

# **The syntax of MCP: Deriving the truncation account<sup>1</sup>**

Short title: Deriving truncation

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## **Abstract**

This paper proposes that the restricted distribution of MCP follows from locality conditions on movement. The focus is the absence of argument fronting in English adverbial clauses, but the account extends naturally to other clause types and to other MCP. Underlying most syntactic accounts of the distributional restrictions on MCP is the intuition that certain clause types cannot fully exploit their left peripheral space. This intuition is expressed in ‘truncation’ accounts which postulate that a segment of the articulated left periphery is unavailable. It will be shown that truncation accounts raise a number of problems. The problems dissolve if ‘truncation’ is not seen as the primitive conceived of a by-product of the operator movement that derives the relevant clause types.

## **1. Introduction**

Starting from seminal work by Joe Emonds (1970, 1976), there is a long standing tradition that sets apart a set of syntactic phenomena as ‘Root Transformations’ or ‘Main Clause Phenomena’ (Hooper and Thompson 1973), that is patterns whose distribution is restricted to Main clauses and a restricted subset of subordinate clauses. This paper focuses on one subset of the so called root phenomena, namely (non resumptive) argument fronting in English.

Picking up the tradition initiated by Emonds’s own work (1970, 1976), I will explore a syntactic account for the restricted distribution of this phenomenon. Though the focus of my

discussion is the absence of argument fronting in English adverbial clauses, the account which will be explored extend naturally to other clause types that disallow MCP, and it also has the potential of accounting for the fact that there is a restriction on the co-occurrence of MCP.

I start from the assumption that English argument fronting implicates the left periphery (in the sense of Rizzi 1997). Underlying most syntactic accounts of the distributional restriction of MCP is the intuition that somehow adverbial clauses cannot fully exploit their left peripheral space. This intuition is expressed directly in so-called ‘truncation’ proposals, i.e. accounts postulating that a specific chunk of the articulated left periphery is unavailable in some embedded domains. However, such accounts raise a number of questions, in particular the precise implementation of structural truncation is complex and empirical issues remain. I will show that these problems dissolve if one conceives of ‘truncation’ not as the primitive of the analysis but rather as a by-product of the syntactic derivation of the clause types in question.

The paper is organized as follows. Section 2 presents the empirical focus of the paper, namely the fact that so called Main Clause Phenomena (MCP) are banned from adverbial clauses, focusing on the absence of argument fronting in English. It offers an account in terms of structural deficiency according to which clausal domains that are incompatible with MCP are ‘truncated’ in that their left periphery lacks the Focus and Topic layers that host fronted arguments in English. Section 3 discusses the conceptual and empirical problems that arise for the truncation account and shows that linking the distribution of MCP to Assertion also is not without its problems. Section 4 presents an alternative account which is built on the observation that fronting in the left periphery presents a double asymmetry: on the one hand in English adjuncts can and arguments cannot front to the Left periphery of adverbial clauses, on the other hand unlike English argument fronting, CLLD in Romance is admitted in the left periphery of adverbial clauses. The section shows that this double asymmetry is familiar from

contexts such as *wh*-questions and relativization structures, contexts in which a natural account in terms of intervention effects on movement suggests itself. It is then proposed that adopting a movement analysis of adverbial clauses, the distribution of MCP will follow without any need for appealing to truncation. Section 5 briefly shows that apparent structural deficiency of domains that are incompatible with MCP follows from the intervention account and hence that what seems like structural truncation is a byproduct of locality conditions of movement.

## **2. Main clause phenomena and truncation**

### *2.1. The core data*

For most speakers of English, temporal and conditional adverbial clauses are incompatible with argument fronting, a pattern available in root declaratives.

- (1) a. \*When her regular column, she began to write again, I thought she would be OK.
- b. \*If these exams he doesn't pass, he won't get the degree.

These data might lead to the hypothesis that for some reason the left peripheral space is unavailable in the adverbial domains. This proposal would reflect Hooper and Thompson's (1973: xxx) idea that clauses that resist MCP are 'reduced'. It is, however, not the case that adverbial clauses do not allow any material to appear to the left of the canonical subject position, as shown by the fact that (i) in English adverbial adjuncts (2) and (ii) in Romance CLLD constituents (3) may also appear to the left of the subject (see Haegeman 2006 for more examples).

- (2) a. When last month she began to write a regular column for the Times (at a reported £ 250,000 a year), I thought, that's it ... (*Guardian*, G2, 21.1.2, page 8 col 5)
- b. If on Monday the share price is still at the current level then clearly their defence doesn't hold much water. (*Observer*, 11.7.4, business, p. 22 col 5)
- (3) [*Se la stessa proposta la fa anche l'altro candidato*],  
 if the same proposal it makes also the other candidate  
*non otterrai quel posto.*  
 not get-FUT-2SG that position (Cardinaletti 2009, her (22a))

A TP adjunction analysis for adjuncts, which might at first sight be compatible with the idea that the left peripheral space is unavailable in the relevant adverbial clauses, raises both theoretical and empirical problems. (i) In many current approaches adjunction as such is no longer available, (ii) Rizzi (1997: xxx) provides empirical arguments that an adjunction approach to initial adjuncts is unable to account for the fact that such adjuncts are incompatible with subject auxiliary inversion. I refer to his paper for discussion. <sup>2</sup>

Observe that it is also not the case that adverbial clauses preclude argument fronting in absolute terms. In (4), from Bianchi and Frascarelli (2010:22, their (44a), the DP *the staff* is fronted in a clause embedded within the adverbial clause.

- (4) He held back when I told him that the staff, I myself would choose \_ (and the office, he would choose).

## 2.2. The truncation analysis

To account for the unavailability of argument fronting in English adverbial clauses while allowing initial adjuncts and CLLD in Romance, Haegeman (2006) proposes that the size of the left periphery of adverbial clauses differs from that of main clause and of those embedded clauses that are compatible with argument fronting: while root clauses and embedded clauses compatible with MCP have the full-fledged left periphery in (5a), adverbial clauses have a reduced (cf. Hooper and Thompson 1973: xxx) or truncated periphery in (5b). The representations in (5) depart from the original articulated CP structure in Rizzi (1997) in two ways. (i) SubP is distinguished from ForceP: the former hosts the subordinating conjunction, the latter encodes Illocutionary force (cf. Bhatt and Yoon 1992); (ii) Mod(ifier)P hosts the initial adverbial adjuncts. I return to these points below.

(5)	a.	SubP	ForceP	TopP*	FocP	TopP*	ModP	FinP
	b.	SubP				TopP*	ModP	FinP

Haegeman proposes that different TopPs must be distinguished, with a specialised contribution to information structure (see Frascarelli and Hinterhölzl 2003, Bianchi and Frascarelli 2010, etc) and, in particular, that the ‘lower’ TopP which is dominated by FocP and survives truncation (5b) is only available in Romance (in the form of CLLD). To derive the structural truncation Haegeman (2006) proposes that the higher TopP and FocP are licensed by Force. The intuition behind this is the idea that in English ‘focalisation’ and ‘topicalisation’ are directly anchored to the (possibly reported) speaker, and that this is encoded through Force. A similar idea was suggested in Bayer (2001: 14-15), who explicitly relates the availability of topicalization and of high modal markers to the presence of illocutionary force. One might formalize the relevant dependency in terms of feature checking by, for instance, proposing that Foc and the higher Top are associated with an uninterpretable

feature Force which upwardly probes for the Force head, which has the matching interpretable feature.<sup>3</sup>

Among others, the following have explored the idea that the left periphery is not uniformly projected to the same level: Kuroda (1992: 350), Benincà and Poletto (2001), Grewendorf (2003: 53), Emonds (2004), McCloskey (2006), Meinunger (2004), though with widely divergent implementations. Haegeman's (2003a, 2006) implementation of the truncation account was further explored by Carrilho (2005: 244-5, 2008), Munaro (2005), Cardinaletti (2009), Abels and Muriungi (2008: 693-4), Hernanz (2007a,b), Bentzen, Hrafnbjargarson, Horarsdottir and Wiklund (2007).

### **3. Discussion**

For Haegeman adverbial adjuncts are – or can be – hosted by a designated ModP (Haegeman 2003b, Rizzi 2004), which remains available in the left periphery of adverbial clauses (5b). Note however, that the fronted adjuncts that are most easily available in the left periphery of adverbial clauses seem to belong to Frame setting adjuncts. Maienborn (2001) proposes that such adjuncts are merged in the left periphery of the TopP. Benincà and Poletto (2004: 66) label the same class of adjuncts 'scene setting' adjuncts and propose that they occupy a high position in the left periphery (cf. also Hernanz 2010: 53 for supporting evidence). Assuming the truncated structure in (5b) as well as assuming that the high scene-setting projection remains available introduces a complication to the truncation analysis since one would then have to assume that certain projections above FocP are selectively instantiated and can license the relevant adjuncts. This might arguably be because these projections are not licensed by Force, so one would have to assess for each projection, regardless of its relative position in the periphery, whether it is licensed by Force or not. The truncation account then becomes more stipulative.<sup>4</sup>

For Haegeman (2006), the availability of the higher TopP and of FocP crucially depends on the presence of ForceP, i.e. illocutionary Force. However, the presence of illocutionary Force is not a sufficient condition for licensing fronting operations in English: though imperative and interrogative sentences are presumably associated with Force, argument fronting in English is also felt to be degraded by most speakers. On the other hand, as was the case for adverbial clauses, adjunct fronting and Romance CLLD remain compatible with both imperatives and interrogatives.

- (6) a. \*This book, leave on the table. (Bianchi and Frascarelli 2009: 12, their (44b))
- b. When you leave/tonight, don't forget to lock up.
- c. *De cette histoire , ne m'en parle plus jamais!* (French)  
 Of this affaire, *ne* me of-it talk more never  
 'Don't you ever talk to me about this affair again.'
- d. *Il libro, portamelo!*  
 (Italian)  
 the book bring-to.me-it  
 'Bring me that book.' (Cardinaletti 2009 : 8, her (17))
- (7) a. \*That book about shrimp, did you actually read ? (cf. Sobin 2003: 194)
- b. \*Those petunias, when did John plant? (Bianchi and Frascarelli 2009: 12, their (44f))
- c. When you were in France, which language did you speak?
- d. *Ton texte, quand l'auras tu terminé ?*  
 your text, when it have-FUT-2sg you finish-PARTICIPLE.  
 'Your texte, when will it be ready?'

e. *E la famiglia, dove la lasci?*

and the family where it leave-2SG

‘And where do you leave your family?’ (Frascarelli 2000 : 152 : (184a))

Observe that the patterns in (6) and (7) replicate those found in adverbial clauses. For the imperatives in (6) one might conceivably entertain a truncation analysis (as in Cardinaletti 2009) and assume there is no ForceP and hence no TopP or FocP, but absence of Force is harder to motivate with respect to root questions, which are clearly speech acts. Indeed, the pattern displayed by root wh-questions in (7) give rise to additional problems of execution for the truncation account. It is commonly assumed that the fronted wh-phrase moves to the specifier of the root FocP (Rizzi 1997). This as such is in keeping with the truncation account: if root wh-questions have illocutionary Force, then FocP will be licensed. But in that case, one also expects a higher TopP to be licensed, and the unacceptability of (7a) and (7b) is unexpected. Furthermore, on these assumptions, the topicalised constituents, *de cette histoire* ‘your text’ in (7d) and *la famiglia* ‘the family’ in (7e), can clearly not be said to occupy the lower TopP, the projection which, according to Haegeman (2006), is unavailable in English and available in Romance, but they must be in the higher TopP. So the higher TopP is projected but still cannot host a fronted constituent in English. Finally, (7c) confirms that the scene-setting adjunct definitely can occupy a higher position than FocP. In spite of the fact that truncation cannot plausibly be invoked, wh-questions display the distributional pattern found in adverbial clauses with argument fronting leading to ungrammaticality and both CLLD and fronted adjuncts remaining available.

One way of capturing the restrictions discussed is to tie all argument fronting operations in English directly to assertion, while allowing for fronted adjuncts and CLLD to be available in non-assertive contexts. Roughly, Force could carry the interpretable feature



[*iAss*] and (English) topicalization could be associated with [*uAss*]. A fronted constituent with [*uAss*] in a clause lacking Force [*iAss*] will lead to ungrammaticality. If illocutionary force and clause type are identified by means of a specific feature on Force, we can dispense with the distinction between Sub and Force proposed in Haegeman (2006): Force may host the subordinating conjunction, and depending on its feature specification (assertion, question etc) fronting will be licensed. In terms of such an analysis, truncation is no longer a primitive concept, the apparent structural truncation is simply a byproduct of the features instantiated on Force: whenever Force lacks [*iAss*] argument topicalisation will be unavailable and hence TopP cannot be activated.

Though the account is preferable in that ‘truncation’ is here not a primitive but follows from the analysis, there remain problems. First, FocP must remain available in non assertory contexts, since its specifier is taken to attract the *wh*-constituent in root questions. If FocP is then not dependent on assertory force, the question arises why argument fronting qua focalisation is excluded in English adverbial clauses (1). Second, tying English argument topicalisation to Assertory force is not fully satisfactory either. As observed by Culicover and Levine (2001: 297), gerunds are (for some speakers) compatible with topicalisation. It is certainly not a standard assumption in the literature that such gerundive clauses are associated with assertion, indeed gerunds are standardly taken to be presuppositional (Kiparsky & Kiparsky 1970, Hooper and Thompson 1973).

- (8) That solution Robin having already explored *t* and rejected *t*, she decided to see if she could mate in six moves with just the rook and the two pawns. (Culicover and Levine 2001:297,n14, (i))

At this point, there exists no workable definition of the required Force (assertion / ‘declarative’) and often there is danger of circularity: where MCP occur in a particular clause type, the clause will be labelled ‘assertive’ on a *post-hoc* basis. Heycock (2006: 190) remarks: “It is a general problem for work in this area that definitions given are vague and independent evidence for the validity of the concepts used often weak” (Heycock 2006: 190). Similar remarks are found in Bentzen et al (2007a: 9) and Hróarsdóttir *et al* 2008: 45).

So far the accounts outlined above explicitly relate the licensing of MCP to some specific property of the clause: if that is absent, then MCP are illicit. In the next section I explore a different generalization that emerges from the data, namely that English argument fronting (or MCP in general) is essentially available in the unmarked clause type, that is a clause in which no other movement has taken place. (cf. Roberts and Roussou (2002: 141) on declaratives as the unmarked force). At the descriptive level, this generalization also captures the unavailability of argument fronting in *wh*-questions and in imperatives: both of these display syntactically marked Force.

Further complications to the assertion related account are revealed by data presented in Ledgeway (2010) from Southern Italian dialects. This author introduces data such as those in (9) from the Campania dialect, in which the subject ‘*a fibbia* (‘the buckle’) is doubled by *chella* (‘that-one’) a demonstrative element in the left periphery.

- (9) a.                    *Chella*<sub>i</sub>            [DP ‘*a fibbia*]<sub>i</sub> *s’è rotta*.
- That one.F      the buckle.F    self=is broken
- b.                    *Chella*<sub>i</sub>            *s’è rotta* [DP ‘*a fibbia*]<sub>i</sub>.
- That one.F      self=is broken the buckle.F
- ‘The buckle has broken.’ (Ledgeway 2010: 259, his (1b,c))

The pattern has a particular impact on information structure:

The double-subject construction typically proves felicitous in contexts where it serves to announce a new topic or mark a shift from one topic to another, a pragmaticosemantic interpretation transparently betrayed in the structural combination of a pronominal with a coreferential lexical DP. In particular, pronominals represent the prototypical topical expression, whereas full DP coding is generally reserved for the expression of discursively new (unidentifiable or inactive) referents. (Ledgeway 2010: 264)

From the description above, and from the illustrations provided in Ledgeway (2010: 264-5) I tentatively conclude that the presence of the demonstrative is not associated with a familiar or given topic. Adopting the articulated left periphery as developed by Benincà and Poletto (2004), Ledgeway (2010) examines the position of the doubling demonstrative in some detail and concludes that it occupies a high Subject position in the left periphery, and in particular that its position is higher than that of the focus field. The lexical DP subject may occupy a number of different positions in the Left periphery or within IP:

- (10) [<sub>FrameP</sub> HTop [<sub>ForceP</sub> *che/ca* [<sub>TopP/IntP</sub> (LD-Top, *si*) [<sub>SubjP</sub> Subj1] (LD-Top, *si* Subj2<sub>i</sub>) [<sub>FocP</sub> ConFoc [<sub>FinP</sub> [IP [<sub>SubjP</sub> Subj2/proi] ]]]]]]] (Ledgeway 2010: 285, his (30))

If it was the case that conditional clause had a truncated left periphery in which the Focus domain and the high topic projections were unavailable, then we would predict that

Ledgeway's high SubjP would also not be available in conditional clauses. This prediction is not borne out: in (11) the demonstrative is available in a conditional clause:

- (11) *Se chella saglie a signora,*  
If that-one.F ascends the.F.SG lady.F  
*ammu passate nu guaie.*  
we-have passed a problem

‘If the landlady comes up, we are in trouble.’ (Ledgeway 2010: 284, 28b)

The only way to rescue patterns such as (11) in terms of the truncation account would be by adopting some selective truncation which allows for the high SubjP to survive the structural deficiency. Such an account seems to me stipulative. In terms of the Assertion account and assuming that conditional clauses are not assertions, one would then have to specify that the specific information structural function of the doubling pattern illustrated in (9) is independent of assertion.

#### **4. The syntax of initial constituents**

In the truncation account, the observed asymmetries between adjunct fronting and argument fronting on the one hand, and between argument fronting and CLLD on the other, are stipulated by relating the fronted argument to the available projections, but there seems to be no intrinsic reason why the data are what they are. Yet, these asymmetries are not accidental.

Shlonsky (2010) shows that Hebrew patterns like English. (12a) illustrates argument fronting in an embedded clause. As seen in (12b) and (12c) this type of argument fronting is incompatible with temporal clauses, while (12d) and (12e) show that adjuncts can be fronted in such contexts.

- (12) a. *Dani 'amar se et ha sulxnan Rina niqta.*  
 Dani said that ACC the table Rina cleaned  
 'Dani said that the table, Rina cleaned.'
- b. \**Dani niqa et ha sulxan axarey se et ha calaxot Rina hesira.*  
 Dani cleaned ACC the table after that ACC the dishes Rina cleared  
 'Dani cleaned the table after Rina cleared the dishes.'
- c. \**Dani yelex ha batta kse et ha 'avoda ha pakid yigmur.*  
 Dani will go the home when ACC the job the clerk will finish  
 'Dani will go home when the clerk finishes the job.'
- d. *Dani niqa et ha sulxan hayon*  
 Dani cleaned ACC the table today  
*axaery se 'etmol Rina hesira et ha calaxot.*  
 after that yesterday Rina cleared ACC the dishes  
 'Dani cleaned the table today after Rina cleared the dishes yesterday.'
- e. *Dani halax li-son kse ba bayt ha kol haya saqet.*  
 Dani went to sleep when at home the all was quiet  
 'Dani went to sleep when at home everything was quiet.'
- (Shlonsky 2010: p. 3: (28)-(31))

Crucially, like in English, argument fronting in Hebrew (12a-c) does not implicate the use of a resumptive pronoun. In Italian, the clitic in CLLD patterns turns out to play a key role in licensing the left peripheral DP. While CLLD – which displays the clitic- is not a MCP, Resumptive Preposing, i.e. the fronting of an argument without resumptive clitic, is. Cardinaletti (2009:9: (22a) and 8: (19a)) shows that while CLLD is licit in conditional clauses in Italian, resumptive preposing, a type of topic fronting without overt clitic, is not:

- (13) a. [*Se la stessa proposta la fa anche l'altro candidato*],  
 if the same proposal it-make-3SG also the other candidate  
*non otterrai quel posto.*  
 not get-FUT-2SG that position
- b. \**[Se la stessa proposta fa anche l'altro candidato]*,  
 if the same proposal make-3SG also the other candidate  
*non otterrai quel posto.*  
 not get-FUT-2sg that position

The role of the resumptive clitic in avoiding MCP effects is also shown by Garzonio (2008), who shows that while in root clauses (14a) a PP in the left periphery is optionally doubled by a resumptive clitic, in conditional clauses (14b) containing such a PP, the resumptive clitic is obligatory. He concludes that the clitic-less construction with PP fronting in (14b) is syntactically analogous to English argument fronting. For discussion of fronted PPs and CLLD see also Cruschina (2010).

- (14) a. *Col capo non (ci) parla.*  
 with-the boss not clitic-speak  
 'He doesn't speak with the boss.' (Garzonio 2008 : 7)
- b. ?*Se col capo, non \*(ci) parli,*  
 if with-the boss non \*(clitic) speak-2SG,  
*non puoi capire il problema.*  
 non can-2SG understand the problem.  
 'If you don't talk to the boss, you cannot understand the problem.'

## 4. The double asymmetry

### 4.1. The core pattern

The empirical generalization that emerges is the double asymmetry in (15), schematically summarized in (16). (i) In adverbial clauses, argument fronting is excluded in English (and in Hebrew) while initial adjuncts are available; (ii) in adverbial clauses argument fronting is excluded in English while in Romance CLLD is available:

- (15) a. \*When this column she started to write last year, I thought she would be fine.
- b. *Quand cette chanson je l' ai entendue, j' ai pensé à toi.*  
 when this song I it-have-1SG heard-PART-FSG, I have-1SG think-PART on you  
 ‘When I heard this song, I thought of you.’
- c. When last year she started to write this column, I thought she would be fine.
- (16) a. Eng \*when-- argument .....
- b. Rom √when- - CLLD.....
- c. Eng √when- - adjunct.....
- 

### 4.2. Intervention and the double asymmetry

The double asymmetry in (16) is also instantiated in relative clauses (17) and in *wh*-interrogatives (18):

- (17) a. \*These are the students to whom, your book, I would recommend in the next semester.

- b. These are the students to whom, in the next semester, I will recommend your book.
- c. ? *Ecco lo studente a cui, il tuo libro, lo darò*  
 this is the student to whom, the your book , it give-FUT-1SG  
*domani.* (Italian)  
 tomorrow
- (18) a. \*Robin knows where , the birdseed, you are going to put. (Culicover 1992: 5 (6c)<sup>5</sup>)
- b. Lee forgot which dishes, under normal circumstances, you would put on the table. (Culicover 1992: 9, (17d))<sup>6</sup>
- c. *Non so proprio chi, questo libro, potrebbe recensirlo per domani.* (Italian)  
 non know-1SG honestly  
 who, this book, can-COND-3SG review-it for tomorrow  
 ‘I honestly don’t know who could review this book for tomorrow;’  
 (Cinque 1990: 58, his (1b))

For speakers who reject argument fronting in the adverbial clause in English (15a), extraction from a clause with a fronted argument is also degraded; extraction remains applicable in the context of initial adjuncts or with CLLD. (20) summarizes the relevant patterns:

- (19) a. \*Who did you say that to Sue Bill introduced? (Boeckx and Jeong 2004: (3))
- b. Who did they say that two weeks ago had travelled to France?<sup>7</sup>
- c. ? *Non so a chi pensi*



*non* know-1SG to whom think-2SG

*che, tuo fratello, lo potremmo affidare.*

that your brother him can-COND-1PL entrust

‘I don’t know to whom you think that, your brother, we could entrust.’

(Rizzi 2004: his (64a))

- (20) a. Eng \* $wh_{INT/REL}$ -constituent - argument ..... t.....  
 b. Eng \* $wh_{INT/REL}$ -constituent .....argument ... t.....  
 c. Eng  $\surd wh_{INT/REL}$ -constituent - adjunct..... t.....  
 d. Eng  $\surd wh_{INT/REL}$ -constituent ..... adjunct.....t.....1  
 e. Rom  $\surd wh_{INT/REL}$ -constituent - CLLD..... t.....  
 f. Rom  $\surd wh_{INT/REL}$ -constituent ..... CLLD..... t.....

The asymmetries in (20) are standardly captured in terms of locality conditions on extraction: English fronted arguments give rise to intervention effects on movement, whereas English fronted adjuncts as well as CLLD constituents do not (see Cinque 1990, Rizzi 1997, for discussion and for references). While there remain important questions about the syntax of intervention (see Starke 2001, Rizzi 2004, Haegeman and Lohndal 2010 for some discussion), one way to account for the double asymmetry is to propose that only English argument fronting is derived by movement, hence English fronted arguments may act as interveners, while both a CLLD phrase and the adjunct to the left of the subject are merged in the left periphery and are not interveners for movement (see Cinque 1990, Ledgway 2010:290-293 for recent discussion and arguments). If intervention can account for the double asymmetry in (20), then the most economical account for the double asymmetry in adverbial clauses will be one according to which that double asymmetry also follows from locality conditions on movement. This should lead to the hypothesis that adverbial clauses are derived by

movement. As will be shown in the next section, this hypothesis actually ties in with a long tradition.

#### 4.3. The movement derivation of adverbial clauses

According to a fairly long standing tradition started by Geis (1970, 1975) and continued in work by Larson (1985, 1987, 1990), Declerck (1997), Demirdache and Uribe Etxebarria (2004), Stephens (2007), Bhatt and Pancheva (2006), Tomaszewicz (2009), Zentz (2011) and many others, temporal and conditional adverbial clauses are derived by movement of an operator from a TP internal position to the left periphery. Various types of empirical evidence are provided in support, for reasons of space I cannot go into this here. See also Haegeman (2011) for discussion. If such a hypothesis is adopted, the double asymmetry summarized in (16) should be reanalysed as in (21):

- |      |    |     |                  |                |                         |   |
|------|----|-----|------------------|----------------|-------------------------|---|
| (21) | a. | Eng | * <i>when</i> -- | argument ..... | t <sub>when</sub> ..... |   |
|      | b. | Rom | √ <i>when</i> -  | - CLLD.....    | t <sub>when</sub> ..... | 1 |
|      | c. | Eng | √ <i>when</i> -  | - adjunct..... | t <sub>when</sub> ..... | 2 |
- 

The ungrammaticality of argument fronting in adverbial clauses now follows from the same constraints that rule out argument fronting in English relative and interrogative *wh*-clauses.

That (4), repeated here as (22), is grammatical is expected since in this example the movement path of the *when*-operator will not cross the position of the embedded topic:

- (22) He held back when I told him that the staff, I myself would choose \_ (and the office, he would choose)

For completeness's sake I note that the availability of the doubling subject pattern in conditional clauses in the Southern Italian dialect described by Ledgeway (2010) also follows if, as he argues, the doubling pronoun is merged directly in the left periphery. Thus, like CLLD, the doubling pattern is not expected to interfere with movement.

#### *4.4. A precursor*

In the above I have proposed that the restricted distribution of MCP can be accounted for in terms of a syntactic account that puts a restriction on the interaction between moved constituents. This proposal is in line with the intuitions behind Emonds's original work on root phenomena. Concerning the movements which are referred to as Root Transformations he writes: "There is evidence that all the root transformations that front phrasal constituents without inducing comma intonation are substitutions for the sentence-initial COMP node. The evidence is the fact that only one of these transformations can occur in a given clause." (1976: 40) On the assumption that there is one slot in the CP area, the unavailability of multiple MCP will follow. If adverbial clauses are derived by operator movement to what used to be called COMP, then they are predicted to be incompatible with MCP that also involve movement to COMP since the fronted operator in COMP will preclude any additional movement.

However, in an articulated CP along the lines of Rizzi (1997) the incompatibility of various fronting operations to the left periphery can no longer be derived by the fact that there is only one landing site available. Rather it must be related to intervention effects related to multiple movements.<sup>8</sup>

### **5. Truncation follows from locality**

At this point I would like to return to the truncation account and eliminate a misunderstanding that seems to have arisen in the literature.<sup>9</sup> The intervention account sketched here (see also

Haegeman 2009, 2010a,b,c) is not seen as an alternative to the truncation account. In general, locality conditions on movement should lead to precise predictions as to the compatibility of different types of movement to the left periphery (see Starke 2001). If adverbial clauses are derived by leftward movement of an operator, intervention restrictions on movement will effectively determine which additional movements are available to their left periphery. In terms of the movement approach, the apparent ‘truncation’ of adverbial clauses can be seen as a by-product of movement: there is no need to invoke structural ‘truncation’ for adverbial clauses; rather certain projections cannot be activated because their activation would create an environment which renders the adverbial clause underivable. The claim of the paper is that a full understanding of the constraints on preposing in adverbial clauses ultimately rests on a full understanding of locality conditions on leftward movement. Though it is true that there remain questions concerning locality conditions on movement, these will need to be solved independently.

## **6. Completing the picture: peripheral adverbial clauses**

In the discussion so far I have left aside the fact that while argument fronting is excluded in central adverbial clauses, that is those illustrated above, another set of adverbial clauses, which I have labeled peripheral (Haegeman 2003, 2006) do allow for argument fronting (and MCP in general). I discuss one example here, for more details see the papers cited. The English conjunction *while* has two uses: (i) it introduces a temporal clause (23a) or a contrastive clause (23b). In the latter it’s interpretation resembles that of *whereas*. I have shown in independent work that central adverbial clauses are more closely integrated with the clause they modify than peripheral ones.

- (23) a. While I was revising this handout last week, I thought of another point.

- b. She put Len on her right while she will put Gillian on the corner of the table.

Observe now that whereas the temporal *while* clause in (23a) does not allow argument fronting, the peripheral one in (23b) does. (24b) is attested.

- (24) a. \*While this handout I was revising last week, I thought of another point.
- b. Sophie would put Len between two women who would have to bear his halitosis, while Gillian she buried mid-table among the also-rans.  
(Sebastian Faulks, *A week in December*, London: Vintage 2010, page 40)

The question arises how peripheral adverbial clauses should be dealt with. In Haegeman (2003, 2006) I proposed that peripheral adverbial clauses have the full fledged periphery as in (5a), thus allowing for fronting of arguments. In terms of the current proposal two options are available to derive the compatibility of peripheral adverbial clauses with fronting: (i) either no operator movement takes place to derive such clauses, which means that there will be no intervention effects and MCP are available, or (ii) there is operator movement but from a higher position in the periphery, with *while* reinstated as a temporal conjunction that introduces a temporal modifier to a tacit speech act head.

In the recent literature, a number of authors (Kayne 2010, in press, Manzini 2008, Arsenijević 2009a) have proposed that all *declarative* complement clauses are to be analyzed as hidden relatives. For instance, for Arsenijević (2009a) the verb *claim* is actually derived in the syntax from the combination of a light verb which incorporates a nominal element *claim*.

So *claim* roughly equates *make the claim*. This means that the clause embedded under *claim* would have to be assimilated to complement clauses of N, themselves derived as relatives (see Arsenijević 2009a)

- (25) a.       claimed that John kissed Mary  
      b.       *claimed* = made the claim that....

Clearly if complement clauses are uniformly reanalysed as hidden relatives, we need to be able to set apart those that allow MCP from those that don't. To do this, the hypothesis could be formulated that in clauses compatible with MCP, the relativization target is high up in the domain of the complement clause and hence the path of operator movement that derives the clause will not interfere with the movement operations that derive MCP. Arsenijević's own hypothesis that what is relativized is 'Force' would certainly be compatible with such a proposal, though, his analysis will have to be amended for complement clauses associated with N and which resist MCP.

The choice between the two options could be made on purely conceptual grounds but preferably one would like to find empirical support for one hypothesis or the other. One type of evidence that hypothesis (i), which assumes that there is no movement in peripheral adverbial clauses, is preferable is adduced in recent work by Zentz (2011). This author discusses morphological evidence for the operator movement account of adverbial clauses from Akxse. In this language *wh*-extraction gives rise to distinct verbal morphology. For details I refer to Zentz's own work, but suffice it to say here that whereas the distinctive morphological marking (*wh*-agreement) surfaces in central adverbial clauses it is absent from peripheral adverbial clauses, leading Zentz to the conclusion that these clauses display no movement.

Obviously further research is needed, not merely in relation to the internal syntax of adverbial clauses but in relation to the general question to what extent all complement clauses can be derived by some process of relativization. I leave this issue for future research;

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<sup>2</sup> The objection extends to Maki et al's (1999) adjunction account of argument fronting.

<sup>3</sup> Given (5a), the probing has to be upward. See Baker 2008, Boskovic 2007, Merchant and Sadock 2008, Stechow 2005, Zeijlstra 2004, Zeijlstra and Stechow 2008, Haegeman and Lohndal 2010, among others for upwards probing.

<sup>4</sup> Lipták (2010: 169) reaches a similar conclusion on the basis of a comparison of the Topic fields in Hungarian and in Italian. Again the observed crosslinguistic differences in fronting operations in the two languages have to be stipulated.

<sup>5</sup> If in these embedded *wh*-clauses, the *wh*-constituent targets the clause typing projection (Rizzi's SpecForce 1997), then we have to conclude that both the lower topic AND the higher topic must be unavailable here .

<sup>6</sup> See Browning (1996) and Delfitto (2002: 57-8).

<sup>7</sup> Thanks to Andrew Radford for this example and also for discussing speaker variation with me.

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<sup>8</sup> Cardinaletti (2008) comes close to being an updated implementation of Emonds' original idea.

<sup>9</sup> De Cat (2010) for instance writes (my italics):

It has recently been proposed that root properties could be captured syntactically by positing a reduced structure in non-root clauses (as in Haegeman 2006), *or* by appealing to restrictions on syntactic movement across elements endowed with properties inherent to rootness (Haegeman 2010)

There is no 'disjunction': the intervention account derives the truncation account.