advantage of this non-deletion analysis is that no resort to anomalous deletion operations is needed to generate non-sentential utterances. Its most important drawback is that the grammar has to be “enriched”; some additional mechanisms must be added to explain how non-sentential DP arguments receive their theta-role or get/check their Case, for example.

Proponents of analyses in which non-sentential utterances are the result of syntactic deletion/ellipsis from full sentences tend to call them **fragments**, whereas proponents of non-deletion solutions usually call them **non-sentential constituents**. Although I adhere to the latter view here, I will use both labels.

1.3. Merchant (2004): Movement plus ellipsis

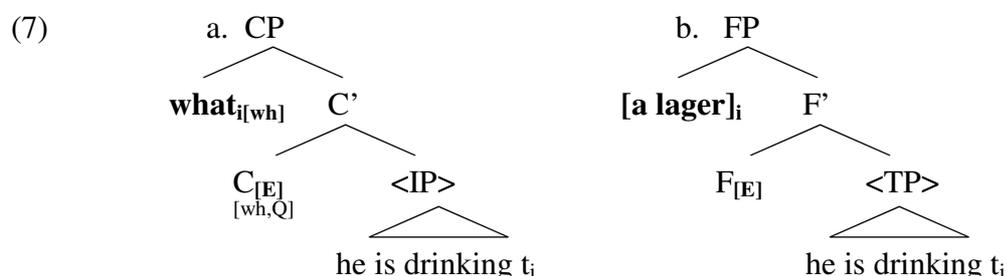
Merchant (2004) proposes an ellipsis analysis of non-sentential utterances which avoids the non-constituent deletion problem of previous ellipsis analyses. In this section I revise the most important aspects of this elegant and influential proposal.

1.3.1. Non-sentential answers

Merchant assimilates non-sentential answers to sluicing [5] and proposes a similar derivation in which the fragment moves to a left-peripheral position before the rest of the sentence is elided [6b].³

- (5) a. Bill is drinking something, but I don't know what.
 b. Bill is drinking something, but I don't know [what]_i; ~~Bill is drinking t_i~~
- (6) a. A: What are you drinking?
 B: A lager.
 b. [DP a lager]_i; ~~I am drinking t_i~~

More specifically, he proposes that these phenomena are the result of the presence of **E**(llipsis) features in C [7a] and the functional head F [7b] which give instructions for non-pronunciation to their IP and TP complement respectively, recasting in terms of feature-checking Lobeck's (1995) proposal that only heads which enter into an agreement relation with their specifiers license ellipsis of their complement. A prominent feature of this movement plus ellipsis analysis is that the non-constituent deletion problem of the traditional ellipsis approach to fragments disappears: the elided TP in (7b) is a constituent.



As fragments are fronted constituents under this conception, parallelisms are expected to arise with respect to the possibility of having fragments and fronting strategies. As a matter of fact, Merchant takes the parallelism observed in island effects as evidence for movement in

³ To my knowledge, Schütze (2001) is the first scholar to consider movement plus ellipsis as a possible analysis of fragments, which he rejects on the basis of the facts in (11).

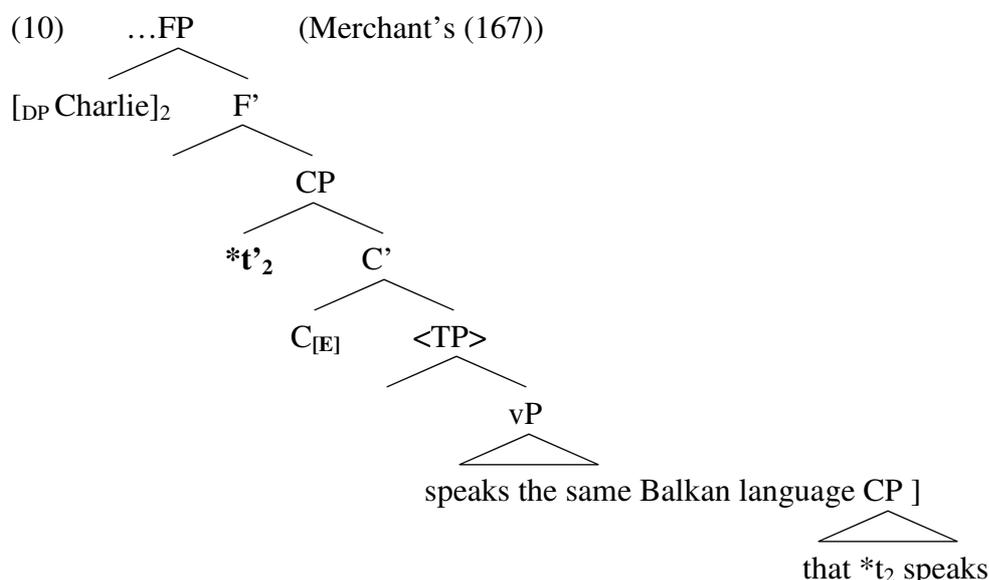
fragments; in (8a), where the focus constituent is not contained in an island, both the fragment answer and the full sentential answer with fronting are possible, whereas in (8b), where the focus constituent is contained in an island, both are impossible. A non-sentential constituent approach, he claims, cannot capture this parallelism effect, as it wrongly predicts (8bB1) to be possible.

- (8) a. A: Did Abby claim she speaks Greek fluently? (Merchant's (85))
 B1: No, Albanian.
 B2: No, Albanian_i she claims she speaks t_i fluently.
 b. A: Does Abby speak the same Balkan language that *Ben* speaks? (Merchant's (87))
 B1: *No, Charlie.
 B2: *No, Charlie_i Abby speaks the same Balkan language that t_i speaks.

He notes that there is an unexpected asymmetry in the behaviour of sluicing and fragments concerning the island-repair effects of deletion, which are present in the former [9a,b] but not in the latter [8bB1].

- (9) a. They want to hire someone who speaks a Balkan language, but I don't remember which.
 b. They want to hire someone who speaks a Balkan language, but I don't remember which_i ~~Balkan language they want to hire someone who speaks t_i .~~

His proposal when trying to account for the lack of island-repair effects in fragments is that the E feature is not in the functional head F, as represented in (7), but in a lower C, so that ellipsis leaves the non-legitimate trace $*t'_2$ at PF [10].⁴ The result is a non-convergent derivation.



Merchant notes that his movement plus ellipsis solution faces an additional problem: there are cases of unexpected non-parallelism effects in which a fragment answer is possible where a corresponding fronting structure is not. This is the case of (11), where the universal quantifier

⁴ This explanation of the lack of island-repair effects is conceptually and theoretically problematic; assuming standard antecedent-government type requirements on traces, only traces inside islands which fail to be antecedent-governed from outside the island should be marked “-gamma”, and no conceptual or theoretical reason exists why the traces outside the island should be marked as deviant if they are in a local relation with an antecedent, as is the case for $*t'_2$ and its antecedent $[DP\ Charlie]_2$ in (10). On the other hand, with this modification in which the ellipsis feature is in Comp the correlation between spec-head agreement and the possibility of licensing ellipsis that he assumes collapses.

cannot be fronted but can appear as a non-sentential answer. A second instance of the same situation is illustrated in (12).^{5, 6}

- (11) a. ??Everyone, they would have interviewed. (Merchant's (170))
 b. A: Who would they have interviewed?
 B: Everyone.
- (12) a. ??Carla, they named her. (Merchant's (168))
 b. A: What did they name her?
 B: Carla.

Merchant's solution is that these cases illustrate the repair effect of ellipsis: the violation of whatever principle is involved in (11a) and (12a) is repaired once the sequences [*they would have interviewed t*] and [*they named her t*] are elided in (11b) and (12b) respectively. The functioning of the system is expressed in Merchant's own words as follows:

“... In a word, the general argument is that parallelisms support a movement and ellipsis analysis, while non-parallelisms reveal repair effects.”
 Merchant (2004, p. 711)

A general methodological problem with this solution is that it makes the theory virtually unfalsifiable. Notice also that this repair effect is expected not to arise in cases in which the principle violated is an interpretive (LF) principle, as he claims that ellipsis in fragments is a post PF phenomenon. I will later show non-parallelism effects involving interpretive principles which would never be repaired by (post)-PF ellipsis.

1.3.2. Discourse-initial non-sententials

Merchant argues that discourse-initial non-sentential utterances like (13) are also full sentences which contain anaphoric elements like the determiner *this* and the verb *be* that are elided after movement of the focal element [14].

- (13) [Abby and Ben are arguing about the origin of products in a new store on their block, with Ben maintaining that the store carries only German products. To settle their debate, they walk into the store together. Ben picks up a lamp at random, upends it, examines the label (which reads Lampenwelt GmbH, Stuttgart), holds the lamp out towards Abby, and proudly proclaims to her:]

From Germany! See, I told you!

(Merchant's (182))

- (14) [from Germany_i <[_{TP} this is t_i] >]

He argues in support of the existence of a “hidden” VP in (13) on the basis of the fact that VP ellipsis, a phenomenon which typically requires the presence on an antecedent VP in discourse, is licensed in the reply to this non-sentential [15B].

⁵ The facts in (11) are explicitly mentioned by Schütze (2001) as an argument against a movement plus ellipsis approach to short responses.

⁶ As a matter of fact, the asymmetry observed in (11) and (12) is not a real problem for Merchant, as the (a) examples are cases of topicalization. As I will propose later, fragments, being focus, should be compared with focus fronting, not with topicalization, and (11a) and (12a) are perfect with a focus interpretation on *everyone* and *Carla*.

- (15) A: From Germany! See, I told you!
B: OK, but this one isn't!

2. Declarative fragments don't move

In this section I provide arguments against movement plus ellipsis in declarative non-sententials on the basis of two premises. First, as fragments in both answers to questions and discourse-initial contexts are focus, if they are to be compared with a fronting strategy that can only be focus movement/preposing, not topicalization. Second, the repair effect of ellipsis should not be appealed to (when trying to explain unexpected non-parallelisms) unless independently justified.

My first argument against deriving fragments from focus fronting in English comes from the fact that focus fronting is restricted to contrastive focus [16B1 vs. 17B1], whereas fragments are possible in contexts of both information (typically represented by short answers to questions) and contrastive focus [16B3 and 17B2].⁷ On the other hand, there are native speakers of English who have serious problems with focus preposing, mainly if it takes place from embedded to matrix domains, even in contexts of contrastive focus. Unexpectedly under a movement plus ellipsis approach, they produce non-sentential utterances.⁸

- (16) A: What did Susan eat?
B1: #Spinach she ate.
B2: She ate spinach.
B3: Spinach.
- (17) A: Did Susan eat leaks?
B1: No, spinach she ate, (not leaks).
B2: No, spinach.

But even if we assumed that overt focus movement, for some mysterious reason, is possible in contexts of information focus if the presupposed material is later elided, in the following subsections I will provide empirical, theoretical and conceptual arguments against this analysis.⁹

2.1 Non-parallelism effects

There are two types of non-parallelism effects in the behaviour of fragments and focus fronting; sometimes possible fragments are found where the corresponding fronting strategy is deviant, and in other situations impossible fragments are found where the corresponding fronted sequence is possible. In what follows I will consider several cases of both types of non-parallelism effects, although the list is not meant to be exhaustive.

2.1.1 Possible fragments where fronting is impossible

Let us first consider negative inversion, a phenomenon which, as illustrated by the contrast in (18), requires subject-auxiliary inversion. Non-sentential utterances consisting of (expressions which contain) negative quantifiers are perfectly possible only if the inverted auxiliary is omitted [19B1 vs. 19B2].

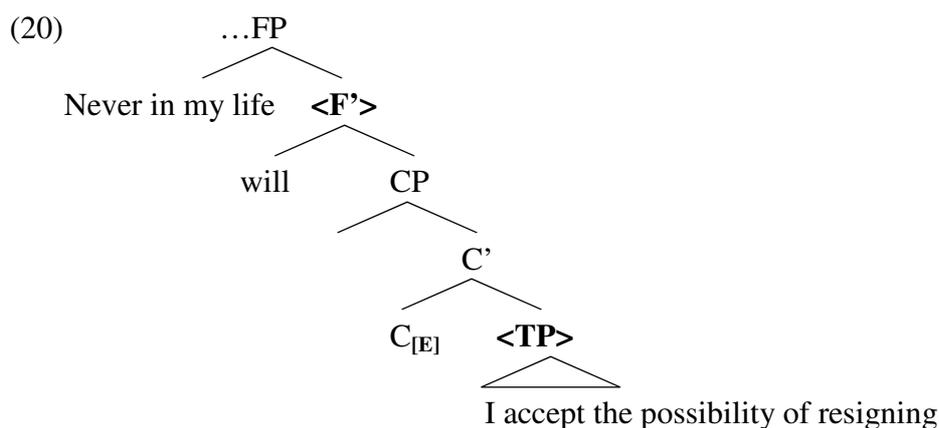
⁷ Spanish exhibits the same restriction. See also Rizzi (1997) for a similar observation for Italian.

⁸ Note also that all languages seem to have fragments but not focus fronting strategies, something unexpected within a movement plus ellipsis analysis.

⁹ The problem with this solution would be the "look-ahead" character of the condition.

- (18) a. Never in my life will I accept the possibility of resigning.
 b. *Never in my life I will accept the possibility of resigning.
- (19) A: When will you accept the possibility of resigning?
 B1: Never in my life.
 B2: *Never in my life will

The problem for a movement plus ellipsis analysis here is that the impossibility of (19B2) is unexpected if the E-feature sends a message for non-pronunciation to its TP complement in (20). The only possibility to explain why the auxiliary must be omitted would be to allow the E feature to target <F'> for non-pronunciation, an unwelcome result given that there is no way of establishing a syntactic relation between the C head and F'.



On the other hand, Negative Inversion induces pied-piping, a property which Horvath (2005) takes as evidence that it is a feature-driven movement [21a]. She notes that in Negative Inversion, like in *wh*-movement, a phrase can be pied-piped only if the negative feature is in specifier position [21a] but not if it is in complement position [21b]. The negative fragment-answer in [22B] where the negative feature is in complement position thus provides additional evidence against deriving this non-sentential answer from a fronted structure.

- (21) a. No young girl's participation in the game can they permit. (Horvath's (17))
 b. *The participation of no young girl in the game can they permit.
- (22) A: Whose participation in the game won't they permit?
 B: The participation of no young girl.

Similar problems arise with negative polarity items (NPIs), which, as noted by den Dikken et al. (2000), can appear in fragment answers [23B1,B2], as these can never be fronted [24].¹⁰

- (23) A: What didn't Max want to read?
 B1: Anything.
 B2: Any mystery novels.
- (24) *Anything/Any mystery novels_i Max didn't want to read t_i.

The behaviour of degree modifiers like *very*, which typically resist fronting [25aB] but can appear as non-sentential answers [25bB], constitute another instance of non-parallelism effect.

¹⁰ Merchant considers (23B1,B2) ungrammatical, but all the native speakers asked accept them.

- (25) a. A: Somebody mentioned that Tim was a bit upset.
 B: *No, very_i he was t_i upset.
 b. A: Was he upset?
 B: Very.

A special type of non-parallelism effect which arises in non-sentential VPs is related to the form of the verbal head. There are many speakers who do not accept VP-fronting with past participle forms [26b] but accept the corresponding VP-fragments (27B2).¹¹

- (26) a. John said that he would fix the car, and [fix the car] he has.
 b. *John said that he would fix the car, and [fixed the car] he has.
- (27) A: What have you done?
 B1: Fix the car.
 B2: Fixed the car.

Let us now consider non-parallelism effects in complex non-sentential utterances now. Non-sententials like (28B) which consist of an adverb plus negation could only have (29a,b,c) as possible sentential sources, but *probably* and *not* do not form a constituent susceptible of being fronted there and, as expected, cannot be fronted (29d).

- (28) A: Will you buy any mystery novels?
 B: Probably not.
- (29) a. I will probably not buy any mystery novels.
 b. I probably will not buy any mystery novels.
 c. Probably I will not buy any mystery novels,
 d. *Probably not I will buy any mystery novels.

We also find multiple-constituent non-sententials like (30) and (31) which consist of two DPs and a DP plus a VP respectively. In these cases they feature a contrastive topic plus an information focus.¹² As in the previous cases, the corresponding fronted sentences are impossible [32].

- (30) A: Which vegetables do the boys like?
 B: John spinach and Bill leeks.
- (31) A: What will they/John and Bill do?
 B: John clean the carpet and Bill fix the car.
- (32) a. *John_i spinach_j t_i likes t_j.
 b. *John_i [clean the carpet]_j t_i will t_j.

One might try to circumvent this problem by saying that (30B) and (31B) are cases of Gapping in which the verb *like* and the auxiliary *will* have been gapped. I reject this analysis on the basis of the fact that negation can be left unexpressed in multiple-constituent fragments [33], but not in Gapping [34].

- (33) A: Which vegetables don't they like?
 B: John spinach and Bill leeks.

¹¹ To my knowledge, Emonds (1976) was the first to note the impossibility of sentences like (26b).

¹² I discuss the internal structure of examples like (31B) in section 5.

(34) *John doesn't like spinach and Bill leeks.

2.1.2 Impossible fragments where fronting is possible

As for the non-parallelism effects in which the fronting strategy turns out to be more permissive than the corresponding non-sentential utterance, the defendants of the (movement plus) ellipsis approach would have to resort to the existence of some type of worsening-effect of ellipsis, something unexpected if one assumes, as they do, that ellipsis has a "repair" effect in the general case.

An instance of this type of non-parallelism effect is observed in the behaviour of VP-adverbs like *often*, which can appear in initial position in fronted VPs [35b] but not in VP-fragments [36B1].

(35) a. She said that John would often break the rules, and [often break the rules]_i; he did t_i.
 b. She said that John would break the rules too often, and [break the rules too often]_i; he did t_i.

(36) A: They told me that John got sacked. What did he do?
 B1: *Often break the rules.¹³
 B2: Break the rules too often.

Similarly, although focus fronting of the object of an embedded sentence can take place to the left periphery of the matrix clause [37a] and to the left periphery of the embedded clause with [37b] or without [37c] complementizer, the fragment answer corresponding to (37b) is impossible [38B2]. As in the previous examples, this indicates that (38B1) and (B3) do not derive from (39a) and (39b) respectively.

(37) a. Albanian_i I think she speaks t_i.
 b. I think that Albanian_i she speaks t_i.
 c. I think Albanian_i she speaks t_i.

(38) A: What Balkan language does she speak?
 B1: Albanian I think.
 B2: *I think that Albanian.
 B3: I think Albanian.

(39) a. Albanian_i I think ~~she speaks t_i~~.
 b. I think that Albanian_i ~~she speaks t_i~~.
 c. I think Albanian_i ~~she speaks t_i~~.

I thus conclude that the two types of non-parallelism effects discussed make a movement plus ellipsis analysis of non-sentential constituents untenable.

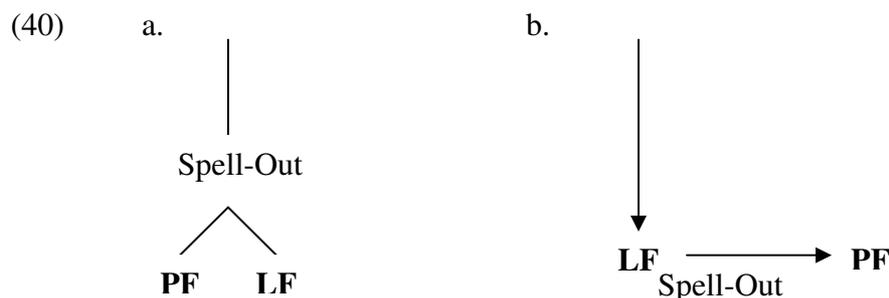
2.2 Non-reparable interpretive effects

In this section I discuss cases of non-parallelism effects which can not be treated as repair-effects of ellipsis given that they are interpretive in nature and would never be repaired by PF

¹³ Notice that this position is accessible to floating quantifiers, which goes against analyzing these as elements occupying adverbial positions [i].

(i) A: Eugene was very upset with his students. What did they do?
 B: All arrive late.

ellipsis, independently of whether one assumes a T- or L-model of the computational system. In the former because after *spell out* the derivation branches and there is no connection between PF and LF representations [40a], in the latter because LF is derivationally prior to PF [40b].



The first of these effects is related to the co-occurrence restrictions of certain types of quantifiers. As observed in Beghelli and Stowell (1997), subject Distributive-Universal Quantifier Phrases (DQPs) like *every* can not coexist with object Negative Quantifier Phrases (NQPs) like *nobody* in sentences with neutral non-focused intonation [41a].¹⁴ Obviously, the corresponding fronted counterparts are also ungrammatical [41b,c]. However, a negative quantifier is perfectly possible as a short answer to a question whose subject is a DQP [42B1], the interpretation being that in which the negative quantifier has wide scope, i.e. “there is no individual who is admired by every syntactician”, not that in which DQP scopes over the NQP. As expected, the full sentential answer is impossible here [42B1].¹⁵

- (41) a. *Every syntactician admires nobody.
 b. *Nobody_i every syntactician admires t_i.
 c. *Nobody_i does every syntactician admire t_i.

- (42) A: Who does every syntactician admire?
 B1: Nobody.
 B2: *Every syntactician admires nobody.

Consider now the configuration in (43) that Postal (1993) called Secondary Strong Crossover (SCO) in which the crossing wh-operator is contained in a larger phrase. Although focus preposing is not subject to secondary strong crossover [44B], fronting of an expression containing a pronominal over a coreferential quantified expression, as in [45B], results in configuration in which the c-command condition on pronouns as bound variables is violated.¹⁶

- (43) *[Whose_i mother]_j does he_i love t_j?
 (44) A: Bill_i seems to admire his_i father.
 B: [His_i mother]_j he_i admires t_j, (not his_i father).

¹⁴ The same effect is found in Spanish with the floating quantifier “todos” (all):

- (i) a. *Todos los sintactistas admiran a nadie.
 All the syntacticians admire to nobody.
 ‘All syntacticians admire nobody’
 b. A: ¿A quién admiran todos los sintactistas?
 To whom admire all the syntacticians?
 B: A nadie.

¹⁵ Interestingly, with non-neutral intonation the interpretation of (41a) is that in which the universal quantifier takes wide scope.

¹⁶ These facts and the deviance of (iB) below suggest that, unlike in topicalization, reconstruction is not possible in Focus Fronting.

(i) *Himself he admires, (not his wife).

- (45) A: No linguist_i admires his_i father.
 B: *[His_i mother]_j no linguist_i admires t_j, (not his_i father).

As noted in Hornstein (1995), short answers to questions like (46A) allow the “functional” reading in which the pronoun has a bound variable interpretation [46B]. Considering the impossibility of (45b) above, this interpretation is completely unexpected under a movement plus deletion approach.

- (46) A: Who does no linguist_i admire? (Hornstein’s (51a,b))
 B: His_i mother.

Now take cases of quantifier interpretation in which, Merchant observes, there is parallelism in the interpretation of a fragment and the corresponding full sentence [47]. Both (47B1) and (47B2) are ambiguous, with either the numeral or the universal quantifier taking wide scope.

- (47) A: How many diplomats did every translator greet? (Merchant’s (65))
 B1: Three. $\exists_3 \forall / \forall \exists_3$
 B2: Every translator greeted three (diplomats). $\exists_3 \forall / \forall \exists_3$

But note that under Merchant’s analysis (47B1) should not be compared with (47B2) but with the quite deviant focus-fronted version (48B) which, when accepted, tends to be interpreted with the numeral taking wide scope.

- (48) A: It seems that every translator greeted four diplomats.
 B: ??Three (diplomats)_i every translator greeted t_i, (not four). $\exists_3 \forall / * \forall \exists_3$

Let us turn to Weak Cross Over (WCO) effects now. Postal (1993) notes that focus particles like *even* and *only* cancel weak crossover effects [49b,c,d]. Consider the answers to (50A), which contains the WCO cancelling particle *even*. The non-sentential (50B1) is a possible reply, but the non-fronted (50B2) and fronted (50B3) sentential answers are not. The former is grammatical but not an adequate answer, as the particle *even* in that position is only compatible with a focus interpretation on *his clients*, and the latter is ungrammatical.

- (49) a. *Which lawyer_i did his_i clients hate t_i? (Postal’s (31))
 b. Which lawyer_i did even his_i clients hate t_i?
 c. Which lawyer_i did only his_i clients hate t_i?
 d. Which lawyer_i did his_i own clients hate t_i?
- (50) A: Which lawyer_i did even his_i clients hate t_i?
 B1: Bob Anderson_i.
 B2: #Even his_i clients hated Bob Anderson_i.
 B3: *Bob Anderson_i even his_i clients hated.

One might try to maintain a movement plus ellipsis analysis here by saying that the focus particle *even* is not present in the underlying sentential representation of the fragment answer, but this solution will not work simply because the resulting representation would be (51), which constitutes a WCO violation.¹⁷

- (51) *Bob Anderson_i his_i clients hated t_i.

¹⁷ The example of (51) is the overt-movement counterpart of (i), on the basis of which Chomsky (1976) proposed LF movement for in situ focus.

(i) *His_i mother loves JOHN_i

The interpretive asymmetries considered in the behaviour of fronted structures and fragment answers thus constitute another argument against deriving the latter from the former.

2.3 Island insensitivity

Merchant argues in favour of movement in fragments on the basis of examples like (52) where the short answer is sensitive to adjunct island condition effects.

- (52) A: Does Abby speak the same Balkan language that *Ben* speaks?
 B1: *No, *Charlie*.
 B2: No, she speaks the same Balkan language that *Charlie* speaks.

Note, however, that (52B1) is a case of contrastive focus fragment and that the island effects disappear in contexts of fragments with information focus; the examples of (53,54) and (55) illustrate this for subject and object fragments respectively.

- (53) A: I heard that Ben left the party because some girl wouldn't dance with him.
 B: Yeah, Susan.
- (54) A: I heard that Abby speaks the same Balkan language that some linguist speaks.
 B: Yeah, Zeljko Boskovic.
- (55) A: I heard they want to hire a linguist who speaks a/some Balkan language.
 B: Yeah, Albanian.

In the light of these facts one might be tempted to propose that contrastive focus fragments are derived via movement plus ellipsis whereas information focus fragments are not. This scenario would be compatible with the fact, illustrated in (16) and (17) above, that information focus and contrastive focus in full sentences differ in that the former is only realized in situ by prosodic prominence whereas the latter can be realized both via prosodic prominence and via movement. This solution, however, will not allow us to explain the fact that the apparent island effects observed by Merchant in (52B1) also arise in cases of extraction from deeply embedded complements of bridge verbs if the fragment receives a contrastive focus interpretation [56]. As in the previous examples, an information focus non-sentential is perfectly possible in the same context [57], which indicates that the impossibility of (52B1) and (56B) is related to the nature of contrastive focus and not to island condition effects.

- (56) A: Didn't Bill say that Ann suspected *John* could only speak one Balkan language?
 B: *No, Peter.
- (57) A: Didn't Bill say that Ann suspected some lecturer of the Slavic Linguistics department could only speak one Balkan language?
 B: Yeah, Peter.

As a matter of fact, the mysterious constraint on short answers with contrastive focus interpretation disappears if the short answer can unambiguously be linked to a constituent in the preceding discourse either by means of a preposition [58B1] or by repeating the constituent it contrasts with [58B2]. This suggests that the problem with (52B1) and (56B) is related to parsing difficulties, not to island effects.

- (58) A: Did Bill leave the party because he wanted to avoid having to talk *to Susan*?

B1: No, *to Mary*.

B2: No, not *to Susan, to Mary*.

Adjectival fragments constitute another case not treatable in terms of movement, as they appear in positions clearly not accessible to movement in full sentences [59].

- (59) A: Are you looking for an ex-convict with a light-coloured shirt?
B: Yeah, light blue.

Culicover and Jackendoff (2005) also note that Merchant's analysis runs into trouble when we consider the possibility of fragment answers to echo questions in which the corresponding long answer would contain the focalized element in an island [60].

- (60) (Speaker A is astonished that Ann left the party because she didn't want to meet Bill, as everything seemed to indicate that she was in love with him.)
a. A: Ann left because she didn't want to meet **who**!?
B: Bill.
b. *Bill_i Ann left because she didn't want to meet t_i.)

I thus conclude that the island effects observed by Merchant in fragment answers are in fact not island effects and thus do not support a movement plus ellipsis analysis. On the contrary, the fragment answers in (53-55,58) constitute a powerful argument against movement plus ellipsis.

2.4. Non-sententials and VP-ellipsis

For present purposes I will assume, as Merchant does, that VP ellipsis requires the existence of an antecedent VP in discourse and can thus be used as a "detector" of unpronounced (antecedent) VPs. Let us apply the test to discourse-initial fragments.

Ludlow (2005) claims that there is hidden sentential structure even in proverbs like (61a), to which he assigns the representation in (61b). The impossibility of VP-ellipsis in (61c), as opposed to the grammatical (61d) where there is an overt VP antecedent, clearly argues against the existence of a hidden VP in the proverb.

- (61) a. An apple a day keeps the doctor away.
b. PRO (having) an apple a day keeps the doctor away.
c. * I know that an apple a day keeps the doctor away, but I don't want to [~~have an apple a day~~], because I hate apples.
d. I know that having an apple a day keeps the doctor away, but I don't want to [~~have an apple a day~~], because I hate apples.

Let us go back to Merchant's discourse-initial fragment (62A) for which he proposes the underlying representation in (63). A careful analysis of this case reveals that the possibility of having VP ellipsis in (62B) does not support the existence of the unpronounced string [_{TP} this is t₂] in (63), as it is not this string, but the overt PP *from Germany*, that triggers reconstruction of the elided material in (62B), whose interpretation is (64). As a matter of fact, reproducing the sequence [_{TP} this is t₂] in the elided part of (62B) gives rise to syntactic and semantic deviance [65].

- (62) A: From Germany! See, I told you!
B: OK, but this one isn't!

- (63) [_{FP} from Germany₂ [_{TP} this is t₂]] See, I told you!

(64) OK, but this one isn't **from Germany!**

(65) *OK, but this one isn't **this is!**

The licensing of ellipsis in (62B) thus does not constitute an argument in favour of hidden sentential material in discourse-initial fragments. Furthermore, the impossibility of VP-ellipsis in the replies to the fragments in (66-70) shows that these contain no hidden VPs. In (66) we would expect VP ellipsis to be possible if we had elided sentential material containing something like *I want* or *I'd like*, but only the non-sentential reply (B2) is possible.^{18, 19} As shown in (67), VP-ellipsis becomes possible in an equivalent dialogue in which there is an overt VP in A's utterance.

(66) Speakers A and B are two friends who approach the vendor at a drinks stand and say:

A: A bottle of sparkling water, please.

B1: #So do I/#I do, too.

B2: For me too.

(67) A: I want/I'd like a bottle of sparkling water, please.

B: So do I/I do, too.

Let us now apply the VP-ellipsis test to non-sentential answers. VP-ellipsis is not acceptable in the reply to the short answer (68A2), whereas it is perfectly possible in the reply to the corresponding full sentential answer (69A2). As in the previous cases, this contrast reveals that the former does not contain a hidden VP.²⁰

(68) A1: Which novel have you been asked to read?

B: *Disgrace*.

A2:#Are you going to?

(69) A1: Which novel have you been asked to read?

B: I've been asked to read *Disgrace*.

A2: Are you going to?

Again the conclusion is that VP-ellipsis facts actually constitute an argument against the existence of hidden sentential material in both discourse-initial fragments and non-sentential answers.

2.5 Non-sentential answers, language impairment and language savants

A movement plus ellipsis approach to the derivation of non-sentential answers predicts that individuals who for some reason do not have A-bar fronting strategies as part of their linguistic

¹⁸ An anonymous reviewer says that the speaker who utters (66B1) would probably get a bottle of sparkling water in that context. I agree, but that doesn't mean that the sequence is appropriate, it simply indicates that the vendor manages to understand that B1 wants the same as (66A), as would probably be the case if he uttered the ungrammatical **I too*.

¹⁹ I use the hash sign and not the asterisk here given that they are grammatical but not adequate in the context provided.

²⁰ Some speakers accept (68A2). This is due to the fact that they can use the explicit VP [read t] of (68A1) in combination with the fragment answer to recover the content of the null VP [read *Disgrace*], a possibility which does not arise in speakers who require a stricter identity condition for licensing of VP-ellipsis. See Valmala (in prep.) for a revision of the concept of identity relevant for reconstruction of null VPs.

competence will not be able to produce fragment answers. My last argument against movement plus ellipsis comes precisely from the existence of individuals who, as a result of an impaired theory of mind or mind, do not have fronting but can nevertheless produce and understand non-sentential answers and questions. One such case is Christopher, the language “savant” reported in Smith and Tsimpli (1991, 1995) and Cormack and Smith (2006), who rejects sentences with topicalization [70a,b] and left dislocation [70c,d] even when he is given enough context to motivate these phenomena (see Smith and Tsimpli (1995: p. 51-53) for more data and the contexts provided) but produces and understands non-sentential answers [71a,b].²¹

- (70) a. Susan, I met her yesterday. ----- I met Susan yesterday.
 b. Me, I don't like football. ----- I don't like football.
 c. Steven, they saw during the break. ----- They saw Steven during the break.
 d. The green ones, Mary got. ----- Mary got the green ones.

- (71) a. **NS** What do you use it for?
 C Music. [Smith and Tsimpli (1995) p. 67]
- b. **NS** What are they talking about?
 C Food, mainly. [Smith and Tsimpli (1995) p.68]

Elugardo and Stainton (2005) also provide arguments against ellipsis in fragments on the basis of the existence of aphasics who have deficits specific to INFL, and thus have problems with sentences and elliptical constructions, but can produce non-sententials.

3. Non-sentential questions and imperatives

Previous analyses of non-sentential constituents have mainly concentrated on non-sententials with declarative illocutionary force, and almost no attention has been paid to non-sententials with interrogative and imperative illocutionary force which are also very common. Exceptions are Lambrecht (1990) and Ginzburg and Sag (2000). In this section I turn to non-sentential questions and imperatives, showing that these cannot be derived from (movement plus) ellipsis.

Sometimes non-sentential questions consist of wh-phrases which are interpreted as wh-questions. This is the case of *why* in (72), *how well* in (73) and *where* in (74), which are interpreted like (75a), (75b) and (75c) respectively.²²

- (72) “I'm worried about him.”
 “**Why**. Is he sick?”
 [H. Mankell, *Sidetracked*, 54]
- (73) “... And knew him well.”
 Wallander leaned forward and gave Ekholm a penetrating look.
 “**How well?**” he asked.
 “They might have been friends. Colleagues. Rivals.”
 [H. Mankell, *Sidetracked*, 279]

²¹ According to Barton (1990) “Understanding a subsentence is as much a pragmatic affair as understanding conversational implicature or sarcasm: neither is carried out by the language faculty itself.” This cannot be correct, as it predicts that individuals who suffer from general cognitive deficits but have their language faculty intact will not be able to understand non-sententials. Christopher constitutes the clearest counterexample to this claim, as he has problems with irony or sarcasm but can produce and understand non-sententials.

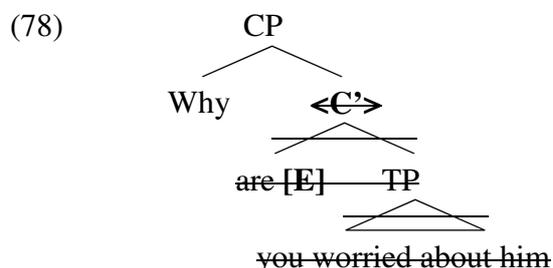
²² Ginzburg and Sag (2000) assimilate these non-sentential wh-questions to sluicing, but not implying that they derive from ellipsis.

- (74) Wallander hung up and asked the girl at the switchboard to find Ekholm. In a few minutes she called back and said that he'd gone out for lunch.
 “**Where?**” asked Wallander.
 “I think he said the Continental.”
 [H. Mankell, *Sidetracked*, 278]
- (75) a. Why are you worried about him?
 b. How well did he know him?
 c. Where did he go for lunch?

In principle, these non-sentential questions do not appear to pose special problems for a (movement plus) ellipsis/deletion approach, as they could be analyzed assuming a derivation similar to that of sluicing where the *wh*-phrase moves to [Spec,CP] followed by ellipsis of C', which is a constituent [76a-c]. On the other hand, the “island-repair” effects observed in sluicing are also present in these short questions [77B]. But remember that in Merchant's analysis of sluicing, shown in (7a), the E(llipsis) feature in Comp sends a message for non-pronunciation to its complement TP. If we apply this to the cases under discussion we get the ungrammatical [76d-f].

- (76) a. Why [_{CP} ~~are you worried about him~~]?
 b. How well [_{CP} ~~did he know him~~]?
 c. Where [_{CP} ~~did he go for lunch~~]?
 d. *Why are [_{TP} ~~you worried about him~~]?
 e. *How well did [_{TP} ~~he know him~~]?
 f. *Where did [_{TP} ~~he go for lunch~~]?
- (77) A: Abby speaks the same Balkan language that one of he professors speaks.
 B: Which professor?

In order to derive the non-sentential *wh*-phrases in (72-74) via movement plus ellipsis the E feature in Comp should be assumed to be able to send a message for non pronunciation to the first branching node immediately dominating it C', so that finally everything dominated by that node, the ellipsis feature included, is elided [78]. This is an unwelcome result both because it introduces exceptionality in the behaviour of the E-feature, which everywhere else only targets its complement, and because the relation between a head and the first branching node dominating it is not a core relation of the grammar.



Fragment-questions like (79) consisting of a *wh*-phrase plus negation cannot be derived in this way, either. Considering that negation has scope over the modal, only (80c) would be a possible sentential source, but it does not contain the sequence *why not*. We would instead expect the ungrammatical non-sentential (81).

- (79) “That can't be true.”
 “**Why not?**”

[H. Mankell, *The Fifth Woman*, 216]

- (80) a. *Why not can that be true?
 b. #Why can that not be true? can > not
 c. Why can't that be true? not > can

- (81) ***Why can't?**

As noted in Ginzburg and Sag (2000), some non-sentential questions are interpreted as echo questions. This is the case of *who?* in (82), which can only be interpreted as (83b). Once again, the movement plus ellipsis analysis of (84a) is untenable, as movement of the *wh*-phrase to the left periphery is totally out in echo questions (84b).

- (82) “I feel fine.” Wallander said. “How’s it going with Holger Eriksson?”
 Martinsson gave him a baffled look.
“Who?”
 “Holger Eriksson. The man I wrote a report on, ...”
 [H. Mankell, *The Fifth Woman*, 63]

- (83) a. # Who is Holger Ericsson?
 b. How’s it going with who?

- (84) b. Who_i [~~how’s it going with t_i~~]?
 a. *Who how’s it going with?

Additional evidence supporting my claim that these non-sentential echo-questions are not the result of a movement plus ellipsis strategy comes from the fact that they do not obey island conditions [85B].

- (85) A1: I bought a CD which contains several songs by Ottmar Liebert.
 B: Who?
 A2: Ottmar Liebert.

Other non-sentential questions consist of (sometimes discourse-initial) non-*wh*-phrases which are interpreted as *yes/no* questions, as those of (86) and (87) which receive the interpretation of (88a-c). Once again, for a movement plus ellipsis analysis to work the non-*wh*-phrase should be able to move to the left periphery in these contexts [89a-c], but this is totally impossible [89d-f].

- (86) “We’ve got dogs here,” Nyberg said. “They’ve picked the scent from the rope at the logging site. But that’s not so strange, since it’s the only way up here. I think we can assume that Rumfeldt didn’t walk. There must have been a car.”
“Any tyre tracks?”
 “Quite a few, but I can’t tell you which is which yet.”
“Anything else?”

- (87) “We could hope for that,” Wallander said. “But I don’t think so.”
“The same killer?”
 “It looks like it.”
 [H. Mankell, *The Fifth Woman*, 347]

- (88) a. Are there any tyre tracks?
 b. Is there anything else?
 c. Was/is it the same killer?

- (89) a. Any tyre tracks_i E [~~are there~~ t_i]
 b. Anything else_i E [~~is there~~ t_i]
 c. The same killer_i E [~~was it~~ t_i]
 d. *Any tyre tracks are there?
 e. *Anything else is there?
 f. *The same killer was it?

Also interesting are complex non-sentential yes/no questions like (90), which features the predicate *scalped* and its argument. Here (91a) is the obvious sentential candidate for a movement plus ellipsis derivation [91b]. But, once again, fronting is impossible [91c].

- (90) “Another one?” she asked.
 “Same offender,” said Wallander. “Or offenders.”
 “**This one scalped too?**”
 “Yes.”
 [H. Mankell, *Sidetracked*, 138]

- (91) a. Was this one scalped too?
 b. [_{FP} [_{IP} This one [scalped too]_j [_{F'} [_{CP} [_{C'} was_E t_i]]]]]
 c. *This one scalped too was?

The non-sentential questions of (92) and (93) receive the interpretation of (94a) and (94b) respectively. Movement of the sequences under discussion is also impossible and thus invalidates an ellipsis analysis [94c,d].

- (92) “The body was found by an orienteer who was out running. He practically tripped over it.”
 “Who was it?”
 “**The orienteer or the dead man?**”
 “The dead man.”
 “A florist.”
 [H. Mankell, *The Fifth Woman*]

- (93) “What’s your impression?” Martinson asked.
 “**Of Lisa Holgersson?** I think she seems first-rate.”
 [H. Mankell, *The Fifth Woman*]

- (94) a. Who was the orienteer or (who was) the dead man?
 b. What’s my impression of Lisa Holgersson?
 c. *[The orienteer or (who was) the dead man]_i who was t_i ?
 d. *[Of Lisa Holgersson]_i what’s my impression t_i?

Lambrecht (1990) notes that non-sentential questions like (95) are used as echo-questions [96b]. Here too, the corresponding fronted sentence is impossible [96c].

- (95) “The rope is from a factory in Denmark.”
 “**Denmark?**”
 “I should think it could be bought just about anywhere that sells rope. Anyway, it seems new. Bought for the occasion,” said Nyberg, to Wallander’s disgust.
 [H. Mankell, *The Fifth Woman*, 183]

- (96) a. #Is the rope from a factory in Denmark?

- b. The rope is from a factory in Denmark?
- c. *Denmark the rope is from a factory in?

Non-sentential questions like (97) are topic-selectors for which it is really difficult to identify a sentential counterpart; none of the questions in (98) can be argued to underlie it, as deletion/ellipsis would violate the principle of recoverability. Even if we wanted to derive it from (98a), assuming that the content of *where is* is pragmatically recoverable, the fronted version is totally out [99].

- (97) “One of Blomberg’s colleagues is on his way to identify the body. They’ll let us know by phone.”
“And the widow?”
 “Not yet informed. We thought that it was a little premature.”
 [H. Mankell, *The Fifth Woman*, 361]
- (98) a. and where is the widow?
 b. and why hasn’t the widow identified the body?
 c. and has the widow been informed?
- (99) *And the widow where is?

What-about non-sentential questions like (100) are also used to introduce topics and pose the same problems for an ellipsis analysis.

- (100) **“What about you?”**
 “That applies to me too.”
 “But how do you do it?”
 [H. Mankell, *One Step Behind*, 53]

The non-sentential imperative in (101a) can not be derived via movement plus ellipsis either [101b]; as the fronted sentential counterpart is deviant [101c].

- (101) a. **Home!** Straight away!
 b. [Home]_i E [~~go-t_i~~]
 c. *Home go!

So far everything indicates that non-sentential questions and imperatives do not derive from full sentences via ellipsis. Let us now apply the VP-ellipsis test; if as proposed here there is no “hidden” sentential material in these non-sententials, they should fail to license VP ellipsis in subsequent discourse. The facts confirm my claim: the non-sentential question [102A2] cannot license VP-ellipsis in the reply in (B2). Similarly, the impossibility of VP ellipsis in (103) indicates that there is no elided VP in the non-sentential imperative.

- (102) Conversation between a host and his guest:
 A1: Would you like/Do you want some coffee?
 B1: Yes, please.
 A2: Cream and sugar?
 B2: #No I don’t, thank you.
- (103) Home! Straight away! ... #If you don’t you will be punished.

I thus conclude that non-sentential questions and imperatives cannot be analyzed in terms of (movement plus) ellipsis of material from full sentences. These, like declarative non-sententials, are non-sentential projections.

4. Non-sententials and the theory of grammar

Note that analyzing the short answers in (104) and the non-sentential question in (105) as DPs implies that we have to ask ourselves a number of questions concerning how they satisfy their licensing requirements: How do they satisfy the theta-criterion? How do they get their Case assigned/checked? How does the anaphor satisfy its binding-theoretic requirements in (104B1)? How is the Negative Polarity Item licensed in (104B2) and (105)? Etc.

- (104) A: Who didn't Bob want to psychoanalyze?
 B1: Himself.
 B2: Any linguist. He says that they're all too complicated.

(105) Any tyre tracks?

Turning to the more complex cases of non-sententials illustrated below, something must be said about the lack of external argument in (106B), Case assignment/checking of the external argument in the two conjuncts of (107B) and the DP *this one* in (108), and the source of the illocutionary force of each non-sentential.

- (106) A: What dill John do to the car?
 B: Total it.
- (107) A: What will they/John and Bill do?
 B: John clean the carpet and Bill fix the car.

(108) This one scalped too?

The above mentioned questions and others not considered here imply asking ourselves a more general and important question: How much must the grammar be "enriched" in order to deal with non-sententials? Implicit in Barton's (1990) analysis, for instance, is the idea that Universal Grammar provides different specifications for sentences and fragments, i.e. that there is a *sentence grammar* and a *fragment grammar*: Thus, when dealing with (109b) she proposes the principles of (110) and (111).

- (109) a. John hurt someone by revealing information. (Barton's (75))
 b. **Himself.**
- (110) **Case Rule for NP Constituent Structures** (Barton 1990, p. 91)
 If N'' is the initial node, then assign any Case.
- (111) **Principle A of Binding Theory for NP-fragments** (Barton 1990, p. 96)
 If X'' is the initial node, then an anaphor in the structure may be free or bound.

I will not pursue this type of approach. As Valmala (1999) shows, this conception of the grammar is neither empirically tenable nor conceptually desirable. The Case rule in (110), for instance, wrongly predicts nominative pronominals to be possible in the fragment answer (112B). Similarly, the marked formulation of Principle A of Binding Theory in (111) cannot explain the ill-formedness of the anaphor fragment of (113B). On the other hand, assuming that

we are equipped with two grammars which contain contradictory specifications is not conceptually desirable.

(112) A: John gave a book to someone.
B: Me/him/her/us/them/*I/*he/*she/*we/*they

(113) A: Mary said that John_i hurt someone by revealing information.
B: *Herself

In what follows I will thus assume the (null) hypothesis that the principles which govern sentence-formation, whatever shape they take, are also responsible for the formation of non-sententials. This requires a zero level of “enrichment”. Obviously, analyzing all the consequences that assuming the existence of non-sententials has for our conception of the theory of grammar is clearly beyond the scope of this paper. Here I will only address a number of issues which have played a role in the debate over the analysis of non-sentential utterances.

4.1. Non-sententials, the theta-criterion, and Full Interpretation

Non-sentential DPs like (114B2) should not exist if one assumes both their status as arguments and the standard formulation of the theta-criterion in (115); non-sentential DPs, not being in a (local) relation with theta-assigning predicates, would never get a theta-role and would thus violate (115a). But considering that we have independently demonstrated that non-sentential DPs exist, we are forced to conclude that these never receive a theta-role. This situation is apparently problematic, as it does not seem to be in line with our earlier conclusion that the principles which govern sentences and non-sententials are the same, i.e. we do not want to stipulate that non-sentential arguments do not have to satisfy the theta-criterion. We will find a solution to this dilemma if we can independently motivate their behaviour as non-theta-recipients. On that purpose I will consider both the status of non-sententials in relation to the theta-criterion and in relation to the rationale for the theta-criterion itself.

(114) A: What are you eating?
B1: I'm eating an apple.
B2: An apple.

(115) Theta-criterion

- a. Each argument must be associated with one and only one thematic role.
- b. Each thematic role must be associated with one and only one argument.

In order to clarify the theoretical status of non-sententials in relation to (115) we have to determine whether they are arguments or not. If they turn out not to be arguments (115) will vacuously apply, in which case no violation of such principle will arise. Particularly illuminating on this purpose is William's (1995) analysis of the notion “argument”:

‘Although we speak of a Noun Phrase as “having a theta role”, it is important to realize that the “argument of” relation is a relation, a relation between a verb and a Noun Phrase, and it is this relation that the theory characterizes, not the “having of a theta role.” (Williams (1995): p. 101)

The “relation between a verb and a Noun Phrase” required to define the relational notion “argument” is never satisfied in non-sentential DPs, as they are not embedded in sentential structure. This amounts to saying that they are not arguments and thus do not fall within the

scope of (115). Williams observes that vocatives, the subjects of pseudoclefts, and hanging topics like (116) constitute exceptions to the elsewhere obligatory “argument of a predicate” relation.²³ To these exceptions we are now adding non-sentential DPs.²⁴

- (116) Sakana wa tai ga ii (Williams’ (2b))
 fish TOP red snapper NOM good
 “As for fish, red snappers are good”

However, if we stopped here we would simply have circumvented the theoretical problem of the non-application of the theta-criterion, but we wouldn’t have completely eliminated the conceptually undesirable mechanism that we wanted to avoid; having a sentence grammar and a fragment grammar. The only way of avoiding this dichotomy is by going one step further and analyzing the rationale for the Theta-Criterion and its relation to non-sententials.

For Williams (1995) and Hornstein (2006a), among others, the conceptual justification of the part of the theta-criterion which requires that a DP bear (at least) one thematic role follows from Full Interpretation.²⁵ Williams (1995), when commenting on the obligatoriness that DPs receive a theta-role in the general case and the exceptional behaviour of topics like that in (116) – his (2b) - in that they do not have to be theta-marked, says:

‘The topic in (b) is not the argument of any verb, but it clearly fills a function in the sentence – it is the topic of the following comment. This obligatoriness probably reduces to such a requirement of “full interpretation” – every NP must have some business being in the sentence in the first place, and being an argument of a verb is one business.’

It is this conception of Full Interpretation, also implicit in Hornstein (2006a), that is relevant for the present discussion.²⁶ I argue that a non-sentential DP in question-answer pairs does not need a theta-role to satisfy Full Interpretation simply because, like the topic in (16), it independently fulfils a function -not in a sentence as there is no sentence, but in discourse -: it is the focal constituent required to identify a variable introduced in the context question. Only in this respect can we say that non-sententials belong to discourse grammar; in that they do not satisfy Full Interpretation via theta-relations.

But the licensing issue just considered for non-sententials referring to arguments in the corresponding sentential contexts also arises for adjunct non-sententials; PPs like “in the garden” in (117B1) must be interpreted as referring to an event/state, i.e. they must have some business being in discourse, using Williams’ words. Note that in both sentential and non-sentential answers in which the focus constituents are adjuncts, these are as obligatory as arguments in canonical sentential structure: in (117B1) and (117B2) the PP is clearly not an optional element, as shown by the inappropriateness of (117B3).

- (117) A: Where are the children playing?
 B1: In the garden.
 B2: They’re playing in the garden.

²³ If Cinque (1983) is correct in his claim that Hanging Topic Left Dislocated elements are part of discourse grammar and thus are not syntactically linked to the adjacent clause, they would turn out to also be cases of non-sententials which appear in the vicinity of a sentence.

²⁴ Idan Landau (p.c.) suggests the possibility that non-sentential DPs are in fact VPs headed by a null verb. That alternative, however, is not compatible with the general analysis of non-sentential answers proposed in section 5.

²⁵ For Hornstein (1999, 2006a) theta-roles are features assigned to DPs by predicates derivationally so that only two parts of the theta-criterion survive: that which requires that every predicate discharge its theta-role and that which requires that every argument get at least one theta role.

²⁶ Later on I will show that non-sentential DPs also satisfy Full Interpretation in that they do not contain uninterpretable features.

B3: #They're playing.

Although apparently a truism, this observation becomes important when considering the licensing mechanism for non-sentential answers in the general case; both 'argument' and 'adjunct' non-sentential answers are licensed by being the focal constituents required to identify the variables introduced in preceding discourse. In the next section I discuss the procedure for this identification.

4.2. An algorithm for question-short answer resolution

I argue that the procedure for interpreting non-sententials in question-answer pairs is as follows. In order to identify the variable introduced in preceding discourse, the non-sentential targets a copy of the context question and substitutes for the wh-phrase. Thus, assuming a copy theory of movement as in Chomsky (1995) and subsequent work, this implies that all the positions accessible to "reconstruction" of the wh-phrase in the source will be potential "landing sites" for a copy of the non-sentential constituent if they give rise to legitimate LF representations. The following facts constitute clear empirical arguments in support of this hypothesis.

Let us first consider the configurations in (118) discussed in Chomsky and Lasnik (1993). In the declarative sentence (118a) the anaphor can only be construed as coreferential with the closest potential antecedent *Bill*, whereas the wh-question (118b) is ambiguous and the anaphor can refer to either *John* or *Bill*. This is so because, as represented in (118c), successive-cyclic movement of the wh-phrase has left two copies and we thus have two possible LF representations, depending on whether the wh-phrase is interpreted for binding in [spec,CP] of the embedded clause or in the complement position of the verb. In the former case the anaphor will be construed as referring to *John*, and in the latter it will be interpreted as coreferential with *Bill*.

- (118) a. John_i said that Bill_j liked that picture of himself_{*i/j} best.
 b. Which picture of himself_{i/j} did John_i say that Bill_j liked best?
 c. [**Which picture of himself_{i/j}**]_n did John_i say [**Which picture of himself_{i/j}**]_n that Bill_j liked [**Which picture of himself_{i/j}**]_n best

Consider the question-(non-sentential-)answer pair in (119). Like in (118b), the non-sentential answer (119B1) is ambiguous in its interpretation, with the anaphor taking either *Bill* or *John* as antecedent. Of course, the full sentential answer (119B2) is not ambiguous and, like in (118a), the anaphor can only be construed as coreferential with *Bill*. Notice that this is a clear indication that (119B2) cannot be the source of (119B1). Note also that (119B1) cannot result from ellipsis applied to the focus-fronted (119B3), as this is totally ungrammatical. The ambiguity of (119B1) is thus a mystery in this context.

- (119) A: Which picture did John_i say that Bill_j liked best?
 B1: That black and white picture of himself_{i/j}.
 B2: John_i said that Bill_j liked that black and white picture of himself_{*i/j}.
 B3: *That black and white picture of himself John said that Bill liked.

But the dilemma is resolved once we consider the application of the algorithm that I have proposed: like (118b), (119A) is the result of successive cyclic movement so that we have three copies of the wh-phrase [120a]. Substitution of the non-sentential answer for the wh-phrase results in (120b), which leads to two possible LF representations. In one the non-sentential is interpreted in [spec,CP] of the embedded clause where the anaphor refers to the matrix subject, and in the other the non-sentential is interpreted in the complement position of the verb, resulting in the construal in which the anaphor is coreferential with the embedded subject.

- (120) a. **[Which picture]_n** did John_i say **[Which picture]_n** that Bill_j liked **[Which picture]_n** best
 b. **[that black and white picture of himself_{i/j}]_n** did John_i say **[that black and white picture of himself_{i/j}]_n** that Bill_j liked **[that black and white picture of himself_{i/j}]_n** best

Now I turn to the interpretive properties of non-sententials observed in section 2.2., showing that these too can be explained on the basis of the algorithm proposed. Remember that although (121a,b,c) are impossible, the short answer (122B) is perfect with the interpretation in which *nobody* has wide scope. Here the non-sentential targets the two copies of the wh-phrase in (123a), resulting in (123b). But deletion must apply to the lower copy, as the negative quantifier cannot be construed within the scope of the universal quantifier. This explains why (122B1) is interpreted as (123c).

- (121) a. *Every syntactician admires nobody.
 b. *Nobody_i every syntactician admires t_i.
 c. *Nobody_i does every syntactician admire t_i.

- (122) A: Who does every syntactician admire?
 B1: Nobody.

- (123) a. **[who]** does every syntactician admire **[who]**?
 b. **[nobody]** does every syntactician admire **[nobody]**
 c. There is no x, x=human, such that for every y, y=syntactician, y admires x.

The availability of a “functional” reading in which a pronominal is interpreted as a bound variable noted in Hornstein (1995) for short answers like (124B) also receives an explanation. The non-sentential targets (125a) with subsequent replacement of the wh-phrases, resulting in (125b). If *his mother* is interpreted in the head of the chain, the pronominal can not receive a bound variable interpretation, but if *his mother* is interpreted in the foot of the chain it can.

- (124) A: Who does no linguist_i admire?
 B: His_i mother.

- (125) a. **[who]** does no linguist_i admire **[who]**?
 b. **[his_i mother]** no linguist_i admires **[his_i mother]**

As for the ambiguity in quantifier scope observed in (126B), it suffices to say that, once the non-sentential quantifier has substituted for the wh-phrase in (127a) resulting in (127b), nothing prohibits interpreting the numeral in the head or the foot of the chain. If interpreted in [spec,CP] it will take scope over the universal quantifier, if interpreted in the foot of the chain the universal quantifier will take scope over the numeral.

- (126) A: How many diplomats did every translator greet?
 B: Three. $\exists_3 \forall / \forall \exists_3$

- (127) a. **[how many diplomats]** did every translator greet **[how many diplomats]**?
 b. **[three]** did every translator greet **[three]**

In the case non-sentential answers like (128B1) which do not induce WCO effects, remember that they can not derive from ellipsis applied to the canonical sentential answer (128B2), as this is not a possible answer in this context given that it is only compatible with a focus

interpretation on *his clients*. Similarly, it can not derive from the focus fronted sentence in (128B3) which is ungrammatical. In (129b), the output of substituting the non-sentential for the wh-phrase, *Bob Anderson* can be interpreted in the head or the foot of the chain without violating WCO.

- (128) A: Which lawyer_i did even his_i clients hate t_i?
 B1: Bob Anderson_i.
 B2: #Even his_i clients hated Bob Anderson_i.
 B3: *Bob Anderson_i even his_i clients hated.
- (129) a. [**which lawyer**]_i did even his_i clients hate [**which lawyer**]_i?
 b. [**Bob Anderson**]_i did even his_i clients hate [**Bob Anderson**]_i;

I thus conclude that the fact that non-sentential answers are interpreted as propositions does not force us to assume an ellipsis analysis, as that interpretation is also compatible with LF copying of the source question plus substitution for the wh-phrase. As a matter of fact, I have shown that many interpretive properties of non-sentential answers can only be explained along these lines.

4.2. Non-sententials and checking of formal features

Ludlow (2005) argues against non-sentential DPs on the basis of theory-internal reasons; their uninterpretable Case feature would not be checked and the derivation would crash. I cannot accept this line of reasoning, as I take the existence of non-sentential DPs to be a fact on the basis of the evidence against ellipsis provided in the previous sections. It is true, however, that we are confronted with a dilemma if we assume both the existence of non-sentential DPs and the checking-based approach to Case proposed in Chomsky (1995) and subsequent work in which the Case features are non-interpretable on both the functional projection and the DP.²⁷

A number of possible moves come to my mind. The first would be to stipulate that the uninterpretable Case feature of DPs does not have to be checked in fragments, but this strategy would be similar in spirit to (110) in that it would imply the existence of a “fragment grammar” as opposed to a “sentence grammar”, not a welcome result.

A second way of circumventing the problem would be to assume that the Case feature of DPs is in fact interpretable in the general case, so that the problem simply does not arise. First of all, with this solution we would miss the empirical coverage that the theory based on Case features being always non-interpretable has in sentential contexts. On the other hand, it is difficult to justify the interpretability of Case features unless we go back to a visibility-based GB-type of approach to Case, something not compatible with the minimalist framework assumed here.²⁸

The third alternative to solve our dilemma would come from assuming that the uninterpretable Case feature is not an intrinsic part of the DP. This would be the case if, as proposed by Schütze (2001) and Boeckx (2007), DPs do not have to obligatorily enter the computational system with Case features, i.e. if Case features on DPs are in fact optional.²⁹ Let us consider how the system would work in both a full sentential answer [130B1] and a non-sentential DP answer [130B2]. If the DP enters the computational system with the (optional) uninterpretable Case feature in the full sentential answer, the probe will have a goal to agree with and both uninterpretable features will be deleted, the result being a convergent derivation

²⁷ The same problem would arise within a Government and Binding approach to the Case Filter which crucially relies on the existence of a Case assignor not present in non-sentential DPs.

²⁸ As a matter of fact, in Government and Binding non-sentential DPs would not constitute a problem under a visibility approach to Case, as they would not have to be visible simply because no predicates exist in those contexts which have to identify an argument in order to discharge their theta-roles.

²⁹ In the case of Boeckx (2007) it is more general: uninterpretable unvalued features are always optional.

[131a]. If the DP enters the computational system without the Case feature, the Case feature on the Probe will not be able to enter into an agreement relation with a matching feature, resulting in non-convergent derivation due to the unvalued uninterpretable Case feature [131b]. In the non-sentential DP answer the derivation will converge if the DP does not contain a Case feature [131c], but not if it does, as the Case feature will be uninterpretable and unvalued [131d].

(130) A: What did Bill's parents buy?

B1: They bought a laptop.

B2: A laptop.

(131) a. [_{TP} They [_{T'} PROBE_[phi-int, Case-int] [bought a laptop_[phi+int, Case-int]]

b. * [_{TP} They [_{T'} PROBE_[phi-int, Case-int] [bought a laptop_[phi+int]]

c. A laptop_[phi+int].

d. *A laptop_[phi+int, Case-int].

I thus conclude that the theory-internal motivations Ludlow (2005) utilizes are not enough to reject the existence of non-sentential constituents, as it might well be the case that Case features, being optional, are not present in DP-fragments. Note that this solution has the advantage of not requiring different specifications for sentences and fragments, their different behaviour being simply a by-product of the interaction between the optionality of Case features on DPs and the presence vs. absence of a probe in need of matching features.³⁰

An anonymous reviewer notes that the non-sentential approach to short answers, which are interpreted as focus, is not compatible with a feature-driven theory of focus based on the satisfaction of a criterion as in Rizzi (1997) because the focus feature would not be checked against a matching feature in the relevant functional projection and the derivation would be expected to crash [132B].

(132) A: What will Bill's parents buy?

B: A laptop_[focus].

But the presence of a focus feature on non-sententials should not be a problem, as it is logical to assume that this feature is interpretable on the constituent which receives the focus interpretation and thus does not have to be valued and/or eliminated, i.e. the existence of a probe is not needed.³¹ This solution also applies to the wh-feature in non-sentential wh-phrases, which is expected to be interpretable on the wh-phrase [133B].

(133) A: Mary wanted to meet somebody.

B: Who_[wh]?

5. Non-sententials as pure focus

Merchant (2004) considers that the impossibility of omitting the object whose content is recoverable from previous discourse in short answers like (134B) is an argument against non-sentential analyses. A movement plus ellipsis approach, he argues, can easily explain the facts: VP-fronting is possible in English, but V-fronting is not.

(134) A: What did he do to the car? (Merchant's (136))

³⁰ An analysis along these lines is independently needed for left and right dislocated DPs, as they do not enter into checking relations with functional heads. See Schütze (2001) for a detailed description and analysis of similar cases.

³¹ See Horvath (2005) and Neeleman & van de Koot (2007) for alternatives to the feature-driven conception of focus.

B: Totaled *(it).

But note that Merchant's movement plus ellipsis analysis wouldn't work for (134B) either, as VP-fronting never carries along tense features in English [135]. (134B) is probably an example of Initial Material Deletion as discussed in Napoli (1982). The relevant examples for us are thus (136B1,2), where the VP-fragment is devoid of the tense features which are also recoverable from (136A). The question that we have to address is then why we cannot have a non-sentential reply to (136A) in which the object is absent.

(135) *John said that he would total the car, and [totaled it]_i he t_i.

(136) A: What will John do to the car?

B1: *Total.

B2: Total it.

As a matter of fact, two additional questions arise when we consider non-sentential transitive predicate answers. The first is why the external argument cannot be realized as an overt category [137B3]. The second question for which an answer is needed is why the internal argument cannot reproduce the referential expression contained in the question [137B4], considering that full sentential answers are not subject to this restriction [137B5].^{32, 33}

(137) A: What will John do to the car?

³² Notice that, as shown in (i), a lexical expression introduced in the question can be repeated in the non-sentential predicate answer if it is [+focus]. I am grateful to Ad Neeleman for bringing this data to my attention.

(i) A: What did Mary do with John's present?

B: Send it back to John.

³³ Zubizarreta (1999) observes that when questions are answered with full sentences we tend to not repeat the DPs introduced in the questions, so in the answer to (iA1) and (iA2) the subject is usually omitted (B1). She says that this "avoid repeating" principle belongs to discourse grammar and not to sentence grammar. But she also notes that in Spanish, like in English, this principle is simply a tendency, since repetition of the lexical subject is perfectly possible (iB2).

(i) A1: ¿Qué se comió el gato?

what refl.pron. ate the cat (refl.pron.= reflexive pronoun)

'What did the cat eat?'

A2: ¿Qué hizo el gato?

what did the cat

'What did the cat do?'

B1: Se comió un ratón.

refl.pron. ate a mouse

It ate a mouse.

B2: El gato se comió un ratón

the cat refl.pron ate a mouse

'The cat ate a mouse.'

Notice that in Spanish, like in English, the "avoid repeating" principle is not simply a tendency in non-sentential answers to questions like (iiA) which only trigger a focus interpretation on the verb (B1 vs. B2,B3). Again, a full sentential answer is not subject to this restriction (iiB4). So the question is to what extent the "avoid repeating" principle operating in non-sentential answers is discursive in nature. Below I will propose that this restriction follows from the properties of the numeration. Obviously, although my proposal is based on data from English, it is applicable to Spanish and other languages.

(ii) A: ¿Qué hizo el gato con el ratón?

what did the cat with the mouse

'What did the cat do with the mouse?'

B1: Comérselo.

eat+refl.clit+DOclit. (clit.=clitic)

'Eat it.'

B2: #Comerse el ratón.

B3: #El gato comérselo.

B4: Al ratón el gato se lo comió.

- B1: Total it.
 B2: *Total.
 B3: #Him/He total it.³⁴
 B4: #Total the car.
 B5: He'll TOTAL the car.

The three questions for which we must provide an answer when dealing with non-sentential transitive predicates in which only the verb is focus are thus those in (138).

- (138) a. Why cannot the internal argument be omitted? (137B2)
 b. Why cannot the internal argument be realized as a referential expression, i.e. why must it be realized as a pronominal? (137B4)
 c. Why must the external argument be omitted?³⁵ (137B3)

Before I try to provide answers to these questions it is important to consider the rationale for non-sentential answers: with them speakers only concentrate on the non-presupposed material which is relevant for the identification of a variable in preceding discourse. With this background, I propose that non-sentential answers are pure focus constructions formed on the basis of numerations which only consist of lexical items with the feature [+Focus].^{36, 37} The numerations of (139B), (140B), (141B) and (142B) are thus those listed in (143).³⁸

- (139) A: Who will you meet?
 B: The Dean.
- (140) A: Where's John?
 B: In London.
- (141) A: When are you coming back?
 B: Tomorrow.
- (142) A: Is she intelligent?
 B: Very.
- (143) a. {the_[+F], dean_[+F]}
 b. {in_[+F], London_[+F]}
 c. {tomorrow_[+F]}
 d. {very_[+F]}

5.1. Pure focus, pronouns and last resort

The problem is then why questions like (137A) which only trigger a focus interpretation of the verb actually require a non-sentential answer with an overt pronominal object if, as proposed

³⁴ I use the hash sign here because this sequence is grammatical but not appropriate in this context. I consider the impossibility of both a nominative and an accusative pronominal as external argument because there is clear cross-speaker variation in the choice of Case in contexts in which overt pronominals are possible (iB1,B2).

(i) A: What will John and Mary do?

B1: Him clean the carpet and her fix something for dinner.

B2: He clean the carpet and he fix something for dinner.

³⁵ In the case of unaccusative and unergative predicates their only argument must be omitted too.

³⁶ See also Irurtzun (2007) for a feature-based analysis of the interface effects of focus in full sentences.

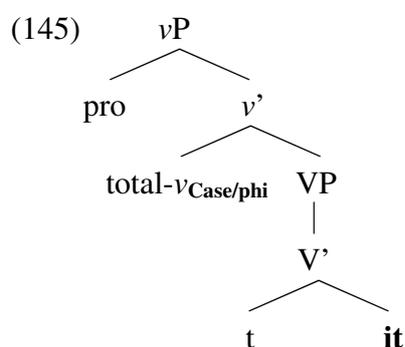
³⁷ Vallduvi (1993) calls these and other constructions in which everything is focus "all-focus" constructions.

³⁸ In a potential scenario without numerations in which the computational system had access to the lexicon, non-sententials would be the result of merging lexical items up to the point in which the representations can be interpreted.

above, the corresponding numeration, shown in (144), only consists of the verb, i.e. why cannot we have the purest focus here?

(144) {total_{[+F]}}}

The solution comes from the Hornstein's (2006b) proposal that pronouns and reflexives are not part of the numeration but grammatical formatives added in the course of the derivation. Let us concentrate on the facts in (137) under this perspective. Assuming Chomsky's (1995) little *v*-based VP-shell, the representation I propose for short transitive predicate answers like (137B1) is that of (145). I consider the questions in (138a) and (138b) first. The object cannot be omitted because, assuming that only overt categories can check strong features, an overt element is needed to satisfy the checking requirements of the Case and phi features of *v*, thus the pronominal clitic is inserted in the course of the derivation as a Last Resort operation.^{39, 40} So (137B2) is a non-convergent derivation because the Case and phi features of *v* remain unchecked.⁴¹ In (137B4), on the other hand, the object cannot be realized as *the car* simply because those lexical items, not being [+Focus], are not in the numeration.



Let us now turn to the question (139c). I assume, following Valmala (1999), that [spec, vP] in these non-sentential predicate answers is occupied by *pro* [145]. Like overt pronouns, *pro* is inserted in the course of the derivation to satisfy the theta-requirements of the little *v*. An overt pronominal subject (137B3) is not possible due to economy considerations; because insertion of a null pronominal is enough to satisfy the theta-requirements of little *v*, insertion of additional phonological features is blocked.⁴² Note that a full sentential answer does not allow a *pro*

³⁹ In an earlier version of this paper I proposed an alternative analysis in which non-sententials are the result of numerations which contain [+F] constituents plus the minimum features required for convergence, and thus pronouns, being bundles of features, would be part of those numerations. I have adopted the modification in the text based on Hornstein (2006b) because I consider it conceptually more attractive, although both alternatives have the same empirical coverage.

⁴⁰ See Slonsky (1992) and Hornstein (2001) for an identical conclusion with respect to resumptive pronouns.

⁴¹ Myriam Uribe-etxebarria (p.c.) draws to my attention the fact that the obligatory insertion of pronominal clitics in non-sententials is not restricted to direct objects, as shown by the Spanish facts in (iB) where the indirect object clitic cannot be omitted. If not all clitics are treated as manifestations of some type of agreement relation with features in a functional head, the ultimate reason which forces the last resort insertion of clitics in predicate non-sentential would not be checking of features.

(i) A: ¿Qué le ha hecho Luis a Juan?
 what IOclit. has done Luis to Juan
 'What did Luis do to Juan?'

B1: Quitarle el cuchillo.
 Take-IOclit. the knife
 'Take the knife from him.'

B2: *Quitar el cuchillo.

⁴² The prediction is that in languages like Basque which allow null objects an overt pronoun will not be allowed in short answers if only the verb is focus. As shown in (i), this is indeed the case.

(i) A: Zer egin duzue Anderrekin?
 what du aux Ander+with

subject because it cannot check the EPP feature in Infl [146B1], and the complement can be a referential expression [146B2] because sentences are not pure focus constructions and their numerations can thus contain lexical elements which do not have the [+Focus] feature. According to my analysis, sentential and non-sentential answers to questions do not compete with one another in terms of economy because they are the result of different numerations⁴³.

- (146) A: What will John do to the car?
 B1: *pro will total it.
 B2: He will TOTAL the car.

As expected, in non-sentential predicates headed by unergative [147B1,B2] and unaccusative [147B3,B4] focal verbs the subject does not show up, as nothing forces insertion of overt pronominals.

- (147) A: What did Jeremy do?
 B1: Sigh.
 B2: #Him/He sigh.
 B3: Disappear.
 B4: #Him/He disappear.

5.2. Pure focus and contrastive topics

However, non-sentential predicate answers sometimes contain overt subjects. This is so in examples like (148B) where the subjects of the two coordinated predicates are contrastive topics.⁴⁴ The question which arises in the present context is why these contrastive topics are allowed to enter the numeration if they are not [+Focus].

- (148) A: What will the boys do?
 B: Bill clean the carpets and John fix something for dinner.

In order to account for the presence of these subjects in pure focus contexts we have to consider the status of contrastive topics. There have been three approaches to contrastive topics in the literature. For some scholars they constitute a sub-case of topic (Buring (2003)), others characterize them as having properties of both topics and foci ((Molnár (1998), López and Winkler (1999)), and for others they are foci (Krifka (1998), Irurtzun (2007)).

Let us start with Jackendoff's (1972) classical examples which feature what he calls two foci, each distinguished by a distinctive pitch accent. The B accented focus, which he associates

'What have you done with Ander?'

B1: Etxera eraman.

Home take.

'Take him home.'

B2: *Bera etxera eraman.

⁴³ This does not mean that other considerations might not favour one type of answer over the other. As a matter of fact, there are cases in which the non-sentential answer is the preferred (if not the only) answer. This seems to be the case of (i), where the long answer is clearly disfavoured probably due to the fact even in English the preferred situation for information focus is that in which nuclear stress falls on the rightmost/most deeply embedded constituent.

(i) A: Who gave you the money?

B1: John.

#B2: JOHN gave me the money.

⁴⁴ Some native speakers do not accept predicate answers with overt subjects except if there is a clear pause between the subject and the verb phrase. I will later suggest an analysis which explains this situation.

As for the definition of Given, he assumes that

“..., a constituent is Given if there is a previously uttered constituent which is identical (*female-female*), an instance of hyponym (*Slaughterhouse 5/novel-book*), coreferent (*a man-the man/he*), but also if it’s semantically vacuous (*something*).” (Buring (2003), p. 527)

Let us now go back to our example of non-sentential predicate answer (156B). The constituents *Bill* and *John* qualify as not Given and thus need to be CT-marked, receiving the B accent.⁴⁵ Obviously, the predicates which provide an answer to the wh-phrase are also not Given and need to be marked as foci, receiving the A accent. The final result is that all the constituents present in the non-sentential answer need to be marked.

(156) A: What will the boys do?

B: Bill_{CT} clean the carpets_{SF} and John_{CT} fix something for dinner_F⁴⁶
 B A B A

Within this conception of contrastive topics their presence in non-sentential answers does not constitute a problem, and we could say that non-sententials are built on the basis of numerations containing only lexical items which need to be marked, independently of whether it is CT or F-marking, thus accounting for the presence of both contrastive topics and foci. On the other hand, what is important in cases like (156B) is that, independently of whether the subject of the predication is marked as CT or as F, the pair formed by that subject of the predication and the verbal predicate is focus, i.e. the predication relations established between those subjects and the predicates are non-presupposed.

Alternatively, the idea that contrastive topics are in fact foci *sensu strictu* is not new, and has been defended by Krifka (1998) and Irurtzun (2007), among others. Irurtzun, for instance, proposes that in answers to multiple wh-questions like (157) both the constituent which provides an answer to *who* and the one which provides an answer to *what* are [+Focus]. He further argues that these cases of apparently multiple (split) foci are in fact cases of complex foci in which at

⁴⁵ The informants tend to reject non-sentential predicates with overt subjects if the subject does not have a B accent.

⁴⁶ Notice that even in situations in which the contrastive topics have been uttered in the context question is CT-marking obligatory in both sentential [iB1-B2] and non-sentential [iiB1-B3] answers, i.e. the contrastive topics have to be overtly realized in the same way in which foci have to. On the contrary, non-contrastive topics can be dropped in these contexts [iB3,iiB4]. In pro-drop languages like Spanish the English patterns of the non-sentential answers reproduce in an identical way in sentential answers [iii]. These facts indicate that *Bill* and *John* in the answers do not count as Given although there is an identical constituent which has been previously uttered.

(i) A: What will [Bill_i and John_j]_i do?

B1: Bill will clean the carpets and John will fix something for dinner.

B2: *He_i will clean the carpets and he_j will fix something for dinner.

B3: They_i will clean the carpets and fix something for dinner.

(ii) A: What will [Bill_i and John_j]_i do?

B1: Bill clean the carpets and John fix something for dinner.

B2: *pro_i clean the carpets and pro_j fix something for dinner.

B3: *Him_i clean the carpets and him_j fix something for dinner.

B4: pro_i clean the carpets and fix something for dinner.

(iii) A: ¿[Luis_i y Pedro_j]_i que harán?

Luis and Pedro what do+fut. they?

‘What will Luis and Pedro do?’

B1: Luis limpiará la moqueta y Pedro preparará la cena.

Luis clean-fut.-3pSing. the carpet and Pedro prepare-fut.3pSing. the dinner

B2: *pro_i limpiará la moqueta y pro_j preparará la cena.

B3: *El_i limpiará la moqueta y él_j preparará la cena.

he clean-fut.-3pSing. the carpet and he prepare-fut.3pSing. the dinner

B4: pro_i limpiarán la moqueta y prepararán la cena.

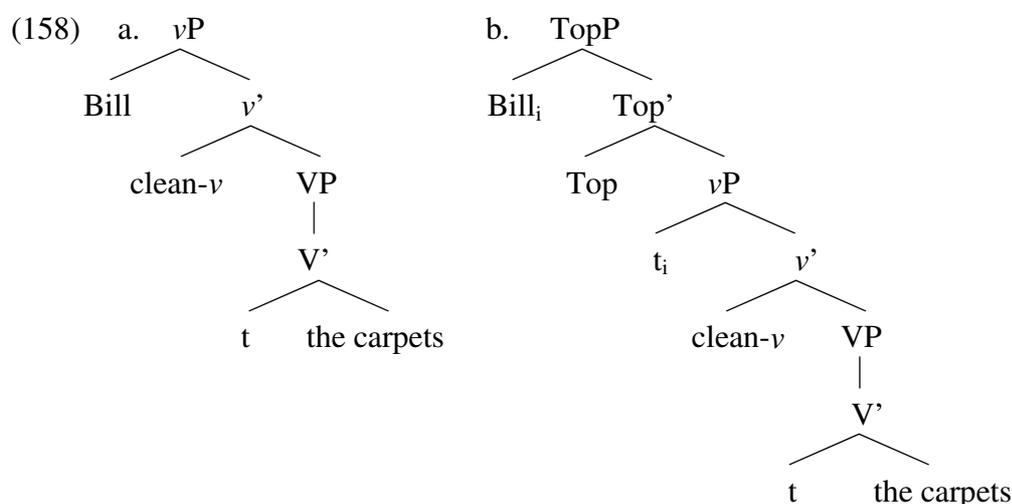
pro clean-fut.-3pPlur. the carpet and prepare the dinner

logical form there is a pair of elements as the focus of the sentence, so that the uniqueness property of focus is preserved. Although it is not conceptually crucial for present purposes, I will assume the analysis of contrastive topics as foci to be correct and thus maintain my initial characterization of the lexical items of the numerations of non-sententials in terms of the feature [+Focus].⁴⁷

(157) A: Who bought what?

B: BILL_F bought A NOVEL_F and SUSAN_F bought AN MP3 PLAYER_F.

Let us now consider the representation of non-sententials with contrastive topics. I consider that a possible representation of the first conjunct of (156B), for instance, could be as is (158a), where the external argument occupies [Spec,vP], an A-position. On the other hand, if we assume that the subject is marked as Contrastive Topic, an alternative representation could be (158b), where, following Belletti (2003) and Jayaseelan (2001) among others in that there are also discourse related functional projections above vP, the contrastive topic is located in the specifier position of a Topic Phrase, an A'-position.



I consider that there is empirical evidence that the correct representation is not that of (158b). If a TopP existed above vP we would expect topicalization of objects to also be possible in these contexts, but, as shown by the contrast in (159B1,B2), topicalization of objects in answers to questions is only possible in full sentences.^{48, 49} Interestingly, left dislocation of objects is possible in both sentential and non-sentential answers [159B3,B4], which I take as evidence that Cinque's (1983) analysis of left-dislocation as a phenomenon of discourse grammar is correct. The representation of the first conjunct of (159B4) is thus as in (160), where the left dislocated constituent and the non-sentential predicate are not syntactically connected.

⁴⁷ As a matter of fact, unlike in cases like (157) discussed by Irurtzun, in our non-sentential predicates the split focus problem does not arise, as the focal subject is always adjacent to the focal predicate.

⁴⁸ This is an indication that non-sentential predicate answers have less structure than superficially similar constructions like Mad Magazine Sentences, in which, as Akmajian (1984) observed, topicalization is possible if there is no overt subject [i].

(i) a. That trash novel, read by tomorrow!? Impossible!

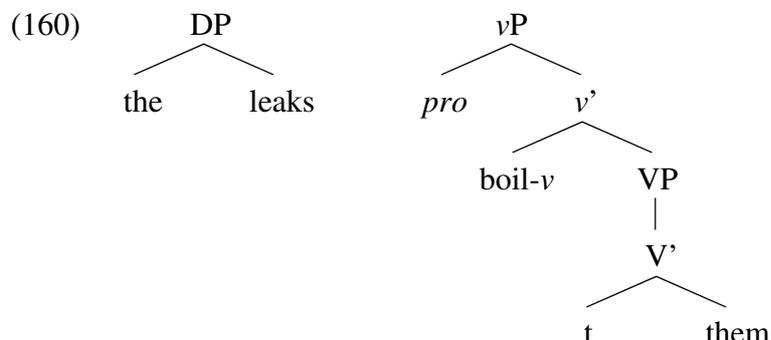
b. *That trash novel, me read by tomorrow!? Impossible!

⁴⁹ There is crosslinguistic variation in this respect; as shown in (i), Spanish allows clitic left dislocation in non-sentential predicate answers, an indication that the Spanish infinitivals contain more structure.

(i) A: ¿Y las verduras? ¿Qué vas a hacer con ellas?
and the vegetables? what go to do with them?
'And the vegetables? What are you going to do with them?'

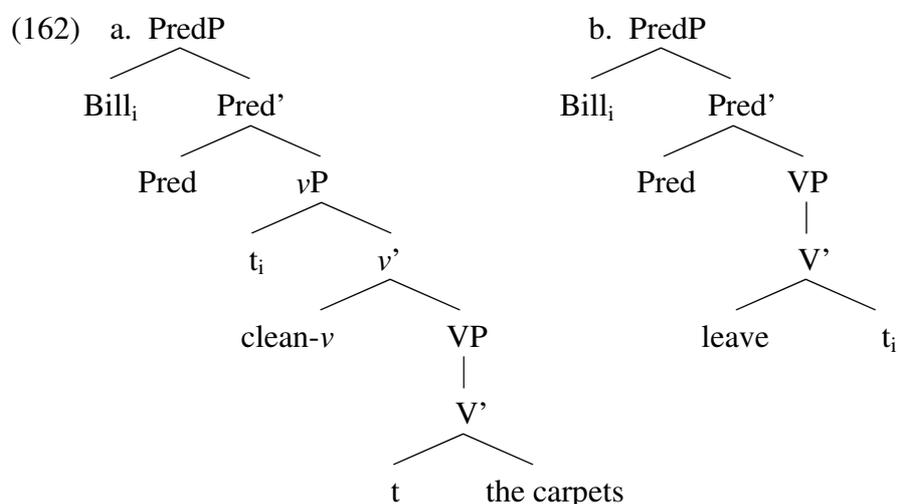
B: Los puerros cocerlos, y las vainas saltarlas.
the leaks boil-clit, and the green beans stir-fry-clit.

- (159) A: What will the boys do with the leaks and the green beans?
 B1: The leaks, they will boil, and the green beans, they will stir-fry.
 B2: *The leaks boil, and the green beans stir-fry.
 B3: The leaks, they will boil them, and the green beans, they will stir-fry them.
 B4: The leaks, boil them, and the green beans, stir-fry them.



But the correct representation cannot be (158a) either; if we only had the lexical domain we would expect the subject to appear postverbally in contexts of unaccusative verbs, contrary to fact (161). This indicates that the structure is a bit more complex. I argue that here the non-sentential contains a Predication Phrase (PrP) above vP , in the sense of Bowers (1993). The representations for the transitive and the intransitive non-sentential VPs are thus as in (162), where the subject of the predication has moved from the VP-internal position.

- (161) A: What will the boys do?
 B1: Bill stay and Tom leave.
 B2: *Stay Bill and leave Tom.



Remember that, as noted in footnote (44), some speakers reject non-sentential predicates with contrastive topic subjects unless there is a clear pause between the subject and the predicate [163]. For these cases I propose an analysis akin to (160) in which the subject is a left dislocated element coreferential with the null subject, so that the representation of the first conjunct of the coordinated non-sentential would be as in (164).

- (163) A: What will the boys do?
 B1: Bill, stay, and Tom, leave.
 B2: Bill, clean the carpets, and John, fix something for dinner.

- (164) a. [Bill]_i [pro_i stay]
 b. [Bill]_i [pro_i clean the carpets]

In this section I have shown that non-sententials are better analyzed as pure focus constituents built from numerations containing only lexical items which are [+Focus]. We have seen that pure focus numerations sometimes do not result in pure focus computations if derivational insertion of features (pronominals) is required to avoid violating some principle of the grammar. This has allowed us to explain a number of restrictions affecting non-sentential predicates without adding additional mechanisms to the grammar.

6. Conclusions:

I have demonstrated that discourse-initial nonsententials, fragment answers to questions, and non-sentential questions and imperatives do not derive from full sentences, showing that both the traditional ellipsis approach and a movement plus ellipsis analysis defended in Merchant (2004) are untenable. Furthermore, a non-sentential analysis of the above mentioned constructions does not require a special “enrichment” of the grammar; non-sentential DP satisfy Full Interpretation via focal identification of a variable in preceding discourse, and are interpreted on the basis of LF copying of the context question plus replacement of the wh-phrase(s) by the non-sentential. Uninterpretable Case features being optional, non-sentential DPs only contain interpretable phi and focus (or wh-)features and thus lead to convergent derivations. I have proposed that non-sentential declaratives are pure focus constructions built from numerations containing only lexical items with the feature [+Focus]. When focus is not so pure, it is due to the obligatory insertion of pronominal elements as a Last Resort operation in order to avoid a non-convergent derivation. This analysis also explains why the apparently more “economical” short answers do not block full sentential answers: they do not compete with one another in terms of economy because they are built on the basis of different numerations. Of course, many issues emerge when assuming the existence of non-sentential constituents which are beyond the scope of this paper. Some have been addressed by other scholars, others I leave for future research.

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