

The Problem of Fragment Answers¹

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Abstract: In this paper, I discuss the status of fragment answers to yes-no questions, based on facts from European Portuguese. I argue, along the lines of argumentation in Merchant (2004), that there is reason to believe that at least some of these fragments are derived through deletion. However, I show that data from EP does not support Merchant's analysis of fragments as constituents moved to the left periphery before deletion. This leaves us with the problem of non-constituent deletion, which I argue is not a problem for a phonological deletion theory of ellipsis.

Keywords: fragments, ellipsis, acquisition.

Resumen: En este estudio, discutiré el estatus de las respuestas fragmentadas que surgen como respuesta a preguntas *si-no*, tomando como base datos del Portugués Europeo. Siguiendo las líneas trazadas por Merchant (2004), propongo que hay razones para pensar que al menos algunos de estos fragmentos se derivan a través del proceso de elisión. Sin embargo, muestro que el portugués europeo no corrobora el análisis de Merchant, quien establece que los fragmentos son constituyentes que se mueven a la periferia izquierda de la cláusula con anterioridad a la elisión. Ante tal situación, surge el problema de la elisión de los no constituyentes, el cual argumento que no es un problema para una teoría de la elipsis centrada en la eliminación fonológica.

Palabras clave: fragmento, elipsis, adquisición.

Resumo: Neste artigo, discuto o estatuto de respostas fragmentárias a interrogativas de *sim-não*, com base em factos do Português Europeu. Defendo, na linha de argumentação de Merchant (2004), que há razão para acreditar que pelo menos alguns destes fragmentos são derivados através de apagamento. No entanto, demonstro que dados do Português Europeu não sustentam a análise de Merchant dos fragmentos como constituintes deslocados para a periferia esquerda após apagamento. Resta-nos o

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problema do apagamento de não-constituintes, que argumento não constituir um problema para a teoria do apagamento fonológico da elipse.

Palavras-chave: fragmento, elipse, aquisição.

1. The Problem of Fragment Answers

Dialogues are full of short verbless utterances, made up of only a DP or an adverb or even an adjective, such as in the answers to (1) and (2).

(1) Q: O que é que ganhaste?

what is that won

“What have you won?”

A: Um carro.

a car

(2) Q: De que cor é o carro?

which colour is the car

“Which colour is your car?”

A: Amarelo.

yellow

These kinds of utterances have raised the interest of linguists. First, these verbless utterances seem to count as a sentence in the sense that they are interpreted as a proposition. This fact raises two kinds of discussion: (i) is the propositional content recovered from a pragmatic interpretation of the fragment or does it correspond to a semantic interpretation given to a syntactic structure actually projected (but somehow elided)? (we find this discussion in Stanley 2000 and in Stainton 2004, for example); (ii) if there is more syntactic structure in these fragments than we can hear, which syntactic structure is it and how can we detect it?

1.1. Previous Studies

There are two kinds of analysis for fragment utterances: those which sustain that fragments are true fragments and those which assume that fragments are sentential structures that were subject to deletion (these are ellipsis approaches). We can find recent examples of a “fragment” approach, which Merchant (2004) calls the “direct interpretation approach”, in Barton (1990), and, more recently, in Stainton (2004), Barton & Progovac (2005), De Cat & Tsoulas (2006). According to this view, the interpretation of the fragment must be partially accounted for by pragmatics, which would explain the fact



that a non-sentential fragment can get interpreted as a proposition. Ellipsis approaches are represented by Morgan (1973), Hankamer (1979: 238) or, more recently, Merchant (2004) and Ludlow (2005). For a review of ellipsis and “direct interpretation” approaches to fragments, I refer to Merchant (2004) and to Barton & Progovac (2005).

But ellipsis approaches are not homogeneous. Whereas Hankamer (1979) assumes that ellipsis is syntactic deletion, Merchant (2001, 2004) assumes that ellipsis is phonological reduction (deletion). This difference will be relevant for the discussion carried out in this paper. I will assume Merchant’s (2001) view of ellipsis. Exploring a hypothesis developed by Tancredi (1992), i.e. contexts of deletion / ellipsis are a subset of deaccenting contexts and deaccented material must be Given, Merchant defines the exact givenness conditions that satisfy the identification requirement of ellipsis² and assumes that elided material is phonologically deleted. The instruction to delete the material at the syntax-phonology interface is given by a feature E, instantiated in a particular functional node (this is the licensing requirement of ellipsis), and which licenses the deletion of its complement at the interface in case this complement is e-Given. The presence of a feature E in a particular functional node determines crosslinguistic variation in terms of the availability of different types of ellipsis (e.g. the presence of the feature E in T in EP but not in French justifies the possibility of VP ellipsis in EP but not in the latter language).

The other way in which ellipsis approaches may not be homogeneous is in the way they deal with possible non-constituent deletion. If fragment utterances are analyzed as fully projected sentences which were partially deleted, than, contrary to what happens in other known types of ellipsis such as VP ellipsis, sluicing, stripping, what ends up being deleted may not necessarily coincide with a constituent (as in 3 or 2 above).

- (3) Q: Onde é que o rapaz pôs o livro?
where is that the boy put the book
‘Where did the boy put the book?’

² Specifically, elided material must be e-Given (see Merchant, 2001 for a definition).



A: [~~O rapaz~~ [~~pôs o livro~~ na mala]].
 the boy put the book in+the bag
 'In his bag.'

In order to avoid non-constituent deletion, Merchant (2004) suggests that the fragment results from movement to the (left) periphery before deletion occurs (Brunetti 2003 also suggests the same type of approach), as exemplified in (4).³

(4) Q: Who did she see?

A: [FP John_i F [TP she saw t_i]] (Merchant 2004: 673-675)

In this paper, I will try to show that there are arguments supporting the view that (at least some) fragments are derived through ellipsis, which I take to be phonological deletion. Merchant's (2004) arguments will be shown to be in agreement with European Portuguese (EP) data and novel arguments in the same sense will be added. I will only consider fragments in answers to questions, a case in which the fragment utterance has a clear discourse antecedent satisfying the requirements of interpretation of ellipsis. But the crucial point I will make in this paper is that the data do not support a movement analysis of all types of fragments. As a consequence, we will need to admit non-constituent deletion, which, I will argue, is not a problem for a true PF deletion account of ellipsis.

1.2. Two Types of Fragments: Type A and Type B Fragments

In order to discuss the status of fragments, I will concentrate on answers to questions and, particularly, on two types of fragments, that I will call Type A (5) and Type B (6).

(5) Q: O que é que o João comeu?
 what is that the J. ate
 'What did J. eat?'

A: O bolo. *Type A*
 the cake

³ Hankamer (1979: 238) assumes a similarity between the derivation of fragments and the derivation of stripping and, to some extent, sluicing. This is interesting, since these two ellipsis structures are often analysed as involving movement of a constituent previous to deletion (Merchant 2001, 2003 and Matos 1992 on stripping for EP). Merchant (2004) does in fact assume a similarity between stripping and the derivation of fragments – I will return to this question in section 3.2.1.



- (6) Q: O que é que o João comeu?
 what is that the J. ate
 'What did J. eat?'

A: Foi o bolo.
 was the cake

Type B

Type A fragments are verbless fragments with the form [XP]; type B fragments are always introduced by a form of the verb SER 'to be' and thus present the form [SER XP].

Type A fragments raise the classical problems associated with fragments in general: although they do not qualify as a sentence, they are interpreted as a proposition. Type B fragments are introduced by a verb, but this verb is always the verb SER "to be" and they are generally understood to have an interpretation parallel to the interpretation of a cleft. The same happens with equivalent fragments in other languages, such as French (as in 7) or Italian (see 8).⁴

- (7) Q: Quia parlé?
 who has spoken

A: C'est Jean (~~qui a parlé~~).
 it is Jean

- (8) Q: Chi ha parlato?
 who has spoken
 'Who did he speak?'

A: ?? Sono / è io/Gianni (che ho / ha parlato) (Belletti, 2005)
 Am is I Gianni 'It's me.'

⁴ Belletti (2005) argues that the answer in (8) is grammatically possible in Italian but is not preferred. According to the judgments in Belletti (2005), among answers with a pronounced verb, Italian speakers prefer an answer such as (i) to a question in (8):

- (i) Ha parlato Gianni.
 has spoken G.

According to Belletti's analysis, this preference is due to the fact that VS is available in Italian and Type B answers (reduced clefts) involve more structure than the inversion structure. EP is also a null subject language allowing for VS answers when the subject is focused. In Santos (2004) I report the results of an elicited production experiment made with 29 adult subjects and trying to elicit VS with both transitive and unaccusative verbs as answers to yes-no questions. Contrary to what we should expect according to Belletti's analysis, the results clearly show that adults prefer Type A or Type B fragment answers to fully pronounced VS answers. In the experiment, no VS answer was produced (although speakers judge it grammatical), all the answers were Type A or Type B fragments.



Thus, the problem with Type B fragments is not equivalent to the problem of Type A fragments. In the case of Type B fragments, we must decide whether they are partially deleted cleft structures or, since they always present the copula verb, identificational structures with a *pro* subject (see the structure in 9):

(9) [IP *pro*_i ser [sc *t*_i [DP *o* bolo]]]

In what follows, I will discuss the syntactic status of these two types of fragments, motivating, in first place, their analysis as the result of ellipsis and secondly, arguing against a unified syntactic analysis of the two types of fragments.

2. Evidence for an Ellipsis Analysis of Fragment Answers

As shown in section 1.1., the first level of discussion concerning fragments concerns their elliptic status. Since at least Hankamer (1979) it has been argued that fragment answers are elliptical constituents. Recently, Merchant (2004) has presented an extensive argumentation in favor of the elliptical status of fragments of Type A, which I will recall here, trying to apply it to both Type A and Type B fragments.

However, and before reviewing empirical arguments in favor of an ellipsis analysis of fragments, we should recall that there are also strong theoretical arguments against true syntactic fragments, mostly related to the design of syntactic theory. If a fragment were a true syntactic fragment, we would have to posit a very atypical structure for (10), an answer to a multiple wh- question:

(10)Q: Quem deu um presente na festa de Natal a quem?
 who gave a presents at+the party of Christmas to whom
 ‘Who gave whom a present at the Christmas party?’

A: O João à Maria.
 the J. to+the M.

As Ludlow (2005: 105) puts it, arguing that very often apparent non-sentential speech cannot be truly non-sentential, “merge is not an arbitrary operation that can be applied willy-nilly to any two grammatical elements”, something we would need to assume if the apparent fragment in (10) were generated as a true syntactic fragment. In order for the DP and the PP to co-occur in the answer to (10), they must fulfill the argument selection requirements of a predicate - there is no other way to justify an atypical structure such as [DP PP] in this case.

However, beyond theory internal arguments, there are empirical arguments supporting a sentential analysis of fragment answers. One argument that we find both in Hankamer (1979) and in Merchant (2004) concerns Case marking in fragments: when there is overt Case marking, the XP in the fragment answer exhibits the Case that it would exhibit in the full sentence. In (11) I present Merchant's example; examples in Portuguese are found in (12), for both Type A and Type B fragments.⁵

(11)Q: Whose car did you take?

A: John's. / *John. (Merchant 2004: 678)

(12)Q: A quem é que o João deu o livro?
to whom is that the J. gave the book
'Who did J. give the book?'

A: a. A mim. / *Eu. - Type A
to me I

Cf. O João deu-me o livro {a mim. / *a eu.}
the J. gave me the book to me to I

b. Foi a mim. / *Fui eu. - Type B
was to me was I

Cf. {Foi a mim / *Foi a eu} que o João deu o livro.
was to me was to I that the J. gave the book

The other source of evidence for an elliptical analysis of fragments is Binding theory. Merchant (2004) explores several connectivity effects in fragments, which he partially attributes to Morgan (1973), and shows that binding principles are obeyed in Type A fragments, in English as well as in other languages. The same happens in Portuguese.

First, there are clear Principle C effects in Type A fragments:

(13) Q: Where is he_i staying?

A: *In John's apartment.

Cf. *He_i is staying in John's apartment. (Merchant 2004: 679)

(14)Q: Onde é que ele_i fica?
where is that he stays
'Where does he stay?'

⁵ In the original presentation that resulted in the published paper by De Cat & Tsoulas (2006), we could find data showing some Case mismatches in fragments and full sentences in Greek and in Korean. However, as far as I understand it, the argument in Greek implies that the constituent in the fragment is moved to a left peripheral position. I will argue against this type of movement in fragments.



A: *Em casa do João.
in house of+the J.
'At João's.'

- Type A

Cf. *Ele_i fica em casa do João_i.
he stays at house of+the J.

If we look at the corresponding Type B fragment, we also see that the result is ungrammatical (see 15). In this case, we can understand the ungrammaticality if we assume that the fragment is derived from a cleft structure (as represented in the example) and if we admit that the clefted constituent has been extracted from an embedded domain. This explains the secondary strong crossover effect that justifies the ungrammaticality. At the same time, this suggests that Type B fragments are derived from cleft structures.

(15) Q: Onde é que ele_i fica?
Where is that he stays
'Where does he stay?'

A: *É em casa do João_i.
is in house of+the J.

- Type B

Cf. *É em casa do João_i que ele_i fica.
is at house of+the J. that he stays

Merchant (2004) shows that fragments also exhibit Principle C effects to the extent that it is required that an epithet is not co-indexed with a noun which c-commands it. The same happens in Type A and Type B fragments, as shown in (17).

(16) Q: What does John_i think?

A: *That the bastard_i is being spied on.
*John_i thinks that the bastard_i is being spied on.

(Merchant 2004: 679)

(17) Q: O que é que o João_i acha?
what is that the João_i thinks
'What does João think?'

A: a. Que o palerma_{i/k} foi acusado.
that the idiot was accused

Cf. O João_i acha que o palerma_{i/k} foi acusado.
the João thinks that the idiot was accused

b. É que o palerma_{i/k} foi acusado.
is that the idiot was accused

Cf. É que o palerma_{i/k} foi acusado que o João_i acha.
is that the idiot was accused that the J. thinks

Principle B is also respected in fragments. The only way to exclude a pronoun from the fragment answer in (18) and (19a) is to assume that this

pronoun is co-indexed with a noun in the same binding domain – and this must mean that there is more structure in the fragment than is apparent. The fact that anaphors are grammatical in the same context indicates that Principle A is satisfied, since there is a binding domain in the answer allowing the anaphor to be bound by a noun in the same domain. In (19b), the case of a Type B fragment, the pronoun is excluded from the fragment answer by Principle C, if we assume that the pronoun in the fragment is clefted and therefore extracted to a position where it c-commands the DP *o João*.

(18) Q: Who did John_i try to shave?

A: *Him_i.

*John_i tried to shave him_i.

(Merchant 2004: 680)

(19) Q: Quem é que o João_i enganou?

who is that the J. cheated

‘Who did J. cheat?’

A: a. *Ele_i. / *A ele_i. / A si mesmo_i. / A si próprio_i.

he PREP he PREP himself PREP himself

Type A

*Him. / Himself.’

Cf. O João_i enganou-se {*ele_i / *a ele_i / a si mesmo_i / a si próprio_i}.
 the J. cheated CLI he PREP he PREP himself PREP himself

João_i cheated {*him_i / himself_i}.

b. *Foi ele_i. / *Foi a ele_i. / Foi a si mesmo_i. / Foi a si próprio_i.

was he was PREP he was PREP himself was PREP himself

Type B

Cf. Foi {*ele_i / *a ele_i / a si mesmo_i. / a si próprio_i.} que o João_i enganou

was he / PREP he / PREP himself / PREP himself that the J. cheated

There are also clear Principle A effects in fragment answers, which justify the exclusion of the fragment answers in (20) and (21).

(20) Q: Who does John think Sue will invite?

A: ??Himself.

??John thinks Sue will invite himself.

(Merchant 2004: 680)

(21) Q: Quem é que o João_i acha que a Ana vai convidar?

who is that the J. thinks that the Ana will invite

‘Who does João think Ana will invite?’

A: a. *A si próprio_i / *A si mesmo_i

PREP himself PREP himself

- Type A

Cf. *O João_i acha que a Ana vai convidá-lo a si próprio / a si mesmo.

the J. thinks that the Ana will invite him PREP himself PREP himself

b. *É a si próprio_i / *É a si mesmo_i.

is PREP himself is PREP himself

- Type B



Cf. *É a si próprio que o João_i acha que a Ana vai convidar.
is PREP himself that the J. thinks that the Ana will invite

Finally, there is at least another empirically based argument supporting a sentential analysis of fragment answers: only semantically weak prepositions (those that may be inferred from the subcategorization structure of the verb) may be omitted in fragments; strong prepositions cannot be omitted. This is exactly what happens in full sentences.

(22) Q: De que é que a Rita gosta?
PREP what is that the Rita likes
'What does Rita like?'

A: a. (De) frango.
PREP chicken

b. É (de) frango.
is PREP chicken

Cf. É (de) frango que a Rita gosta.
is PREP chicken that the Rita likes

(23) Q: Com quem é que a Rita vai ao cinema?
with whom is that the Rita goes to+the cinema

A: a. Com o Pedro. / *O Pedro.
with the Pedro the Pedro

b. É com o Pedro. / *É o Pedro.
is with the Pedro is the Pedro

Cf. É *(com) o Pedro que a Rita vai ao cinema.
is with the Pedro that the Rita goes to+the cinema
'It is with Pedro that Rita goes to the movies.'

However, raising this argument also raises another problem concerning the underlying structure of Type A fragments. There is a correlation between preposition omission in fragments and in full sentences (as shown in 22 for Type B fragments), but in the case of Type A fragments this correlation is only possible with a full sentence in which the material in the fragment was left dislocated (24a vs. 24 b).

(24) a. A Rita gosta *(de) frango.
the Rita likes PREP chicken

b. (De) frango, a Rita gosta.
PREP chicken the Rita likes

This could be used as an argument supporting Merchant's (2004) analysis of (Type A) fragments: fragments are left dislocated material followed by deletion of the lower material. But there is an alternative explanation. The preposition in (24b) must be deleted at PF; it cannot be the case that it is generated as a null preposition, since its omission in its basic position is

ungrammatical, as shown in (24a). This is the position taken by Alexandre (2000) concerning the optional omission of the same prepositions in relative clauses (25a); the fact that it is not possible to delete the preposition if the PP is in its base position is shown in (25b).

- (25) a. O casaco (de) que a Maria gosta é muito caro.
the coat PREP that the M. likes is very expensive
'The coat M. likes is very expensive.'
- b. A Maria gosta do / *o casaco.
the M. likes PREP+the the coat

If these prepositions are deleted at PF, we might be led to believe that the PF deletion of the preposition in a fragment answer such as (22a) is made possible by the ellipsis (PF deletion) context generating the fragment.

In the next section, I will argue that Type A fragments are not left dislocated constituents.

3. The Underlying Structure: Problems for a Movement Analysis of All Types of Fragment Answers

3.1. Possible Underlying Structures

If we accept that fragment answers have more structure than what is pronounced, we must determine what this structure is.

Some approaches are only concerned with Type A fragments – this is the case of Merchant (2004). This type of approach, which assumes left dislocation of the material in the fragment followed by deletion of the material inside CP, has at least two advantages. First, as argued by Merchant, this analysis allows several different ellipsis structures to be unified, namely sluicing and stripping, all apparently implying movement to the left periphery and deletion of the lower material (Merchant 2001, 2003, 2004). Second, it prevents us from assuming non-constituent deletion, an explicit goal in Merchant (2004).

But there are other possibilities that we should consider. Matos (1992: 373) and Belletti (2005) assume that Type B fragments are reduced clefts and suggest that Type A fragments may be derived from Type B fragments⁶ – which is equivalent to saying that they are extremely reduced clefts. The advantages

⁶ Although Belletti (2005) does not assume that Type A fragments must *always* be derived from (reduced) clefts.

The question-answer pair in (27) is an example of a complex NP island and the one in (29) is a case of an adjunct island. The sentences in (28) and (30) show that all extractions from the island (in the context of *wh*- question or the context of a cleft) are impossible; the only case in which we obtain a grammatical structure, parallel to the Type A fragments in (27a) and (29a) are the cases in which there is no movement (28d and 30c).

- (27) Q: GANHOU O NOBEL O ESCRITOR QUE ESCREVEU O QUÊ?
won the Nobel the writer that wrote what
'*What did won the Nobel the writer who wrote?'
- A: a. O Memorial do Convento.
the Memorial do Convento
b. *??? Foi o Memorial do Convento.
was the Memorial do Convento
- (28) (28a) *O que é que ganhou o Nobel o escritor que escreveu?
what is that won the Nobel the writer who wrote
(28b) *Foi o Memorial do Convento que ganhou o Nobel o escritor que escreveu.
was the Memorial do Convento that won the Nobel the writer who wrote
(28c) *Foi o Memorial do Convento o que ganhou o Nobel o escritor que escreveu.
was the Memorial do Convento what won the Nobel the writer who wrote
(28d) GANHOU O NOBEL O ESCRITOR QUE ESCREVEU O MEMORIAL DO CONVENTO.
won the Nobel the writer who wrote the Memorial do Convento
- (29) Q: O João saiu da festa sem falar com quem?
the J. went out of+the party without speaking to whom
'*To whom João left the party without speaking?'
- A: a. Com a Maria.
with the Maria
b. *Foi com a Maria.
was with the Maria
- (30) (30a) *Com quem o João saiu da festa sem falar [-]?
to whom the J. went out of+the party without talk
(30b) *Foi com a Maria que o João saiu da festa sem falar.
was to the Maria that the J. went out of+the party without talk
(30c) O João saiu da festa sem falar com a Maria.
the J. went out of+the party without speak with the M.
'João left the party without speaking to Maria.'

Merchant (2004) uses these types of question-answer pairs to detect movement in fragments. However, since it is difficult in English to build *wh*-questions with a *wh*- *in situ* and since a question with a *wh*- moved from a



strong island would itself be ungrammatical, Merchant tests fragments in the context of multiple *wh*- questions. According to the judgments that he presents, these extractions are not possible in English and, therefore, motivate a dislocation analysis of Type A fragments:

(31) Q: Which committee member wants to hire someone who speaks which language?

A: Abby wants to hire someone who speaks Greek and Ben wants to hire someone who speaks Albanian.

*Abby Greek, and Ben Albanian. (Merchant 2003: 689)

Corresponding examples are possible in Portuguese, as in (32), even though they are hard to process.

(32) Q: Que membros da comissão científica querem contratar pessoas que falem
which members of+the committee scientific want to hire persons who speak
que línguas?
which languages

'Which committee members want to hire people who speak which languages?'

A: A Teresa russo e a Isabel japonês.
the Teresa Russian and the Isabel Japanese

'Teresa Russian and Isabel Japanese.'

Trying to test answers to *wh*- questions in islands in English, Merchant (2004) also presents another type of test involving islands: answers to implicit *wh*- questions which consist of yes-no questions with an intonation rise on a particular constituent.

(33) Q: Does Abby speak the same Balkan language that Ben speaks?

A: *No, *Charlie*.

'No, she speaks the same Balkan language that *Charlie* speaks.'

(Merchant 2004: 688)

However, the context used by Merchant is a typical context of contrastive Focus (it is a context of correction), while Type A fragment answers in EP have typically non-contrastive meaning.⁷ A Type A fragment answer must, indeed,

⁷ Soares (2006: 235-7) compares Type A and Type B fragment answers, according to the criteria in Kiss (1998), and argues that Type A are non exhaustive whereas Type B are exhaustive. She concludes that Type B answers are therefore cases of identificational Focus, which is also often associated to the property of contrastiveness. Here I take exhaustiveness to be independent of contrastiveness, in a more radical way than in kiss (1998).

be distinguished from its “contrastive Focus counterpart”: (34) shows that a Type A fragment is possible as an answer with a contrastive meaning, but only in case it receives itself a particular accent, implicating an intonation rise.

(34) Q: A Maria fala a mesma língua que O MIGUEL fala?
the M. speaks the same language that the M. speaks
‘Does Maria speak the same language as MIGUEL?’

A: *Não, a Teresa. / ?Não, A TERESA. / Não, que A TERESA (fala).
no, the Teresa no, the Teresa no, that the Teresa speaks
‘No, Teresa.’ / ‘No, TERESA.’ / ‘No, the same language as TERESA.’

All the data presented in this section suggest that Type A fragments are generated without movement, whereas movement is implied in the derivation of Type B fragments. Particularly, nothing precludes an underlying cleft structure for Type B fragments, but analyses assuming left dislocation or an underlying cleft analysis of Type A fragments are unmotivated.

On the other hand, the contrasts shown in (34) may also be understood as an additional argument in favor of Matos’ (1992) rejection of a stripping (“despojamento”) analysis of Type A fragments.

Matos (1992, 1996) assumes that stripping is a Focus structure. It would therefore be, in principle, a candidate for deriving a fragment answer (cf. Hankamer, 1979 or Laka, 1991 *apud* Matos 1992), a case in which the fragment would have been extracted and moved to a left peripheral position:

(35) mas frisou [CP que [FP [ao restaurante] [FP [F^o não] [IP _]]] [Matos, 1996: 277]
but insisted that to+the restaurant not

However, stripping is clearly associated with a contrastive reading, contrary to Type A fragments. Moreover, stripping displays island effects, as opposed to Type A fragments (see 36 and 37).

(36) *Ganhou o Nobel o escritor que escreveu o Memorial do Convento mas o
won the Nobel the writer who wrote the Memorial do Convento but the
Alexandra Alpha não [-].
Alexandra Alpha not

(37) *O João saiu da festa sem falar com a Maria mas com a
the J. went out of+the party without speak to the Maria but with the
Teresa não.
Teresa not.

There is therefore no reason to think that Type A fragments are underlying stripping structures.



3.2.2. Other restrictions on movement and left dislocation

We have showed that Type A fragments in EP do not display island effects, by looking at strong islands (complex NP island and adjunct island). We can also see that Type A fragments are not sensitive to other constraints on movement subject to crosslinguistic variation, such as subextraction. We will see that not everything that can occur in a fragment can be extracted.

In (38), the PP [*da Ana*] may occur in a Type A fragment, although it cannot be extracted. Such an extraction would create a configuration of subextraction, impossible in EP.⁸

(38) Q: A Teresa vive em casa de quem?
 the Teresa lives at house of whom
 'At whose house does Teresa live?'

A: ~~A Teresa vive em casa~~ da Ana.
 the Teresa lives at house of+the Ana
 'At Ana's apartment.'

Cf. *Da Ana, a Teresa vive em casa.
 Prep+the Ana the T. lives at house

Another type of argument supporting an *in-situ* analysis of Type A fragments concerns the different restrictions to Type A fragments and left dislocated elements. Duarte (1987: 49) has shown that negative quantifiers such as *ninguém* 'nobody' cannot be left dislocated in EP (as shown in 39); but the same negative quantifier may occur in a Type A fragment (see 40).⁹

⁸ (Wh-) subextraction is typically characterized as the extraction of a (wh-) determiner without pied-piping the NP. It is possible in some languages, such as French (see i.), but not in EP. The possessor PP in the EP example in (38) may indeed be merged in a position to the left of *a Teresa* (see Miguel, 2004), and the impossibility of extraction of the PP [*da Ana*] may be explained as a Left Branch violation / subextraction. See Postma (1997) and references therein on the syntactic analysis of possession.

(i) Combien as-tu acheté de livres?
 how-many have-you bought of books
 "How many books have you bought?"

⁹ Merchant (2004) presented data from English that seems to go in the opposite direction: English *any* NPIs (e.g. *anything*) that cannot be left-dislocated cannot appear as fragment answers.

- (39) *Ninguém, a Marisa (não) viu.
 no one the Marisa NEG saw
 'Marisa saw no one.'
- (40) Q: Quem é que a Marisa viu?
 who is that the Marisa saw
 'Who did Marisa see?'
 A: Ninguém.
 no one

3.2.3. A Language Acquisition View

The last source of evidence that I will use to discuss the nature of fragments is language acquisition. This will also allow me to discuss the nature of fragments in child language. Here I will use Santos' (2006 / 2009) corpus (information on the corpus is presented in table 1).

The analysis of Type A and Type B fragments will be based in a sub-corpus (data from two of the children, Inês and Tomás, who are earlier speakers than Inês M.). I will return later to Inês M. data.

Child	Age range	Number of files	MLUw
Inês	1;6.6-3;11.12	21	1.5 - 3.8
Tomás	1;6.18-2;9.7	16	1.3 - 2.9
InêsM.	1;5.9 - 2;7.24	15	1.3 - 2.4

Table 1 – Data from Santos' (2006)

The first type of observation that child language data allow concerns a mismatch between the emergence of Type A and Type B fragments: table 2 presents the number of Type A fragments in the first recording session; table 3 presents the point of emergence of first type B fragments.

Inês 1;6.6	Tomás 1;6.18
86 cases	98 cases

Table 2 – Type A fragments in the first recording session

Inês	Tomás
1;9.19 – 1 case	1;9.14 – 5 cases

Table 3 – First Type B fragments

The mismatch between the emergence of first Type A and Type B fragments suggests that they have different structures and is therefore an argument against the idea that Type A fragments may be underlying Type B fragments (i.e. extremely reduced clefts).



Note that, in table 3, only Type B fragments allowing a reduced cleft reading (true Type B fragments) were considered; other structures with the format BE XP were excluded.¹⁰ The contrast is illustrated in (41) and (42): while in (41) the verb SER 'BE' does not occur in the question and the answer must be interpreted as a reduced cleft, in (42) it is possible to interpret the answer as a full sentence with a null subject.

(41) Type B fragment

*MAE: olha # quem pôs os ursos lá em cima # Tás?
 look who put the bears there up T.
 'Who put the teddy bears up there?'

*TOM: foi # papá.
 was daddy

Tomás 1;9.14

(= Foi o papá [/] que pôs os ursos lá em cima
 was the daddy that put the bears there up

= Quem pôs os ursos lá em cima foi o papá.
 who put the bears there up was the daddy

'It was daddy who put the bears up there.')

(42) BE XP

*MAE: isto o que é?
 this what is
 'What is this?'

*INI: é o ga(rfo).
 is the fork
 'That's the fork.'

Inês 1;6.6

(= Isto é o garfo
 that is the fork)

Answers with the structure BE XP occur earlier than Type B fragments. We will return to this.

Language acquisition data also constitute further relevant evidence to the discussion of the structure of Type A fragments. Merchant (2004) suggests that the material in Type A fragments is left dislocated (deletion of lower material would follow the dislocation). This could make us expect that first Type A fragments emerge at the same time left dislocations do. However, Abalada (2009), who looked at the production of Tomás (table 1), shows that left dislocated elements are absent from children's speech at least in the first three files (1;6.18 to 1;8.16).¹¹ This contrasts with the child's ability to produce left

¹⁰ Repetitions were also excluded.

¹¹ MLUw is > 1 (between 1.3 and 1.4).



Moreover, the analysis put forward in Santos (2004) implicitly assumes that the first Type B fragments have the same structure as BE XP structures and this would predict no time mismatch in the emergence of BE XP and Type B fragments. However, table 4 shows this type of mismatch. In this case, it would be difficult to explain why Type B fragments with a cleft reading are not produced as early as BE XP structures.¹³

We are therefore left with the idea that Type B fragments may actually be reduced clefts in child as well as in adult production, even though their emergence and the emergence of clefts do not co-occur. The same type of mismatch was already identified between first VP ellipsis and first correspondent fully pronounced VPs (Santos 2006 / 2009). In this case, it was suggested that production of an elided structure (if possible in the target grammar) is probably easier for the child immature processing system than the production of the fully pronounced structure. Moreover, in the case of early VP ellipsis as well as in the case of Type B fragments / reduced clefts, we should not assume that the structure projected and not pronounced is necessarily adult-like – it does not need to be. In fact, we do find in early data cases of proto-clefts, structures similar to clefts and with an apparent interpretation of clefts but typically without an overt complementizer. The following case is the case of a proto-cleft produced by the third child in Santos (2006) corpus: Inês M. (1;5.9-2;7.24). This child produces this proto-cleft at 1;10 even though her first adult-like cleft structure occurs at 2;3.22.

- (45) *ALS: Inês # é a Mafalda # que vai papar iogurte ?
 Inês is the Mafalda who goes eat yogurt
 'Inês, is it Mafalda who will eat yogurt?'
- *INM: hã@i [?] .
- *ALS: é a Mafalda ?
 is the Mafalda
 'Is it Mafalda?'
- *ALS: a Mafalda papa iogurte ?
 the Mafalda eats yogurt
 'Does Mafalda eat yogurt?'
- *INM: não # é a Inê(s) dá [?] .
 no is the Inês gives
 'It is Inês who gives it to her' (lit. 'It is Inês gives.') Inês M. 1;10.16

¹³ In Soares' (2006) data, the younger child (Marta, 1;2.0-2;2.17) does not produce Type B fragments until 2;0.26, confirming their late emergence.

Proto-clefts are also produced by the two other children studied here (Inês and Tomás), even after having started to produce adult-like clefts (see the example in 46). Proto-clefts have also been found in the acquisition of other languages, namely French (De Cat, 2002: 293-4).

- (46) *INI: eu é so(u) e(m)p(r)egada . Inês 2;7.16
I is am employee
'I am the employee.'

Summing up, language acquisition data give us an argument to say that Type A and Type B fragments have different underlying structures. It also gives us arguments against a left dislocation analysis of early Type A fragments. The facts are less clear in the case of Type B fragments, but the mismatch between BE XP structures and early Type B fragments may support the idea that early Type B fragments are reduced (elided) clefts or proto-clefts.

4. Structure and Interpretation: On the Underlying Structure of Fragments

Up to this point, we have suggested that (i) Type B fragments are underlying cleft structures and (ii) Type A fragments do not involve leftward movement of the constituent not deleted. This leaves us with new problems concerning the specific structure proposed for fragments: in the case of Type B fragments, it should be determined the type of cleft structure that may be the underlying structure; in the case of Type A fragments, we must determine which is their underlying structure.

Previous work on this issue has assumed that Type B fragments are reduced clefts (Beletti 2005, Soares 2006). However, if we take the distinction between information Focus and identificational (quantificational) Focus (Kiss, 1998), Type B fragments occur in a typical context of information Focus (new information is presented in the context of an answer to a question), even though clefts are typical contexts of identificational Focus. I therefore intend to show that not all clefts necessarily have the obligatory contrastive reading Kiss (1998) associates with quantificational Focus and that some of them may indeed occur as answers to yes-no questions. This is shown by the acceptability of the different types of clefts in the context of an answer to the question in (47): clefts and wh- clefts are possible in this context, whereas inverted 'é que' pseudo-clefts, basic semi-pseudo-clefts and basic pseudo-clefts are not.

- (47) Q: O que é que a Teresa comprou?
what is that the Teresa bought
'What did Teresa buy?'



- A: a. Foi *um vestido* que ela comprou. - *cleft*
 was a dress that she bought
- b. Foi *um vestido* o que ela comprou. - *wh- cleft*
 was a dress what she bought
- c. # *Um vestido é* que ela comprou. - Inverted 'é que' pseudo-cleft
 a dress is that she bought
- d. # Ela comprou foi *um vestido*. - Basic semi-pseudo-cleft
 she bought was a dress
- e. # O que ela comprou foi *um vestido*. - Basic pseudo-cleft
 what she bought was a dress

On the contrary, the same clefts that cannot be used as answers to wh-questions may occur in contexts of correction, such as the one in (48).

- (48) Q: A Teresa comprou um vestido?
 the Teresa bought a dress
 'Did Teresa buy a dress?'
- A: a. *Uma saia é* que ela comprou. - Inverted 'é que' pseudo-cleft
 b. Ela comprou foi *uma saia*. - Basic semi-pseudo-cleft
 c. O que ela comprou foi *uma saia*. - Basic pseudo-cleft

We can therefore assume that the type of clefts that can answer a Wh-question may be the underlying structure of a Type B fragment.

Let us now look at Type A fragments. In previous work (Santos 2004), I have suggested, along the lines of Matos (2003), that Type A fragments are underlying V XP structures. This means that, when a subject is the constituent in a Type A fragment, the underlying structure should be VS. The reasoning was the following: Type A fragments occur in information focus contexts, such as answers to wh- questions, a context of Focus in-situ in EP (see the answers to a yes no-question in 49); therefore, Type A fragments should derive from focus in-situ, which are V XP structures, namely VS structures.

- (49) Q: Quem é que comprou um vestido?
- A: a. A Teresa.
 b. Comprou a Teresa.
 c. # A Teresa comprou.

However, there is a problem with this type of reasoning: the reason why VS structures (and all V XP Focus in-situ structures) are derived is to satisfy the syntax – phonology interface. The focused material must be the most prominent



in phonological terms and this means, if we accept Cinque's 1993 system, for instance, that focused material must be in the most embedded position in the clause. This explains why the subject does not raise when it is focused (see Costa 1998). Now, let us look again at Type A fragments: in this case, only the focused material (the fragment) is phonologically overt, it is the only prominent material, everything else was deleted, precisely because it was Given, if we assume that ellipsis applies to given material¹⁴. Therefore, in the case of fragments such as (49a), there is no reason to assume that a VS structure must be derived prior to deletion: deletion itself solves the syntax / phonology / information structure problem. I will then conclude that it is irrelevant to decide between a SV or a VS structure for a fragment such as (49a).

Nevertheless, this discussion raised an important point: if we accept that ellipsis is phonological deletion and that what may be deleted is determined by the Information Structure / Semantics component (it is semantically determined, according to Merchant, 2001), this must have consequences for our view of restrictions on ellipsis.

5. A Final Note on Non-Constituent Ellipsis

It is now the moment to come back to the problem defined at the beginning of this paper: the problem of non-constituent ellipsis. By claiming that Type A fragments are derived without leftward movement of the fragment, I have assumed that material that is not a constituent in syntax may be deleted (see the case in 50).

- (50) Q: A Teresa vive em casa de quem?
the Teresa lives at house of whom
'At whose house does Teresa live?'
- A: ~~A Teresa vive em casa~~ da Ana.
the Teresa lives at house of+the Ana
'At Ana's apartment.'

The idea of non-constituent ellipsis is in general difficult to accept, as shown by Merchant (2004). One clear motivation to argue for leftward movement of the fragment prior to ellipsis is indeed to avoid non-constituent

¹⁴ More precisely, e-Given, if we accept Merchant's (2001) system.



ellipsis. At first sight, non-constituent deletion may seem a problem in a theory such as Merchant's theory, which maintains that ellipsis (all types of ellipsis) are licensed by a feature E in a node c-commanding the elided material – this feature instructs phonology to delete the c-commanding material when the identification conditions on ellipsis are met (the c-commanded material must be recoverable from previous discourse in particular semantic conditions).

Nevertheless, I would like to suggest here that non-constituent ellipsis is not a true problem for such a theory of ellipsis, which understands ellipsis as phonological reduction / deletion. In fact, non-constituent ellipsis should only be a problem if ellipsis was understood as syntactic deletion (e.g. Hankamer, 1979). If deletion affects syntactic nodes, then we should expect that a syntactic node and everything it contains is deleted. On the contrary, if deletion is phonological deletion, it operates after syntax and it does not need in theory to be restricted to syntactic constituents.¹⁵

Notice however that this does not necessarily mean that ellipsis is syntactically unconstrained. It is well-known that most cases of ellipsis are clearly syntactically constrained. If we take the case of VP ellipsis, for instance, we know that it can only occur if there is V-to-I movement (see the contrast between main verbs and auxiliaries in English, main verbs do not license VP ellipsis whereas auxiliaries do) and also in languages that allow this type of ellipsis (the parametric variation concerning the possibility of VP ellipsis may be seen as the existence of a feature E in T in the language, if we adopt Merchant's 2001 system).

Furthermore, the claim I am making here does not mean that the particular type of ellipsis that generates fragments is necessarily syntactically unconstrained, although it seems to be less syntactically constrained than other types of ellipsis.

At first sight, we might think that the phonology – semantics / information structure interface could account for fragment answers: Given (or,

¹⁵ Work on phonology has sufficiently shown that there is no complete isomorphism between syntactic structure and prosodic structure (see Viana, 1987 on EP, for instance).

better, e-Given¹⁶) material would end up not being pronounced. However, this hypothesis cannot account for the contrast in (51):

(51) Q: O que é que a Amélia comprou na Baixa no sábado?
what is that the A. bought in+the B. on+the Saturday
'What did Amélia buy at Baixa on Saturday?'

A: a. Acho que uma t-shirt.
think that a t-shirt
'I think she bought a t-shirt.'

(= Acho que a Amélia comprou na Baixa no sábado uma t-shirt.)

b. *Acho uma t-shirt.
think a t-shirt

There is no way for phonology or for semantics / information structure to determine that the complementizer cannot be deleted. I therefore suggest that we still need a mechanism licensing fragments in syntax similar to the mechanism suggested by Merchant (2001) for sluicing or also VP ellipsis. We need a feature E in a particular node licensing ellipsis and telling phonology not to pronounce what is e-Given in its complement. The fact that the feature does not instruct phonology not to pronounce the (entire) complement but only the e-Given material in the complement solves the problem of non-constituent deletion. If this feature occurs in a high node (the root node) in each clause (let us assume it is C) and if the complementizer *que* fills in C in the embedded clause in (51), we can therefore explain the fact that *que* is not deleted: only the material in its complement is deleted. We therefore achieve a certain homogeneity of treatment between fragments and other types of ellipsis, such as sluicing: in sluicing, an E feature in C licenses the deletion of the complement of C, leaving the wh- element, in Spec, C, overtly realized.¹⁷

The same type of analysis may account for reduced clefts. If we assume the analysis suggested by Soares (2006), repeated here as (52), we can think that the node hosting the clefted material in its specifier position has the feature E.

¹⁶ See Merchant (2001).

¹⁷ This does not necessarily mean that children must project C in order to produce Type A fragments. Children may instantiate the feature E licensing this type of fragments in the higher node in their clause.



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