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Title French adverbial clauses, rescue by ellipsis and the truncation versus intervention debate

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In: Probus

Publisher:

pages

DOI [10.1515/probus-2013-0018](https://doi.org/10.1515/probus-2013-0018) Probus 2014

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French adverbial clauses, rescue by ellipsis and the truncation versus intervention debate¹

Abstract: This paper investigates the restrictions on movement to the left periphery found in non-root environments such as French central adverbial clauses and argues that an analysis of main clause phenomena based on intervention/Relativized Minimality is to be preferred to one based on structural truncation. The empirical basis for this claim consists of an examination of some asymmetries between French infinitival TP ellipsis and infinitival TP Topicalization. Adopting Authier's (2011) approach to TP ellipsis whereby the to-be-elided TP undergoes fronting in the computational component but fails to be spelled out at PF, we argue that these asymmetries follow from the fact that in French, while a spelled out fronted TP is an intervener for *wh*-movement in adverbial clauses, leading to a PF crash, the ellipsis of this fronted TP leads to a convergent derivation via Bošković's (2011) mechanism of "rescue by PF deletion." This account entails that adverbial clauses involve *wh*-

¹ We gratefully acknowledge the comments and suggestions made by two anonymous Probus reviewers and Jairo Nunes on a previous draft of this article. We also wish to thank for their input the audience at the September 2012 Meeting of the Linguistics Association of Great Britain hosted by the University of Salford, Manchester, as well as the audience at the 31st West Coast Conference on Formal Linguistics hosted by Arizona State University in February 2013. We are, naturally enough, solely responsible for any remaining errors. This research was supported in part by Odysseus grant #G091409 awarded to Liliane Haegeman by the Fonds Wetenschappelijk Onderzoek - Flanders.

movement (Haegeman 2006, among others) and that the landing site for TP Topicalization is available in a non-root environment, two conclusions that militate against the hypothesis that non-root clauses have an impoverished left periphery.

Keywords: ellipsis, intervention effects, left periphery, main clause phenomena, PF deletion, truncation

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1 Introduction

In this paper, we consider the restrictions on movement to the left periphery found in non-root environments. This phenomenon has received two distinct syntactic analyses, one relying on structural truncation, the other on locality conditions on movement that ascribe the ungrammaticality of left peripheral phenomena in certain syntactic environments to intervention effects. So far, the literature has focused mainly on English data. Here, we will focus on the restrictions on movement found in the left periphery in French adverbial clauses, and we will argue for an intervention account and against a truncation account of these restrictions. Our conclusions extend to non-root contexts in general.

The core argumentation of our paper is based on an examination of some asymmetries between French infinitival TP ellipsis (aka French modal ellipsis) and

infinitival TP Topicalization in adverbial clauses. We adopt Authier's (2011) approach to TP ellipsis whereby the to-be-elided TP undergoes Topicalization but fails to be spelled out at PF and show that the observed asymmetries between infinitival TP ellipsis and infinitival TP Topicalisation follow from the fact that in French, while a spelled out fronted TP is an intervener for *wh*-movement in adverbial clauses, leading to a PF crash, the ellipsis of the fronted TP allows the derivation to converge via Bošković's (2011) "rescue by PF deletion" mechanism. We then argue that this account of the asymmetry between TP fronting and TP ellipsis implies that (a) adverbial clauses are derived by *wh*-movement (Haegeman 2006 among others) and (b) the landing site for TP Topicalization is available in a non-root environment, two assumptions that militate against a structural truncation account of non-root clauses.

The paper is organized as follows. In section 2, we discuss French PP and TP Topicalization and contrast these with other left peripheral phenomena such as with Hanging Topic Left Dislocations and Clitic Left Dislocations. Section 3 introduces some data that are crucial to the intervention versus truncation controversy concerning the restrictions on movement to the left periphery found in non-root environments. It also discusses in some detail how the two approaches fare with respect to these data. In section 4, we take a closer look at French TP Topicalization and French TP ellipsis and the asymmetries found between them in adverbial clauses. We then show how these asymmetries can be accounted for via Authier's (2011) movement analysis of TP ellipsis combined with Bošković's (2011) theory of 'rescue by PF deletion.' Finally, in section 5, we assess the consequences of this treatment with regard to the truncation versus intervention debate and conclude that while an intervention account

of adverbial clauses dovetails nicely with the analysis of TP ellipsis discussed in section 4, a truncation account can only be maintained if several additional assumptions are made that, at this point in time, have yet to be independently motivated.

2 French left-peripheral arguments and main clause phenomena

It has been known since the seminal works of Emonds (1970, 1976) and Hooper and Thompson (1973:495) that English central adverbial clauses (in the sense of Haegeman (2003a) and later work) disallow so-called ‘root transformations’ (Emonds 1970), more recently referred to as ‘main clause phenomena’ (MCP). The examples in (1) illustrate this restriction: (1a) exemplifies Directional Adverb Preposing, (1b), Negative Constituent Preposing, and (1c) Topicalization.

- (1) a. *When in came the bride and groom, everyone cheered.
 b. *When seldom did her husband bring her flowers, Angie was sad.
 c. * When this book, I read, I just felt empowered.

Whether or not similar restrictions are found in the grammar of French may, at first blush, seem difficult to determine since Directional Adverb Preposing and Negative Constituent Preposing are unavailable in that language and left-dislocated arguments are generally resumed by a coreferential nominal expression, be it a clitic (2a-c), a strong pronoun (2d), a demonstrative pronoun (2e), or an anaphoric epithet (2f).

- (2) a. *Paul, je ne le vois plus.*
 Paul I NEG him see no-more
 ‘I don't see Paul any more.’

- b. *Peureuse, elle ne l'a jamais été.*
 timorous she NEG it-has never been
 'She's never been timorous.'
- c. *De ma fille, j'en suis fier.*
 of my daughter I-of-her am proud
 'I'm proud of my daughter.'
- d. *Ce marchand, je n'ai pas confiance en lui.*
 this seller I NEG-have not trust in him
 'I don't trust this seller.'
- e. *[PRO partir], c'est [PRO mourir un peu].*
 to-leave it-is to-die a little
 'To leave is to die a little.'
- f. *Alphonse, je n'aime pas cette petite crapule.*
 Alphonse I NEG-like not that little scum
 'Alphonse, I don't like that piece of scum.'

Since Cinque (1977), it has generally (though not universally) been assumed in the literature that the cases in (2) illustrate two distinct phenomena: Hanging Topic Left Dislocation (HTLD) and Clitic Left Dislocation (CLLD). The differences between the two constructions most commonly reported to hold for French are the following: (a) While a DP/NP can be the left-peripheral phrase in both HTLD and CLLD, left-peripheral PPs (and possibly all XPs except DP/NP) can only partake in CLLD constructions; (b) While the resumptive element in HTLD can be a tonic pronoun, a clitic or an anaphoric epithet, it can only be a clitic/weak pronoun in CLLD; (c) The relation between the left-peripheral phrase and the resumptive element is sensitive to

island constraints in CLLD, but not in HTLD. Criterion (b) clearly identifies (2d) and (2f) as instances of HTLD. According to criterion (a), the examples in (2a-c) and (2e) are instances of CLLD. As for criterion (c), it is based on paradigms such as that in (3) (due to Fradin 1988:43), which shows that it is much easier for a HTLD dependency to apply across an island boundary (symbolized by []) than it is for its CLLD counterpart.

(3) a. *Marie/*A Marie, la femme [qui lui a parlé] m'agace.*

Marie/to Marie the woman who to-her has spoken me-annoys

‘The woman who spoke to Marie annoys me.’

b. *Le toit/*Sur le toit, on a mesuré la vitesse*

the roof/on the roof we have measured the speed

[avec laquelle il y grimpe].

with which he there climbs

‘We measured the speed with which he climbs the roof.’

Contrasts of the type in (3) have led many in the literature to conclude that, unlike HTLD, CLLD is derived by movement to the left periphery² (see Cinque 1977, Kayne

² Jiménez-Fernández and Miyagawa (2013) account for the availability of CLLD in domains that are not compatible with MCP by claiming that in Spanish the CLLDed constituent targets SpecTP (see also Zubizarreta 1998:100), and hence does not end up in the left periphery. Whatever the merits of their proposal for Spanish, this analysis does not extend to French. For instance, as shown by Rizzi (1997), while control clauses are (perhaps marginally) compatible with CLLD, clauses that are complements to raising verbs are not. Since Spec,TP remains available in the raising domain, this contrast is unexpected.

1994, Iatridou 1995, Cecchetto 1999, Cardinaletti 2002 and Belletti 2005, among many others). This conclusion, however, has been challenged by Zribi-Hertz (1984), Cinque (1990), Frascarelli (2004), Frascarelli and Hinterhölzl (2007), De Cat (2007), and Ledgeway (2010), among others. First, as Ledgeway (2010:290) points out, the only way to accommodate the idea that CLLD dislocates move to the left periphery via internal Merge is to assume, as is frequently proposed in many analyses of clitic doubling structures, that the CLLDed PP and its doubling clitic are first merged in argument position as part of the same phrasal projection and that subsequent raising via a combination of XP and X⁰ movements yields the observed CLLD word order. This, however, leaves us with the onerous task of explaining why French uses a clitic doubling strategy in CLLD when clitic doubling is not independently attested in that language. Second, as De Cat points out, there are grammatical cases of CLLD involving a left-peripheral PP linked to a resumptive element inside an island, for example, those in (4).

- (4) a. *Elle est en train de lire les Contes des Mille et Une Nuits aux*
 she is in process of to-read the Arabian Nights Tales to-the
plus grands. Aux petits, je sais pas [ce qu'elle leur lit.]
 more old to-the little-ones I know not that which-she to-them read

-
- (i) a. ??Je pense, ton livre, pouvoir le comprendre
 I think, your book, to-be-able it to-understand
 b. *Marie semble, ton livre, pouvoir le comprendre.
 Marie seems, your book, to-be-able it to-understand

For additional arguments against such an approach from Italian, see Rizzi (1997:309) and Cardinaletti (2009).

‘She's reading the Arabian Nights Tales to the older ones. I don't know what she's reading the little ones.’

(De Cat 2007:530)

b. *Tous les politiciens parlent du mariage gay, mais de la situation*

all the politicians talk of-the marriage gay but of the situation

économique, il y en a pas beaucoup [qui en parlent].

economic there of-them has not a lot who of-it talk

‘Every politician talks about gay marriage, but there aren't a lot of them that talk about the state of the economy.’

Minimally, the existence of grammatical sentences like (4) indicates that the facts concerning the sensitivity of CLLD to islands are not clear-cut. It can also be interpreted to mean that perhaps some semantic/pragmatic factors are at play since while (3) and (4) appear to be syntactically similar, only (4) involves a topic that creates an oppositional pair with respect to another topic. Given this, it seems worthwhile to seek other types of evidence that may shed some light on the question of whether or not CLLD involving left-peripheral PPs in French is derived by movement. One such type of evidence has to do with the absence of reconstruction effects for Principle C in CLLD illustrated in (5a).

(5) a. *De mes exploits aux côtés de François, tout le monde sait*

of my exploits at-the sides of François all the people know

que le salaud_i n'en parle jamais.

that the bastard NEG-of-it talks never

b. **Tout le monde sait que le salaud_i ne parle jamais de*

all the people know that the bastard NEG talks never of

mes exploits aux côtés de François.

my exploits at-the sides of François

‘Everyone knows that the bastard never talks about my exploits
in the company of François.’

While in (5a), *François* in the left-peripheral PP can be understood as being coreferential with the subject *le salaud* ‘the bastard’ in the embedded clause, merging the relevant PP in argument position, as in (5b), has the effect of making this interpretation unavailable, due to the fact that it induces a Principle C effect. This suggests that CLLD does not involve reconstruction, a fact that immediately follows if CLLD dislocates undergo external Merge directly in the left periphery. A second, perhaps even stronger argument against a movement derivation of CLLD can be adduced by comparing CLLD involving a PP to another type of PP fronting, one which does not involve clitic resumption. This latter type, to which we will refer as PP Topicalization, is illustrated in (6).

- (6) a. *Marie a réuni les élèves. Aux filles, elle a donné des exercices*
Marie has gathered the students to-the girls she has given some exercises
d’algèbre [e]. Aux garçons, elle a dicté un problème de géométrie [e].
of-algebra to-the boys she has dictated a problem of geometry
‘Marie gathered the students. To the girls, she gave algebra exercises.
To the boys, she dictated a geometry problem.’

Delais-Roussarie, Doetjes and Sleeman (2004:512)

- b. *De tout cela, Sofia ne pouvait plus se passer [e].*
of all that Sofia NEG could no-more to-do-without
‘All of those things, Sofia could no longer do without.’

Sabio (1995:111)

The examples in (6) involve fronting of an argument PP that corresponds to a gap in the position in which the same PP would normally appear, were it not fronted. What is interesting about this construction is that, unlike CLLD, it *consistently* obeys island constraints. Thus, contrastive pairs such as those in (7) can be found that suggest that clitic-resumed left-peripheral PPs are not derived by movement (7a), but non-clitic-resumed ones are (7b).

(7) a. *De la situation économique, il y en a pas*
of the situation economic there of-them has not
beaucoup [qui en parlent].

a-lot who of-it talk

b. **De la situation économique, il y en a pas*
of the situation economic there of-them has not
beaucoup [qui parlent [e]].

a-lot who talk

‘There aren't a lot of them who talk about the state of the economy.’

Additionally, contrastive pairs that point in the same direction can be constructed that involve pronominal binding by a quantifier. It is standardly assumed that a quantifier can only bind a pronoun if the former c-commands the latter from an A position (cf. Heim and Kratzer 1998). The range of available interpretations for pairs like (8), symbolized by the indices in parentheses, therefore suggests that non-clitic resumed left-peripheral PPs are first-merged in argument position (8a), while their clitic-resumed counterparts are not (8b).

(8) a. *A son_i auteur, j'ai renvoyé [chaque manuscrit]_j [e]_i.* (i = j, i ≠ j)

to its author I-have returned every manuscript

- b. *A son_i auteur, je lui ai renvoyé [chaque manuscrit]_j. (i ≠ j)*

to its author I to-him have returned every manuscript

‘I returned every manuscript to its author.’

We will therefore assume, in the remainder of this paper, that French PP Topicalization (and French TP Topicalization, as we will argue below) involve internal Merge in the left periphery while French HTLD and CLLD are instances of external Merge in the same domain. This conclusion raises the question of why two syntactic derivations (CLLD and Topicalization) are available in French for PP topics. An observation that we believe is key to answering this question is made in Kerleroux and Marandin (2001) and Delais-Roussarie et al (2004). These authors point out that while PP Topicalization in French is typically used to shift from a simple topic to a layered one, this context excludes CLLD. They illustrate this distinction with paradigms like (9).

- (9) *Marie a réuni les élèves. Aux filles, elle (*leur) a donné des
exercices d'algèbre. Aux garçons, elle (*leur) a dicté un problème
de géométrie.*

of geometry

‘Marie gathered the students. To the girls, she gave algebra exercises. To the boys, she dictated a geometry problem.’

Delais-Roussarie et al (2004) describe the context in (9) as one that reshapes the discourse topic *les élèves* ‘the students’ found in the first sentence. They suggest that

the dislocates *aux filles* ‘to the girls’ and *aux garçons* ‘to the boys’ in the second and third sentences embody a shift from this simple topic to a layered one and that this function can be syntactically encoded via PP Topicalization but not PP CLLD.

The semantic characterization of PP Topicalization summarized above corresponds in the literature on information structure to Krifka’s (2007) notion of “contrastive topic.” Krifka regards contrastive topics as constituents endowed with a focus feature, where being endowed with a focus feature means to stand in the paradigmatic relation of contrast with respect to some alternative value from the discourse environment. According to him, contrastive topics are constituents whose denotations break down a topic into sub-topics (function of “addressation”), so that relevant comments can be made about these sub-topics (function of “delimitation”). What is of interest, for our purposes, is that a French PP that undergoes (internal Merge) Topicalization can be seen as being endowed with a morphosyntactic focus feature and as such, would be classified as an instance of the superfeature “operator” in Rizzi’s (2004) characterization of those superfeatures that enter into the computation of Relativized Minimality. CLLDed PPs, on the other hand, can be regarded as instances of the superfeature ‘topic’ since they are inherent topics in the sense of Reinhart (1981) and denote salient entities in the discourse that need not be contrastive (although nothing prevents them from being pragmatically contrasted with other entities). We thus conclude that the two syntactic derivations available for French PP dislocates (Topicalization and CLLD) are further distinguished by the features associated with them: Topicalized PPs are “operators” in the sense of Rizzi (2004) while CLLDed PPs are “topics” also in the sense of Rizzi (2004).

Given these distinctions, it is hardly surprising that PP Topicalization and PP CLLD exhibit divergent behaviors in central adverbial clauses.³ As illustrated in (10), while left-peripheral PP argument in CLLD constructions can be found in central adverbial clauses, Topicalized PPs are excluded in the same context.

- (10) a. *Quand à Fred, tu *(lui) casses les pieds, il te*
 when to Fred you (to-him) break the feet he to-you
tourne le dos.
 turn the back
 ‘When you get on Fred’s nerves, he just walks away.’
- b. *Quand de ses problèmes, on n’*(en) parle à personne,*
 when of one’s problems one NEG (of-them) speak to no one
ils semblent insurmontables.
 they seem insurmountable
 ‘When you don’t talk to anyone about your problems, they seem insurmountable.’

The paradigm in (10) is, in fact, part of a much wider phenomenon. That is, the class of non-root contexts that allow Topicalized PPs corresponds to that delimited by the traditional classification of “embedded root clauses.” The class of non-root contexts that allows CLLD involving PPs, on the other hand, is much wider. For example, CLLDed PPs, unlike Topicalized PPs, are compatible with (at least some) relatives (11a), as well as with clauses that are not assertive (11b).

- (11) a. *Achète-moi ce qu’à Marie, tu allais *(lui) acheter.*

³ For similar observations concerning Italian see Garzonio (2008).

buy-me that which-to Marie you were-going her to-buy

‘Buy me what you were going to buy Marie.’

b. *Et si à Paul, on *(lui) envoyait une carte,*

and if to Paul we (to-him) sent a card

tu crois qu’il serait content?

you think that-he would-be happy

‘And if we sent Paul a card, do you think he’d be happy?’

Having established the fact that, unlike CLLDed PPs, Topicalized PPs (a) are derived by movement and (b) belong to the class of MCP, we now turn to a second instance of English-style Topicalization in French discussed in Authier (2011:198). The phenomenon in question involves infinitival complement clauses that can appear in a left-peripheral position and be directly linked to a gap when they are selected by predicates that encode modality such as *pouvoir* ‘be able,’ *devoir* ‘must/should,’ *vouloir* ‘want,’ *falloir* ‘be necessary,’ and *avoir le droit* ‘be allowed.’ Examples are given in (12).^{4,5}

⁴ The astute reader will have noticed that in (12a), the fronted infinitival lacks the overt ‘subordinator’ *de* ‘of’ that introduces its unfronted counterpart in (i).

(i) *On a le droit [de PRO fumer sur la terrasse].*

one has the right of to-smoke on the terrace

‘You’re allowed to smoke on the terrace.’

Not first this phenomenon is not specific to fronted infinitivals since sentential subjects of psychological predicates are subject to the same constraint, as the paradigm in (ii) illustrates.

(ii) a. *Il m'ennuierait [de PRO fumer sur la terrasse].*

it me-would-annoy of to-smoke on the terrace

b. *[PRO fumer sur la terrasse] m'ennuierait.*

to-smoke on the terrace me-would-annoy

‘To smoke on the terrace would annoy me.’

Second, Nunes (2008, 2010) shows that the contrast between in situ and moved infinitival complement clauses with respect to the presence of *de* is also found in Brazilian Portuguese (BP) and correlates in that language with whether or not subject raising out of the inflected infinitival (a.k.a. hyper-raising) is allowed. Specifically, in BP, while hyper-raising requires *de* to precede the infinitival clause in which it originates (iii), the same infinitival clause can only move to the matrix subject position if it is not introduced by *de* (iv).

(iii) a. *É difícil [(d)esses professores elogiarem alguém].*

is difficult of-these teachers praise.3PL someone

b. *Esses professores_i são difíceis [*(de) [t_i elogiarem alguém]].*

these teachers are difficult of praise.3PL someone

‘These teachers rarely praise someone.’

(iv) *[(*D)esses professores elogiarem alguém]_i é difícil t_i.*

of-these teachers praise.3PL someone is difficult

‘These teachers rarely praise someone.’

Nunes puts forth an analysis aimed at capturing this correlation. He first assumes that in BP, *de* is the morphological realization of inherent Case. Second, given that in BP, both the infinitival complement and its overt subject can potentially raise to the matrix

subject position, potential movement of the former blocks potential movement of the latter, as they instantiate an A-over-A configuration. However, if *de* is present, the infinitival receives inherent Case and is no longer eligible for A-movement and this allows the raising of its subject, provided, of course, that the infinitival T be only specified for number, as is arguably the case in BP. While French does not allow hyper-raising, the claim made by Nunes that if an infinitival receives inherent Case from *de*, it becomes inactive for the purposes of A-movement could be used to account for the French paradigm in (12a), (i) and (ii).

⁵ A reviewer asks whether the class of predicates that license this phenomenon should include *aimer* ‘to like/love’ and *adorer* ‘to love/adore’ given the grammaticality of examples like (i).

(i) *[PRO rouler la nuit], j'aime pas.*

to-roll the night I-like not

‘I don't like to drive at night.’

The example in (i) is, in fact, part of a larger phenomenon, discussed in some detail in Sabio (1995:134-135), whereby a small class of predicates involving verbs of appreciation (e.g., *aimer* ‘to like/love,’ *détester* ‘to hate,’ *ne pas supporter* ‘can't stand/bear’) as well as verbs of knowledge (e.g., *connaître/savoir* ‘to know’) allow the fronting of their arguments, be they clauses or NPs/DPs. This is illustrated in (ii).

(ii) a. *Le poisson, je supporte pas.*

the fish I stand not

‘Fish, I can't stand.’

b. *Combien ça coûte, je sais pas.*

- (12) a. *[PRO fumer sur la terrasse], on a le droit [e].*

how-much it costs I know not

‘How much this costs, I don't know.’

- c. *La rue de Verdun, vous connaissez?*

the street of Verdun you know

‘Do you know Verdun Street?’

Although such examples appear to involve a relation between a left-peripheral phrase and a gap akin to that illustrated in (6), there is a crucial difference between the two sets of data, namely that the construction in (6), but not that illustrated in (i) and (ii) above, obeys island constraints. This can be seen by comparing (7b) in the text to sentences like (iii) (see Abeillé, Godard and Sabio 2008:308 for similar examples).

- (iii) a. *La glace, je connais personne [qui n'aime pas].*

the ice cream I know no one who NEG-likes not

‘I don't know anyone who doesn't like ice cream.’

- b. *Combien ça coûtera, il faudrait être*

how-much it will-cost it would-be-necessary to-be

devin [pour savoir].

soothsayer for to-know

‘You'd have to be a soothsayer to know how much this will cost.’

We conjecture that the examples in (i), (ii) and (iii) either involve verbs that have been detransitivized or should be analyzed as involving a left-peripheral phrase linked to a silent resumptive pronoun, an option argued to be available in French by Zribi-Hertz (1986) and Abeillé, Godard and Sabio (2008).

to-smoke on the terrace you have the right

‘You’re allowed to smoke on the terrace.’

- b. *[PRO fumer sur la terrasse], je veux bien [e].*

to-smoke on the terrace I want well

‘I’m willing to smoke on the terrace.’

- c. *[PRO fumer sur la terrasse], il faut pas [e].*

to-smoke on the terrace it is-necessary (to) not

‘You cannot smoke on the terrace.’

Authier (2011) assumes that examples like those in (12) are instances of English-style Topicalization based on the fact that the chain made up of the fronted infinitival and its silent copy in argument position is not mediated by a pronominal clitic. Here, we provide additional evidence that supports this contention. That is, the syntactic operation responsible for the fronting of an infinitival in contexts like (12) displays all of the characteristic properties of what is commonly referred to as Topicalization in English. As can be seen in (13), fronting of a complement infinitival clause in French, just like English Topicalization, creates unbounded dependencies (13a), is sensitive to strong islands (13b), can appear in embedded clauses following (but not preceding) a complementizer (13c-d), and is barred from those contexts that prohibit MCP such as adverbial clauses (13e) and clauses complement to factive verbs (13f).⁶

⁶ Fronting of an infinitival clause out of a weak island is, however, marginally possible, as (i) shows. The same is true of argument Topicalization in English, as (ii) illustrates. This can probably be attributed to the fact that the topicalized constituent is

- (13) a. *[PRO fumer sur la terrasse], Cécile dit que Léon*
to-smoke on the terrace Cécile says that Léon
pense qu'on a le droit [e].
thinks that-one has the right
‘Smoke on the terrace, Cécile says that Léon thinks you can.’
- b. **[PRO fumer sur la terrasse], Cécile a parlé*
to-smoke on the terrace Cécile has spoken
à quelqu'un qui voulait [e].
to someone who wanted⁷

D-linked (Pesetsky 1987), a property which is known to facilitate extraction (cf. Rizzi 1990, Starke 2001, among others).

- (i) *?Nettoyer l'évier, je ne sais pas si Cécile voudra [e].*
to-clean the-sink I NEG know not if Cécile will-want
- (ii) *?Paul, I don't know whether I should talk to [e].*

⁷ As pointed out by a reviewer, examples such as (i), in which the left peripheral infinitival complement clause is linked to the resumptive pronoun *ça* ‘that’ or *le* ‘it’, are acceptable. We assume here that in these cases the infinitival undergoes external merge directly in the left periphery.

- (i) a. *Fumer sur la terrasse, je connais*
to-smoke on the terrace I know
quelqu'un qui aime ça.
someone who likes that
- b. *Fumer sur la terrasse, je connais quelqu'un*

- c. **Cécile dit [PRO fumer sur la terrasse], qu'elle veut bien [e].*
 Cécile says to-smoke on the terrace that-she wants well
- d. *Cécile dit que [PRO fumer sur la terrasse], elle veut bien [e].*
 Cécile says that to-smoke on the terrace she wants well
 'Cécile says that smoke on the terrace, she wants to.'
- e. **Quand [PRO fumer sur la terrasse], elle a voulu [e], on lui*
 when to-smoke on the terrace she has wanted they her
a dit que c'était interdit.
 have told that it-was forbidden⁸

to-smoke on the terrace I know someone
qui le fait tous les jours.
 who it does all the days

⁸ A reviewer notes that if the left peripheral infinitival complement is resumed by a clitic, this type of sentence becomes grammatical. This is expected on the assumption that such cases are not derived by movement (cf. note 7).

- (i) a. *Quand fumer sur la terrasse, c'est permis, il est difficile de*
 when to-smoke on the terrace, it-is allowed it is difficult of
l'interdire à l'intérieur de la maison.
 it-to-forbid at the-inside of the house
- b. *Quand fumer dans les toilettes on pourra le faire*
 when to-smoke in the toilets one will-be-able it to-do
en toute impunité, on pourra dire que vous avez gagné.
 in all impunity we will-be-able to-say that you have won

- f. **Je regrette que [PRO fumer sur la terrasse], Léon*
 I regret that to-smoke on the terrace Léon
ne veuille pas [e].

Assuming therefore that the syntactic operation underlying French infinitival fronting is an operation akin to English Topicalization (i.e., internal Merge in the left periphery), we conclude that the ill-formedness of (13e) and (13f) can be taken as conclusive evidence that French infinitival clause Topicalization, like French PP Topicalization, falls under MCP. In what follows we will try to establish how this

With respect to examples (13e) and (13f), the reviewer points out that these do not have a grammatical root equivalent and suggests that this may be due to aspectual reasons. While we agree that the status of (iia) is degraded, introducing a negative adverb in such examples results in full grammaticality, as shown in (iib).

- (ii) a. (*) *Fumer sur la terrasse, elle a voulu.*
 to-smoke on the terrace she has wanted.
- b. *Pour des raisons qui m'échappent, nager dans l'océan,*
 for some reasons that me-escape to-swim in the-ocean
elle a jamais voulu.
 she has never wanted
 'For reasons that are unclear to me, she has never wanted to
 swim in the ocean.'

It has occasionally been pointed out in the literature (Baltin 1982, Cinque 1990, Haegeman 1995:207-209) that negation may play a role in the licensing of fronting, but we feel that while of interest, this issue is beyond the scope of the present paper.

restriction on the distribution of French TP (and PP) Topicalization should be accounted for. We will discuss two avenues of investigation that have been proposed to account for the restricted distribution of English MCP and which could, in principle, extend to French.

3 Truncation versus intervention

Hooper and Thompson (henceforth H&T) (1973) account for the restricted distribution of MCP in semantic/pragmatic terms. For them, MCP are barred from sentences that are not asserted because “it is inappropriate to emphasize elements of a sentence whose proposition is already known, whose truth is presupposed, and whose content is related to the background” (p.495). However, H&T’s discussion does not entirely rule out the relevance of syntax in that they explicitly state that MCP are banned from ‘reduced’ clauses such as infinitive and subjunctive clauses (1973:484-5)⁹. This observation, coupled with cartographic views of syntax, including the hypothesis of the articulated structure of the left periphery, can be reinterpreted to mean that the restriction on fronting operations, which are operations that affect the left periphery of the clause, can be (at least partly) syntactic. In terms of a cartographic view (Rizzi 1997, Cinque and Rizzi 2010), a syntactic approach to the restricted distribution of MCP can then be taken to imply that the domains that resist the type of fronting illustrated in English (1) and French (10), (11), (13e-f) are in some way structurally deficient: either these domains are truncated structures and simply lack the relevant left-peripheral landing sites targeted by the relevant fronting

⁹ Notice, for instance, that the embedded clause in example (13f) in the text is in the subjunctive and is incompatible with TP fronting.

operations or, alternatively, while the landing sites might potentially remain available, they cannot be fully projected to accommodate such fronting operations for independent reasons. Following these two lines of thought, two types of syntactic accounts for the absence of MCP in the domains considered here have been elaborated: the truncation account and the intervention account.

3.1 Truncation

The truncation account takes structural reduction to be a primitive. That is, this type of account directly ascribes the restrictions on MCP to the lack of structural space needed for these syntactic operations to take place. This idea that structural deficiency determines the distribution of MCP has been put forth in a number of works, including Kuroda (1992:350), Benincà and Poletto (2004), Grewendorf (2002:53), Emonds (2004), McCloskey (2006), Meinunger (2004), and Haegeman (2003a, 2006). Haegeman's specific implementation for adverbial clauses was subsequently explored by Carrilho (2005:244-5, 2008), Munaro (2005), Hernanz (2007a,b), Bentzen et al (2007), Abels and Muriungi (2008:693-4), Cardinaletti (2009), and Wiklund et al (2009). In addition, Basse (2008) offers a Minimalist implementation of this view, according to which sentential complements to factive verbs lack an edge feature, thus disallowing fronting.

As has been clear from the beginning of this line of research, however, domains that lack MCP cannot be assumed to lack a left periphery altogether. This is because such clause types manifest phenomena that are typically associated with the left periphery such as French CLLD in (10) and (11). So, rather than claiming that there is no left periphery at all, "positional" accounts of the incompatibility of the

clausal domains in question with MCP postulate that such domains are characterized by a reduced or truncated left peripheral space. Thus, while (14a) corresponds to Rizzi's (1997) original articulated CP, (14b) represents the reduced left periphery available in adverbial clauses and in complements to factive verbs proposed by Haegeman (2003a, 2006). Haegeman (2003a, 2006) further argues that the projection ForceP exclusively encodes illocutionary force, and that subordinating conjunctions are hosted by a distinct head "Sub". Presupposed domains such as central adverbial clauses and complements to factive verbs are then assumed to lack illocutionary force altogether, hence ForceP is necessarily absent. Haegeman also adds to Rizzi's (1997) original distinction between a "higher TopP" and a "lower TopP" by arguing that the higher TopP and FocP, but not the lower TopP, are dependent on ForceP. As a result, in reduced domains, FocP and the higher TopP are absent, *de facto* ruling out argument fronting in English, although the lower TopP remains available. She also stipulates that the lower TopP is only 'active' in Romance, where it hosts CLLD constituents. Based on the ungrammaticality of examples like (14c), she concludes that in English the lower TopP cannot host argument fronting. We refer the reader to Haegeman (2006) for details. Finally, to accommodate adjuncts that appear in the left periphery in English central adverbial clauses (cf. (14d)), Haegeman (2003b, 2006) is led to postulate a specialized projection, Modifier Phrase (ModP) (cf. also Rizzi 2004).

- (14) a. (SubP) > ForceP > (TopP) > (FocP) > ModP > TopP > FinP
 b. SubP ForceP > (TopP) > (FocP) > ModP > TopP > FinP
 c. *When [this song] we heard, we were filled with joy.

- d. When [last year] she started to work for the UN, she suddenly became much more relaxed.

Recall now that H&T relate the availability of MCP to assertion. On the truncation account this restriction can be seen as being related to the fact that reduced domains lack ForceP, the projection that, by hypothesis, encodes illocutionary force, and of which assertion is but one realization.

3.2 Intervention

There are a number of problems of implementation inherent to the truncation account (Haegeman 2012a,b) which, for reasons of space, we will not discuss here. Additionally, on a more conceptual level, one could object that the truncation account ignores the fact that the restrictions on fronting observed in the left periphery of English ‘reduced’ clauses are not exclusively found in these clauses but are, in fact, replicated in other domains (cf. (15)-(17)). In particular, the domains with restricted fronting operations display a double asymmetry: (i) as already shown above, while argument fronting is unavailable in English, adjuncts can appear in the left periphery (14c-d), (ii) while argument fronting is unavailable in English, CLLD involving argument phrases is available in French (cf. (10)-(11)). The same asymmetry is reported for domains such as embedded *wh*-questions (15), relative clauses, (16), and embedded clauses in the context of long extraction (17).

- (15) a. *Robin knows where, the birdseed, you are going to put. (Culicover 1991:5, (6c))
- b. Lee forgot which dishes, under normal circumstances, you would put on the table (Culicover 1991:9, (17d))

- c. *Je me demande bien ce qu'à Jean, on pourrait lui acheter.*
 I myself ask well what to Jean we could him to-buy
 'I wonder what we could buy Jean.'
- (16) a. *These are the students to whom, your book, we will recommend next spring.
 b. These are the students to whom, next Spring, we will recommend your book.
 c. *Achète-moi ce qu'à Marie, tu allais lui acheter.* (= (11a))
 buy-me that which-to Marie you were-going her to-buy
 'Buy me what you were going to buy Marie.'
- (17) a. *Who did you say [that to Sue, Bill introduced]?
 (Boeckx and Jeong 2004: (3))
 b. Which book did Leslie say [that for all intents and purposes, John co-authored with Mary]? (Bošković 2011: 34, n. 34, (i), from Culicover 1991)
 c. *J'aimerais bien savoir ce qu'il pense qu'à ton frère,*
 I would-like well to-know what-he thinks that-to your brother
on devrait lui acheter].
 we should him buy
 'I'd like to know what he thinks that we should buy your brother.'

The patterns observed in (15)-(17) have standardly been accounted for in terms of locality conditions on movement and are not usually dealt with in terms of truncation. Rather, it is assumed that in the English (a) examples, the fronted arguments act as

interveners with respect to *wh*-movement, while the left-peripheral adjuncts in the (b) examples and CLLD constituents in the (c) examples do not.¹⁰

As a further instantiation of the asymmetry between argument fronting, adjunct fronting in English, and CLLD, observe that in English a fronted argument can cross over an adjunct (18a) (see Rizzi (1997:331-332) and Rizzi (2012) for discussion) and multiple adjuncts (18b) are possible in the left periphery, while multiple argument fronting is reported as being strongly degraded or excluded (18c). In contrast, multiple CLLD is available in French (18d).¹¹

(18) a. This book, around Christmas, you should buy.

(Rizzi 1997:331, n 26, (i))

Words like that, in front of my mother, I would never say.

(Rizzi 2012: 4, (20))

b. Last week, in Paris, after a hard day's work, he met his agent again.

Deep down, as we grew up, we rued the fact we hadn't taken that path.

(*Guardian* 05.05.2009, page 2, col. 5)

¹⁰ We will consider below a version of Relativized Minimality along the lines of Rizzi (1990, 2004) and Starke (2001) that gives fronted arguments the status of strong interveners and show how this type of approach can capture the facts. See also Haegeman and Ürögdi (2010a,b), and Haegeman (to appear b) for a similar type of proposal also couched in terms of in terms of Starke's (2001) feature-based Relativized Minimality.

¹¹ See Rizzi (1997, 2012), Haegeman (2012b) and Breul (2004:199-205) for a more detailed discussion of multiple fronting in English.

c. *This book, to Robin, we gave.

(Culicover 1991: 36, (117a)).

*Bill, that house, she took to for the weekend.

(Emonds 2004: 95 (27b))

d. *Ce livre, à Jean, je le lui donnerai sans doute.*

this book, to Jean I it him will-give without doubt

‘I will probably give Jean the book.’

(based on an Italian example given in Rizzi 1997: 290, (21))

The patterns in (18) can also be accounted via an intervention account according to which one fronted argument blocks the movement of another while a left-peripheral adjunct does not block the fronting of another (but see Haegeman 2003b, 2012b and Abels 2012 for some provisos concerning adjunct fronting).

If we assume, as is standard in the generative literature, that the double asymmetry in (15)-(17) and the patterns in (18) can all be derived via locality conditions on movement, we must assess the plausibility of extending such an approach to account for the double asymmetry in domains resisting MCP illustrated in (10), (11) and (13b,e,f). Haegeman (2007, 2012a,b) and Haegeman and Ürögdi (2010a, 2010b) explore Geis’s (1970, 1975) intuition, also taken up by others in later work, that adverbial clauses are derived by *wh*-movement of an operator. Haegeman, for example, argues that in central adverbial clauses, temporal and conditional

operators are first merged outside VP and undergo subsequent internal Merge in the left periphery as illustrated in (19).¹²

- (19) a. When she had read Alice's diary, ...
 b. [when [she had [(when)_{VP} read Alice's diary]]]] ...

Topicalization of the infinitival clause in the embedded interrogative in French (20a) is standardly ruled out by locality conditions on movement. If the temporal *when* clause in (20b) is assumed to be derived by operator movement, the same conditions on locality will now account for the unavailability of embedded clausal Topicalization in (20a). Since, as previously observed, CLLD does not block *wh*-movement, CLLD is expected to remain available in adverbial clauses; that is, the availability of CLLD in (20d) is parallel to that in (20c).

- (20) a. **Je me demande quand, [PRO se marier avec elle], il voudra.*
 I myself ask when to-get-married with her he will-want

¹² For empirical arguments that adverbial clauses are derived by operator movement, we refer the reader to the literature (see Haegeman to appear a, for a survey) and, for a similar approach to complements of factive verbs, to Haegeman and Ürögdi (2010a,b).

Cross-linguistic support for the movement analysis of adverbial clauses comes from the fact that they display, in many languages, a striking similarity to relative clauses. To give but one example, Zentz (2011) shows that in Akɔɔse, a Bantu language, the finite verb in temporal clauses displays *wh*-agreement, just like it does in relative clauses. Additionally, Torrence (2013) shows that Wolof temporal and conditional clauses pattern with relative clauses.

‘I wonder when he’ll decide to marry her.’

b. **Quand [PRO se marier avec elle] il a voulu, il était trop tard.*

when to-get-married with her he has wanted it was too late

‘When he decided to marry her, it was too late.’

c. *Je me demande quand [à Patrick], elle lui dira la vérité.*

I myself ask when to Patrick she him will-tell the truth

‘I wonder when she’ll tell Patrick the truth.’

d. *Quand [à Patrick], elle lui a dit la vérité, il est devenu livide.*

when to Patrick she him has told the truth he is become livid

‘When she told Patrick the truth, he became livid.’

For concreteness, let us assume a feature-based version of Relativized Minimality, such as that laid out in Starke (2001) and Rizzi (2004, 2013). In the spirit of Starke, Rizzi assumes that every phrase is specified for morphosyntactic features and that in the configuration ...X...Z...Y..., a local relation (e.g., that between an internally merged phrase and its silent first-merge copy) cannot hold between X and Y if Z intervenes and Z fully matches X in the relevant morphosyntactic featural specification. In other words, Z is an intervener with respect to a local relation between X and Y if it is at least as richly specified as X (the target of the relation) in terms of the relevant superfeature system given in (21).

(21) Classification of morphosyntactic features (Rizzi (2004))

Argumental: Case, person, number, gender, ...

Operator: Q, Neg, Quant, Foc, ...

Modifier: Modality, Tense, Mood, Aspect, Voice, ...

Topic

We can now use this system to account for the facts in (20). Recall that we are assuming that French Topicalized phrases are endowed with a morphosyntactic focus feature and as such, are classified as an instance of the superfeature ‘operator’ in (21), while CLLDed phrases are instances of the superfeature ‘topic’ since they are inherent topics in the sense of Reinhart (1981). If so, then the definition of Relativized Minimality in terms of superfeatures proposed in Rizzi (2004) will account for the facts in (20) in the manner illustrated in (22).

- (22) a. **Je me demande quand_Q [PRO se marier avec elle]_{Foc},*
 I myself ask when to-get-married with her
il t_Q voudra t_{Foc}.
 he will-want
 ‘I wonder when he’ll decide to marry her.’
- b. **Quand_Q [PRO se marier avec elle]_{Foc} il a t_Q voulu t_{Foc},*
 when to-get-married with her he has wanted
il était trop tard.
 it was too late
 ‘When he decided to marry her, it was too late.’
- c. *Je me demande quand_Q [à Patrick]_{Top}, elle lui t_Q dira la vérité.*
 I myself ask when to Patrick she him will-tell the truth
 ‘I wonder when she’ll tell Patrick the truth.’
- d. *Quand_Q [à Patrick]_{Top}, elle lui a t_Q dit la vérité, ...*
 when to Patrick she him has told the truth
 ‘When she told Patrick the truth, ...’

In (22a-b), the topicalized TP acts as an intervener with respect to the relation between the temporal operator and its trace because both Q and Foc are operator features. In (22c-d), on the other hand, the CLLDed phrase does not act as an intervener with respect to the same relation because it does not match the specification of the temporal operator in terms of superfeatures. This type of account, which assumes a movement derivation of adverbial clauses, adopts the independently needed concept of intervention and thereby obviates the need for a structural truncation mechanism applying to certain clauses in the theory of grammar. MCP, such as TP Topicalization in (20b), *must* be absent from the adverbial clause in order for the *wh*-movement of *quand* ‘when’ that derives the clause to be possible. Thus, while it may appear that in such adverbial clauses, TopP and FocP cannot be projected, due to truncation, what, in fact, happens is simply that TopP and FocP cannot be projected if they host an intervener for the movement of *when* (as this would cause the derivation of the adverbial clause to crash). However, TopP can be projected and host a phrase in French CLLD constructions because, given their morphosyntactic featural makeup, CLLD dislocates are not interveners for *wh*-elements.

An intervention account along these lines is compatible with a syntactic account of the presence/absence of assertion and possibly other semantic sentence moods (e.g., question, imperative) in a broader sense in the relevant domains. The precise implementation of such an account depends on how sentence moods are taken to be encoded syntactically. This syntactic encoding, often referred to as clause typing, serves as a ‘signal’ for the construction of the semantic objects representing sentential forces. With respect to temporal clauses, the intervention approach and the

absence of assertion can be made to receive a unified syntactic explanation in at least two ways. First, if an assertion operator is assumed to occupy a designated position in the left periphery of the clause and if such an operator is syntactically active, then one way of accounting for the fact that temporal clauses are not ‘asserted’ is to argue that the operator itself blocks the movement of the temporal operator (see Haegeman 2011). Alternatively, one could assume that the landing site of the moved *wh*-operator in a temporal clause targets a designated clause typing position and that the assertion operator, if available, would be associated with the same position (i.e., the assertion operator and the *wh*-operator that types a temporal clause compete for the same syntactic slot). The latter account can also be restated in terms of features: if clause typing is characterized by a specific feature set on a designated head in the left periphery (see Authier 2013), it would suffice to say that features encoding assertion are incompatible with the features associated with temporal clauses.

4 French TP Topicalization and modal ellipsis

In this section, we turn to an asymmetry between the distribution of French (infinitival) TP Topicalisation (TPT), an instantiation of MCP (cf. (5)), and that of French TP ellipsis (TPE), also known as ‘modal ellipsis’ (cf. Busquet and Denis 2001, Dagnac 2010). We will explore Authier’s (2011) account of TPE, which is based on Johnson’s (2001) movement approach to English VP ellipsis. Authier’s hypothesis exploits the striking parallelisms between contexts allowing TPE and those allowing TPT. He proposes that TPE is syntactically derived via TPT, which creates a chain composed of two links neither of which gets spelled out at PF. Here we will discuss the distributional differences that exist between TPT and TPE and will show that

Authier's implementation of Johnson's thesis accounts for the observed distributional differences but in doing so, presupposes the intervention account of MCP and can thus be taken as an additional argument against truncation.

4.1 French TP ellipsis as TP topicalization

The parallelism between TPE and TPT in French is discussed in detail in Authier (2011), who comes to the following conclusion:

Given that the restriction on modal [TP] ellipsis ... is in every respect similar to that governing the topicalization of infinitival clauses..., I would like to suggest that [French] modal [TP] ellipsis is licensed by topicalization. (p.202)

The evidence can be summed up as follows. First, as the paradigm in (23) vs. (24) illustrates, both TPT and TPE are embedded by verbs that belong to the same class (i.e., modals such as *pouvoir* 'be able', *devoir* 'must/should', *vouloir* 'want', *falloir* 'be necessary' and *avoir le droit* 'be allowed').

- (23) a. *Je veux pas laver tes chaussettes,*
 I want not wash your socks
mais [nettoyer l'évier], je veux bien.
 but clean the sink I want well

'I don't want to wash your socks, but clean the sink, I'm willing to.'

(Authier 2011:198 (44c))

- b. A: *Peux-tu nettoyer l'évier?*
 can-you clean the sink
 'Can you clean the sink?'
 B: *Je veux bien Ø.*

I want well

‘Sure.’

- (24) a. **Eric dit ne pas aimer les moules, mais [aimer les huîtres], il dit.*
 Eric says Neg not to-like the mussels but to-like the oysters he says
 ‘Eric claims to not like mussels but that he does oysters.’
- b. A: *Est-ce qu’Eric aime les huîtres?*
 Q Eric like the oysters
 ‘Does Eric like oysters?’
- B: **Il dit ∅.*
 he says
 ‘He claims that he does.’

Second, infinitival TPs embedded by epistemic modals are incompatible with both TPE and TPT.¹³ In (25a) and (25c), *devoir* ‘must’ and *pouvoir* ‘may/be able’ can only have a deontic reading. In (25b), the context forces an epistemic reading of *pouvoir* and TPT is barred.

- (25) a. *La police doit arriver dans cinq minutes*
 the police must arrive in five minutes
et l’ambulance doit aussi ∅.
 and the-ambulance must too (Authier 2011 : 193, (26))
- b. **Arriver d’un moment à l’autre la police peut,*
 to-arrive of-a moment to the-other the police may,

¹³ Aelbrecht (2010) shows that ellipsis of complements to modals in Dutch is also ungrammatical with epistemic modals.

alors accélère!

so hurry-up

‘The police may arrive at any moment, so hurry up!’

c. *Partir en vacances, tu peux pas.*

to-leave for holidays, you can not

Third, as (26b-c) shows, neither TPT nor TPE are found in infinitival clauses.

(26) a. *Marie attendra la date convenue, mais Paul souhaiterait*

Marie will-wait the date agreed but Paul would-like

[PRO pouvoir [PRO obtenir son visa plus rapidement]].

to-be-able to-obtain his visa more quickly

‘Mary will wait for the agreed upon date but Paul would like

to get his visa faster.’

b. **...mais Paul souhaiterait [[PRO obtenir son visa plus rapidement]*

PRO pouvoir [e]].

c. **Jean souhaiterait aussi [PRO pouvoir ∅].*

Jean would-like as-well to-be-able

d. *John prefers [this paper, PRO to publish first].

On the assumption that TPE is derived via TPT and TPT is English-style Topicalization, the restrictions on TPT and TPE in (26b-c) are expected since, as (26d) shows, English Topicalisation is also ruled out in infinitival clauses.

4.2 TPE vs. TPT

Attractive though the analysis of TPE as TPT may be, a number of problems arise.

One important issue discussed in Authier (2011) is that TPT has a more restricted

distribution than TPE. Johnson (2001) and Aelbrecht and Haegeman (2012) raise the same issue with respect to English VP Topicalization vs. VP ellipsis. We will only discuss some examples of this distributional asymmetry and refer to reader to the papers cited for a full discussion.

4.2.1 (Lack of) sensitivity to island

As already mentioned in section 2, like other types of extraction, TPT is sensitive to islands. TPT out of a relative clause or an embedded *wh*-domain yields ungrammatical results: (27a) illustrates extraction out of a relative clause and (27b) illustrates extraction out of an embedded *wh*-interrogative. Furthermore, TP fronting within these islands is also ungrammatical (28a, 29a). TPE, on the other hand, turns out to be fully grammatical in the same domains (28b, 29b).

(27) a. **Je croyais que personne n'oserait travailler pour nous mais*

I thought that no one NEG-would-dare to-work for us but
 [*PRO travailler pour nous*], *Cécile a trouvé quelqu'un qui voulait.*
 to-work for us Céline has found someone who wanted
 'I thought no one would work for us but Celine found someone
 who wanted to.'

b. **[PRO travailler pour nous], je me demande quand*

I myself ask when to-work for us
elle aura le droit.
 she will-have the right
 'I wonder when she'll be allowed to work for us.'

(28) a. **Je croyais que personne n'oserait travailler pour nous mais*

I thought that no one Neg-would-dare to-work for us but

Cécile a trouvé quelqu'un qui [PRO travailler

Cécile has found someone who to-work

pour nous], voulait.

for us wanted

b. *Je croyais que personne n'oserait travailler pour nous mais*

I thought that no one Neg-would-dare to-work for us but

Cécile a trouvé quelqu'un qui voulait Ø.

Cécile has found someone who wanted

'I thought no one would work for us but Cécile found someone

who wanted to.'

(29) a. **Je me demande quand [PRO travailler pour nous],*

I myself ask when to-work for us

elle aura le droit.

she will-have the right

'I wonder when she'll be allowed to work for us.'

b. *Je me demande bien quand elle aura le droit Ø.*

I myself ask well when she will-have the right

'I wonder when she'll be allowed to.'

4.2.2 Topicalization within certain types of clauses

Recall now from section 2 that French TPT belongs to the class of so-called MCP, that is, phenomena that have a restricted distribution in that they are excluded from a range of embedded domains. Like English argument Topicalization, we have just seen

that French TPT is excluded from embedded interrogatives and from relative clauses, while TPE remains fully licit in these contexts. Recall additionally that, as illustrated in (30) and (31), while TPT is excluded from central adverbial clauses, TPE is licit in the same context (cf. Authier 2011: 209). And similarly, while VPT is barred from central adverbial clauses (cf. (32) from Aelbrecht and Haegeman 2012), VPE is possible in the same context (33).

- (30) a. **Dès que [PRO bâtir sur ce terrain] elle a pu,*
 from that to-build on this land she has been-able
 elle l'a fait.
 she it-has done
 ‘As soon as she could build on this land, she did it.’
- b. **Quand [PRO bâtir sur ce terrain] elle a pu, elle l'a fait.*
 ‘When she was able to build on this land, she did it.’
- (31) a. *Dès qu'elle a pu Ø, elle l'a fait.*
 ‘As soon as she could, she did it.’
- b. *Quand elle a pu Ø, elle l'a fait.*
 ‘When she was able, she did it.’
- (32) Mary wanted to move to London
- a. and [move to London] she did t.
- b. *and when [move to London] she did t, her life changed entirely.
- c. *and as soon as [move to London] she did t, her life changed entirely.
- (33) Mary wanted to move to London
- a. and eventually she did Ø.
- b. and when she did Ø, her life changed entirely.

- c. and as soon as she did \emptyset , her life changed entirely.

As pointed out earlier, the incompatibility of Topicalization - be it French TPT or English VPT - with *wh*-clauses can be made to follow from locality conditions on movement. Assuming a movement derivation of adverbial clauses as outlined in section 3, the same locality account can be extended to account for the ban on TP fronting in French and on VP fronting in English. In both cases, the fronted TP or VP acts as an intervener that blocks the additional movement of the *wh*-operator.

Aelbrecht and Haegeman (2012) discuss some additional environments that display the same type of asymmetry between VPE and VPT. Their conclusion is that in English, VPE cannot be derived via VPT, contra Johnson (2001). If correct, their conclusion applies to the French TPT account of TPE as well since TPT and TPE display similar asymmetries as the data in (27)-(31) illustrate.

4.3 An alternative view

Having rejected the VPT derivation of VPE, Aelbrecht and Haegeman (2012) consider a number of alternative derivations for VPE that ensure that the domains where VPT is excluded are compatible with VPE. The scenarios they envisage have in common the assumption that the crucial locus for the derivation of VPE is not the left periphery but, rather, the middle field. We will not elaborate on their proposals here and refer the reader to their paper for discussion. Funakoshi (2012) implements one of their suggestions in his own account, according to which VPE may be derived by VPT to a Belletti-style vP peripheral TopP (Belletti 2001, 2004; see also Butler 2004, Jayaseelan 2000, 2001, and Kayne 2006). We will not discuss this alternative here

either but will instead reconsider the ellipsis as Topicalization + PF deletion accounts of Johnson (2001) and Authier (2011).

While acknowledging the distributional differences between TPE and TPT, Authier (2011) shows that, given certain assumptions about the place given to intervention in the architecture of the grammar and the interplay between ellipsis and intervention, Johnson's original movement analysis of ellipsis can be maintained. In what follows, we will first go over Authier's account, then we will show that this account is relevant for the derivation of central adverbial clauses and has interesting consequences with respect to the choice between the truncation account and the intervention account discussed in section 3. Specifically, we will show that the account developed by Authier (2011) (i) crucially depends on a derivation of central adverbial clauses in terms of movement, and (ii) is less easily compatible with a truncation account. Thus, if Authier's approach is on the right track, the movement account of adverbial clauses can be shown to be superior to the truncation account.

4.3.1 Repair by ellipsis

It has been pointed out, in the literature on ellipsis, that PF deletion can 'repair' violations that arise through extraction from an island. The original observation goes back to Ross (1969), who gives examples involving sluicing like (34). This phenomenon is not restricted to English as the French counterpart to (34), given in (35) shows. In such examples, extraction from a relative clause within a complex NP appears to be salvaged through an ellipsis operation that includes the island from which *wh*-extraction has taken place. We refer the reader to the literature for discussion, especially to Bošković (2011) and Authier (2011).

- (34) a. She kissed a man who bit one of my friends, but Tom does not realize which one \emptyset . (Ross 1969: 276)
- b. *She kissed a man who bit one of my friends, but Tom does not realize which one of my friends she kissed [a man who bit t]. (Ross 1969: 276)
- (35) a. *Elle a embrassé un type qui a mordu un de mes amis, mais Tom ne sait pas lequel \emptyset .*
- b. **Elle a embrassé un type qui a mordu un de mes amis, mais Tom ne sait pas lequel elle a embrassé [un type qui a mordu t].*

Assuming that the sluicing operation at work in (34a) and (35a) is *wh*-extraction of *which one/lequel* out of a sentential constituent (TP), followed by PF deletion (or lack of PF spell out) of that node, the relevant extraction of *which one/lequel* must have taken place from within the relative clause. Such extraction out of a strong island, however, is normally illicit (cf. (34b) and (35b)). It thus appears that, as a result of ellipsis (sluicing in this particular case) the island violations incurred in (34b) and (35b) are “repaired,” which means that somehow, the island status of the relative clause is made void.

Bošković (2011), elaborating on earlier work by Chomsky (1972), proposes that locality violations incurred in a derivation result in the marking (in the syntax) of the element that is responsible for blocking movement. He does this concretely by using the diacritic *. With respect to illicit extraction from an island, he proposes that when a *wh*-moved element crosses an island boundary, the island is *-marked. In other words, the diacritic * is assigned to the element that has caused a locality-of-movement violation. The presence of a diacritic * in the final PF representation of a derivation leads to a crash. However, such a violation is ‘repaired’ (i.e., does not

occur) if the *-marked element is deleted at PF since in that case, no * is present in the final PF representation. For example, in (34), the extraction of *which one* from a relativized constituent will lead to the *-marking of the nominal island. The diacritic does not cause the derivation to crash up to PF (see Bošković 2011 for discussion of the theoretical implications of this view in relation to the general architecture of the grammar). At this point, if the offending *-marked nominal island is spelled out, the derivation crashes (36a). If, on the other hand, the island fails to be spelled out through sluicing, the offending diacritic * is removed and the potential crash is avoided (36b). Thus, island violations can be repaired by ellipsis.

- (36) a. *She kissed a man who bit one of my friends, but Tom does not realize which one of my friends she kissed [_{DP*} a man who bit t.]
- b. She kissed a man who bit one of my friends, but Tom does not realize which one ~~she kissed~~ [_{DP*} ~~a man who bit.~~] (Ross 1969: 276)

4.3.2 Rescue by ellipsis

Based on work by Saito (2001, 2007), among others, Bošković (2011) extends the repair by ellipsis account to violations caused by an intervener, that is, cases in which one constituent illicitly crosses over another. When a moved *wh*-element crosses over an intervener, leading to a potential intervention effect, the intervener is *-marked (i.e., the diacritic * is assigned to the constituent that has caused a locality violation). This constituent is, in Bošković's terms, the "troublemaker". The presence in the final PF representation of the troublemaker bearing the diacritic * leads to a violation of locality and the derivation crashes. However, such a violation does not occur if the troublemaker (i.e. the *-marked intervener) is deleted at PF.

Let us illustrate the role of repair by ellipsis in relation to French TPT. In (37a), movement of the infinitival TP [*PRO le présenter*] ‘to present it’ to the left periphery leads to intervention with respect to the *wh*-movement of *qui* ‘who’, and the offending TP is *-marked and is thus a troublemaker. As the * diacritic remains present on the TP in question at PF, (37a) is ungrammatical. The derivation of (37b) is like that of (37a), in that the fronted TP is *-marked, but in (37b), ellipsis of the (higher copy of the) TP deletes the troublemaker and hence removes the offending *.

- (37) a. **Je sais qu'un étudiant m'a demandé s'il pouvait présenter*
 I know that-a student me-has asked if-he could to-present
cet article en cours mais je n'arrive pas à me souvenir de
 this article in class but I NEG-manage not to myself remember of
celui [qui [_{TP} *PRO le présenter*], voulait [*PRO le présenter*]].*
 the-one who it to-present wanted
 ‘I know some student asked me if he could present this article in class
 but I can’t remember the one who wanted to.’
- b. *Je sais qu'un étudiant m'a demandé s'il pouvait présenter*
 I know that-a student me-has asked if-he could to-present
cet article en cours mais je n'arrive pas à me souvenir de
 this article in class but I NEG-manage not to myself remember of
celui [qui [_{TP} ~~*PRO le présenter*~~], voulait [*PRO le présenter*]].*
 the-one who wanted

We will not discuss the theoretical repercussions of Bošković’s system here and we refer the reader to Bošković (2011) for more details on the assignment of the diacritic * to interveners. What is crucial to the point at hand is that, as argued in Authier

(2011), a Bošković-style repair by ellipsis, including the assumption that intervention is a PF phenomenon, will allow us to maintain the TPT account of French TPE (as well as the VPT account of English VPE).

4.3.3 French Pseudo-Gapping

The analysis of French TPE adopted here allows us to make one interesting prediction with respect to a phenomenon called “French Pseudo-Gapping,” uncovered by Busquets and Denis (2001). The term refers to the ability of TPE to remain “partial,” as in (38). The phrases in bold in (38) are arguments of verbs that are included in the elided TP.

- (38) a. *Je peux pas réparer ton ordinateur, mais ta télé, je peux Ø.*
 I can not-to-fix your computer but your TV I can
 ‘I cannot fix your computer, but I can your TV.’
- b. *Elle a parlé à Cédric mais à Paul, elle a pas voulu Ø.*
 she has spoken to Cédric but to Paul she has not wanted
 ‘She spoke to Cédric but to Paul, she refused to.’

Authier (2011) proposes to capture French Pseudo-Gapping by assuming that (a) French Topicalization of infinitival TPs is movement to Rizzi’s (1997) lower TopP, (b) the pronounced sub-constituent in Pseudo-Gapping constructions (cf. the bolded phrases in (38)) undergoes further movement to the specifier position of FocP, and (c) both copies of the infinitival TP fail to spelled out at PF. Thus, the derivation of a sentence like (38b) proceeds as in (39).

- (39) *Elle a parlé à Cédric mais [FocP[à Paul] [TopP[PRO parler—à Paul]*
 she has spoken to Cédric but to Paul to-speak to Paul

elle a pas voulu [~~PRO parler à Paul~~]].

she has not wanted to-speak to Paul

As shown in (40a), the combination of the two fronting operations that is required by Authier's analysis, namely, TP fronting and focalization of an argument of the verb, is available independently. In (40a) the TP complement of *pouvoir* ('be able'), [*PRO dire la vérité à Pierre*], is fronted to the matrix TopP and *à Pierre*, the argument of the verb *dire*, is then sub-extracted out of the fronted TP and moved to the matrix FocP. Obviously, we need to rule out the possibility that French Pseudo-Gapping in (40a) involves deletion of a lower phrase within the modal complement, with the pseudo-gapped element surviving the ellipsis in (40a) while still remaining within the modal complement.¹⁴ It is therefore important to note that, as (40b) shows, it is possible to insert an adjunct phrase in between *à Pierre*, by hypothesis in the matrix SpecFocP, and the fronted infinitival in SpecTopP.

- (40) a *[A Pierre] [PRO dire la vérité [~~à Pierre~~]], j'ai jamais pu*
to Pierre to-tell the truth to Pierre I-have never been-able
~~*[PRO dire la vérité à Pierre]*~~
to-tell the truth to Pierre
'Tell Pierre the truth, I've never been able to.'
- b. *J'ai tendance à dire aux gens ce que je pense, mais*
I-have tendency to to-tell to people that which I think but
à Pierre, pour les raisons que tu connais, PRO dire la vérité,
to Pierre for the reasons that you know to-tell the truth
je n'ai jamais pu

¹⁴ We are indebted to a *Probus* reviewer for bringing this issue to our attention.

I NEG-have never been-able

‘I usually speak my mind, but for the reasons you know, tell

Pierre the truth, I’ve never been able to.’

Thus, in the examples in (40), we have a “remnant” phrase, a fronted infinitival TP, occupying the specifier position of TopP. From this TP, a constituent has been extracted and moved to FocP.¹⁵

On the intervention account, the double fronting illustrated in (40) is predicted to be blocked by say, *wh*-movement. This prediction is correct, as shown in (41a). The double fronting is also excluded from adverbial clauses as shown in (41b). Both of these examples are ruled out by the intervention account. In both cases, the fronted TP as well as the focalized constituent trigger intervention effects.

- (41) a. **J’ai jamais pu dire la vérité ni*
 I-have never been-able to-speak the truth neither
 à Céline ni à Paul mais je connais des gens [qui à Paul,
 to Céline nor to Paul but I know some people who to Paul
 [PRO dire la vérité [~~à Paul~~]], peuvent Ø.
 to-tell the truth can
 ‘I’ve never been able to tell Céline or Paul the truth, but I
 know people who can tell Paul the truth.’
- b. **Quand [à Pierre] [PRO dire la vérité [~~à Pierre~~]],*

¹⁵ Interestingly, while focalisation of a DP or a PP is generally unavailable in French (see Rizzi 1997), the focalisation of an argument is possible in (40). This is obviously an issue that requires further study and to which we intend to return in future work.

when to Pierre to-tell the truth to Pierre
j'aurais voulu, [~~PRO dire la vérité à Pierre~~].
 I-would-have wanted to-tell the truth to Pierre

On Authier's account, Pseudo-Gapping is derived via the double fronting operation illustrated in (39) followed by ellipsis of the remnant TP.

In terms of the Bošković/Authier repair by ellipsis account, when the double fronting takes place in a configuration that is incompatible with MCP, ellipsis of the remnant TP will not rescue the structure and pseudo gapping remains ungrammatical. The movement of the focalized constituent in (39) as such is possible out of the Topicalized (elided) TP. However, even after ellipsis of the TP, fronting of the constituent remains illicit because the focused phrase itself, which survives the ellipsis, is an intervener as well. This is made evident by the paradigm in (42). In (42a), the fronted TP is elided and the potential violation of locality is avoided, but in (42b) the extracted focalized constituent *à Paul* survives and, being an intervener, causes the derivation to crash.

- (42) a. *J'ai jamais pu parler ni à Céline ni à Paul mais*
 I-have never been-able to-speak neither to Céline nor to Paul but
je connais des gens [qui peuvent Ø].
 I know some people who can
 'I've never been able to speak to Céline or Paul but I know people
 who can.'
- b. **J'ai jamais pu parler ni à Céline ni à Paul mais*
 I-have never been-able to-speak neither to Céline nor to Paul but
je connais des gens [qui à Paul, peuvent Ø].

I know some people who to Paul can

Finally, as expected, the situation is similar in adverbial clauses, as shown in (43).

While TPE is possible in adverbial clauses, thanks to a rescue by ellipsis effect that removes the intervener (marked with a *), Pseudo-Gapping is not.

- (43) a. *Quand [~~PRO dire la vérité à Pierre~~]*j'ai pu*
 when to-tell the truth to Pierre I-have been-able
[~~PRO dire la vérité à Pierre~~], je me suis senti mieux.
 to-tell the truth to Pierre I myself am felt better
 'When I (finally) was able to, I felt better.'
- b. **Quand [à Pierre]* [~~PRO dire la vérité à Pierre~~]*j'ai pu*
 when to Pierre to-tell the truth to Pierre I-have been-able
[~~PRO dire la vérité à Pierre~~], je me suis senti mieux.
 to-tell the truth to Pierre I myself am felt better

5 Consequences for the analysis of MCP

A TPE-via-TPT account, coupled with the Authier/Bošković approach to intervention and repair by ellipsis, has consequences for the architecture of the grammar. In particular, if intervention is seen as a PF phenomenon, this raises the question of whether accounts relying on intervention as a phenomenon of the narrow syntax or as an LF phenomenon can be devised to capture the TPE/TPT asymmetry while maintaining the TPE as TPT analysis. We will not dwell on this important issue here, but will instead explore the consequences that this analysis has for the derivation of French adverbial clauses and for the syntactic account of MCP. Our main point will be that the assumptions laid out by Authier (2011) and Bošković (2011) dovetail

nicely with Haegeman's (2010, 2012a,b) intervention account of MCP. Given these assumptions, however, it is far from clear that the truncation treatment of MCP is even viable. To see why, let us first briefly return to the core data. As illustrated once more in (44a-b), in French, TPT is illicit in adverbial clauses, while TPE remains available.

- (44) a. **Quand [PRO jouer au hockey]* je peux, ...*
 when play at-the hockey I can
- b. *Quand je peux Ø, je joue au hockey.*
 when I can I play at-the hockey
- (Authier 2011 : 209-210, (59b), (60b))
- c. *Quand [~~PRO jouer au hockey~~]* je peux, ...*

On the Authier/Bošković repair by ellipsis account, TPT in (44a) leads to the assignment of a * to the fronted constituent, the TP *jouer au hockey*, and this causes the derivation to crash if this constituent survives at PF. If ellipsis targets the offender (44c), however, the derivation converges.

As already pointed out with respect to the data in (43), unlike TPE, Pseudo-Gapping remains illicit in adverbial clauses. The examples in (40) show that Pseudo-Gapping is, however, licit in a root environment. Recall that the derivation we are assuming involves TPT to Spec, TopP followed by further movement of the focused PP subconstituent to Spec, FocP. As illustrated in (43a), deletion of the higher copy of the clause affected by TPT allows the derivation to converge in adverbial clauses. As shown in (43b), however, further movement to FocP of a PP constituent that is spelled out at PF in an adverbial clause leads to a crash because the PP acts as an intervener with respect to movement of the *wh*-operator assumed to be present in such clauses.

Notice, however, that there is an important proviso to this type of account. If (42a) and (43a) can be rescued by ellipsis, it must be the case that the offending constituent whose deletion salvages the derivation can be identified as a starred intervener. For this to be possible, the following conditions have to be fulfilled: (i) the constituent must be identifiable as an intervener; that is, there must be another element that moves over it, and (ii) in order to intervene, the relevant constituent must be able to occupy a position in the left periphery of the clause that contains it (i.e., there must be a landing site available to host it). Below we spell out the ramifications of these two conditions.

Condition (i) leads to the conclusion that French adverbial clauses must be derived by movement since it is movement that creates the very context in which intervention effects arise. The movement account of French TPE assumed here, as well as its counterpart for English VPE, is therefore compatible with the movement account of adverbial clauses. Turning next to the implications (ii) holds for the movement account of TPE, it seems clear that the fulfillment of that condition is again fully compatible with the movement derivation of adverbial clauses. It is, however, much less clear how such a condition can be reconciled with a truncation analysis. According to the truncation analysis, French TPT and English VPT are illicit in adverbial clauses because such clauses are structurally deficient and lack the appropriate landing site for TPT and VPE (i.e., TopP). If TPE is itself derived through TPT, it will follow that TPE should be excluded in those domains in which TPT is not possible. But this, of course, makes the wrong prediction: TPE *is* compatible with what would be truncated domains. For the truncation analysis of adverbial clauses to be maintained, one could, perhaps, hypothesize that the left-peripheral fronting

involved in TPE does not have the same landing site as that targeted by TPT. The landing site for the former could then be assumed to be available in truncated clauses, unlike that utilized by the latter. Obviously this has further ramifications, as the status of the moved constituent as an intervener may then well have to be reconsidered entirely.¹⁶

6 Conclusion

In this paper, we explored an Authier/Bošković-style account of some asymmetries between TPE and TPT in French and established its relevance with respect to syntactic approaches aimed at capturing the restricted distribution of so-called MCP. We argued for a movement + intervention account and against a truncation analysis of French central adverbial clauses. Though based mainly on French, the conclusions reached extend to English VP fronting and VP ellipsis and pose a direct challenge to Aelbrecht and Haegeman's arguments against Johnson's VP Topicalisation account of VPE.

From a theoretical perspective, the movement + intervention approach to the restricted distribution of MCP in central adverbial clauses is simpler than the truncation approach in that it does not carry the burden of having to specify which clause types have an impoverished left periphery, which projections are missing, in which languages, and why. From the point of view of truncation, the answers to such questions are usually assumed to be related to the availability of illocutionary force

¹⁶ See Kayne (2006) for a proposal that to-be-elided constituents have specialized landing sites.

(see Bayer 2001, Krifka 2001, and Haegeman 2003), or to discourse related features (see Bianchi and Frascarelli 2010), but the degree to which such concepts are syntactically encoded has not yet been fully formalized and raises a number of problems of implementation that are far from trivial (see Heycock 2006, Authier 2013, and Haegeman 2012a). In contrast, the intervention approach attributes the parametric variation observed in the availability of left peripheral positions to the variation in intervention effects. These differences have independently been established; for instance, it has long been known (since at least Cinque 1990) that Topicalized constituents in English and Romance CLLD constituents pattern differently in terms of intervention.

As a further benefit, the intervention approach does not require postulating a Mod projection dedicated to hosting left-peripheral adjuncts (cf. Rizzi 2004, Haegeman 2003b). Instead, as in Rizzi's (1997) original proposal, left-peripheral adjuncts can be assumed to be in TopP. They can occur in adverbial clauses because they can be independently shown to not trigger intervention effects. The account also does not require any special restrictions on the availability of the lower TopP. Any constraints on its distribution can be made to follow from general principles of intervention.

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