Evidence for the movement derivation of adverbial clauses

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## 1. (Central) Adverbial clauses: An impoverished left periphery?

1.1. Starting point: MCP and adverbial clauses (Emonds 1969, 1976; Hooper \& Thompson 1973)
(1) a. When she began to write her regular column again, I thought she would be OK.
a'. *When her regular column she began to write again, I thought she would be OK.
a". *I thought she would be OK when her regular column she began to write again.
b. I won't take time off until I have finished this handout.
b'. * I won't take time off until this handout I have finished.
c. If you don't pass these exams, you won't get the degree.
c'. *If these exams you don't pass, you won't get the degree. (cf. Maki et al 1999)
d *When [fix his last faucet], you do, I will send you a check. (Authier 2011: 209, (57c))

### 1.2. Asymmetries in (temporal) adverbial clauses

### 1.2.1. Left peripheral adjuncts

(2) a. When last month she began to write a regular column for the Times (at a reported $£$ 250,000 a year), I thought.... (Guardian G2 21.01.2002, page 8, col. 5)
b. I used to listen to them dutifully in the car until one day the car was stolen and ...' (Observer 27.03.2005, page 1, col. 3)
c. Fr Quand samedi dernier j'ai mis France 2 vers 16h20, when Saturday last I-have put France 2 around 16.20 j'ignorais ce que j'allais vivre. I-ignored that what I was-going-to live 'When last Saturday I tuned into France 2 around 16.20, I did not know what I had coming to me.' (http://ecriveuse.unblog.fr/2008/08/)
1.2.2. Clitic left dislocation


| c. Quand cette chanson, | il a | dit | qu'il l'aimait, |
| :--- | :--- | :--- | :--- |
| when that song | he have-3SG | say-PART <br> trés surprise. |  |
| j'en that he it like-PAST-3sg, |  |  |  |

- CLLD is also allowed in adverbial clauses in Italian, Spanish, Catalan and Modern Greek (Haegeman 2006).
- CLLD is not movement to SpecTP; contra Jiménez -Fernández (2010)
(i) control ( $\sqrt{ } \mathrm{CLLD}-d i \ldots)$ vs. raising complements (*CLLD):
(4)It. a Mi sembra, il tuo libro, [Fin di conoscerlo bene]. (Rizzi 1997: 309) $\begin{array}{lllll}\text { me seems, the your book, di know-it } \\ \text { *? Gianni } & \text { sembra, well } \\ \text { il tuo libro, } & \\ \text { conoscerlo bene. }\end{array}$ Gianni the your book know-it well
(5)Fr. a ??Je pense, ton livre, pouvoir le comprendre.
(Rizzi 1997: 331, n 24) I think, your book, can it understand
b *Marie semble, ton livre, pouvoir le comprendre Marie seems, your book, can it understand
(ii) No CLLD with che deletion (Cardinaletti 1997, 2004, 2010, (16a))
(6)It. a. Gianni crede (che) Maria abbia fatto quella proposta.
Gianni believes (that) Maria has make-PART that proposal
b. Gianni crede $\quad$ (che) $\underline{\text { la stessa proposta }}$ la fece il partito di maggioranza.
Gianni believes (that) the same proposal it-make-PAST the party of majority
(iii) No CLLD with Aux-to-Comp (Cardinaletti 1997, 2004, 2010, (16b))
(7)It. a

| Avendo | Maria fatto |
| :--- | :--- |
| having | Maria make-PART |
| *Avendo(la) | la stessa proposta |
| having(it) | the same proposal |

quella proposta, ...
that proposal,...
fatta il partito di maggioranza, ... make-PART-FSG the party of majority
1.2.3. Comparative data: Hebrew (Shlonsky 2010: 3 (28-31))
(8) 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 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.'
c. * 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.'

### 1.2.4. Peripheral adverbial clauses are compatible with argument fronting

(9) a. His face not many admired, while his character still fewer felt they could praise. (Quirk et al 1985: 1378)
b. And yet some popular things are so brilliant, like The Simpsons and the Angel of the North. While other brilliant things hardly anyone buys - I'd put my friend's first novel and sherry in this category. (Observer 6.12 .2009 , page 34, col. 2)
c. 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)
1.2.5. High modal adverbs (in the sense of Cinque 1999)
(10) a. * If they luckily arrived on time, we will be saved. (Ernst 2007: 1027; Nilsen 2004).
b. $\quad$ J John will do it when/if he may/must have time. (Declerck and Depraetere 1995: 278)
(11) Mary studied literature in Oxford while her daughter will probably study medicine in Cambridge.

## 2. A first proposal: structural truncation (Haegeman 2003, 2006)

### 2.1. Survey

Table 1: the LP of adverbial clauses

|  | CLLD | Initial adjunct | Argument fronting | High modals |
| :--- | :--- | :--- | :--- | :--- |
| Central adverbial clauses | $\sqrt{ }$ | $\sqrt{ }$ | $*$ | $*$ |
| Peripheral adverbial clauses | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |

### 2.2. Earlier proposals

- It is well known that -un/-nun marked topics in Korean and -wa marked topics in Japanese are restricted in most embedded contexts... modals are also blocked from appearing in the embedded contexts which disallow topics. (Whitman 1989: ms. P. 5)
- ... this form of [emphatic, lh] topicalization is the grammar's reflex of the speech act to be performed and is as such on a par with German constructions involving modal particles like aber, denn, doch, ja etc. Modal particles supply features which interact with other features such as [WH] yielding a wide range of illocutionary forces. Bayer 2001: 14-15, my italics)
- ...if emphatic topicalization belongs to the class of grammatical means of force projection in the sense of Rizzi (1997), its root clause property and strict left-peripherality [in Bavarian] are not surprising. (Bayer 2001: 14-15, italics mine)
- As a positive environment we can say that [root] transformations operate only on Ss that are asserted. ...some transformations are sensitive to more than just syntactic configurations. It does not seem possible to define the domain of an RT in terms of syntactic structures in any general way. However, ..., even if it were possible to define in syntactic terms the conditions under which RTs can apply, ... the question of why these transformations can apply in certain syntactic environments and not others would still be unanswered. (Hooper \& Thompson 1973: 495, my italics)
- Topic selection is a speech act itself, an initiating speech act that requires a subsequent speech act like an assertion, question, command, or curse about the entity that was selected. (Krifka 2001: 25)
- Though RTs may apply in some complements that are full sentences introduced by the complementizer that, they may never apply in any complements that are reduced clauses. By reduced clauses we mean infinitives,
gerunds ${ }^{2}$, and subjunctive clauses, i.e. those complement types which have uninflected verbs. (Hooper and Thompson 1973: 484-5, my italics)
'Reduced clause': Structural deficiency?
cf. Kuroda (1992: 350), Benincà \& Poletto (2001), Grewendorf (2002: 53), Emonds (2004), McCloskey (2006), Meinunger (2004); Haegeman (2003a, 2006) (explored by Carrilho (2005: 244-5, 2008), Munaro (2005), Hernanz (2007a,b), Bentzen et al (2007), Abels \& Muriungi (2008: 693-4), Basse (2008), Cardinaletti (2009), Wiklund et al (2009).
2.3. A deficient left periphery: Haegeman 2006
$\begin{array}{llllll}\text { (12) } & \text { a. } & \text { (SubP) ForceP TopP1*FocP } & \text { TopP2* ModP } & \text { FinP } & \\ & \text { b. } & \text { SubP } & \text { TopP* ModP } & \text { FinP } & \text { ('truncated') }\end{array}$
2.3.1. Modifications to Rizzi's original LP (1997) ${ }^{3}$
- SubP: 'ForceP' is split into 'subordinating' projection and Illocutionary Force projection
- ModP: adjunct position in the LP (Haegeman 2003b, Rizzi 2004)
- TopP1*: 'high' TopP English argument fronting \& CLLD

TopP2*: 'low' TopP *English argument fronting, OK CLLD
Hypothesis Haegeman 2006: Availability of FocP and TopP1: depends on ForceP (cf. 2.1.)
High modals: licensed by ForceP (Zagona 2007)

### 2.3.2. Problems of implementation

Illocutionary force is not sufficient for licensing of argument fronting:
(13) a. *That book about shrimp, did you actually read? (cf. Sobin 2003: 194)
*That book about shrimp, when did you actually read? (based on Sobin 2003: 194)
b. $\quad$ Those petunias, when did John plant? (Bianchi \& Frascarelli 2010: 12, (44f))

Rizzi (1997): root wh-constituents: Spec FocP; $\Rightarrow$ If FocP is licensed in these examples (?through (interrogative) Illocutionary Force), why is high topic *?

- Adverbial adjuncts in LP may precede (= be higher than) FocP (cf. also Benincà \& Poletto 2004)
(14) When you were in France, which language did you speak?
$\Rightarrow$ Adjunct $>$ FocP, $\Rightarrow$ Adjunct is not always in a low ModP.
$\Rightarrow$ Where is adjunct in (14)?
(12) a' SubP ForceP TopP1* ModP FocP TopP2* ModP FinP

Asymmetry CLLD/high topic:
(15) a.Fr. Ton texte, quand l'auras tu terminé ? your text, when it have-FUT-2sg you finish-PART. 'Your texte, when will it be ready?'
b.It. E la famiglia, dove la lasci? and the family where it leave-2SG
'And where do you leave your family?' (Frascarelli 2000 : 152, (184a))

- CLLD > FocP:
$\Rightarrow \quad$ higher TopP is also available in root questions; still: English argument fronting is *?? in (13)
$\Rightarrow \quad$ English adjuncts /argument asymmetry is not (only?) due to variable 'size' of LP
$\Rightarrow \quad$ CLLD/argument asymmetry is not (only?) due to variable LP
Revised proposal: argument fronting in English is licensed by assertive illocutionary force, [uASS] ${ }^{4}$
But: - movement to FocP is not always dependent on assertion (cf. wh-fronting);
- English gerunds allow argument fronting (perhaps marginally) and high modals and are usually taken not to be asserted (cf. Kiparsky \& Kiparsky 1971)
(16) 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 \& Levine 2001:297, n.14, (i))


### 2.3.4. Operational definition of assertion/presupposition

- 'assertion' (vs. 'presupposition')
$\square \quad$ 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). (cf. Bentzen et al (2007a: 9) and Wiklund et al (2009)).
- It is likely that factive predicates, which presuppose the truth of their propositional complement, contain an Ass(ertion) operator in its CP. This operator is lexicalized by the complementizer, which explains why it must be obligatorily present [cf. John regrets *(that) Mary is bald]. Complements of propositional attitude verbs lack an Ass operator, therefore, their complementizer may be absent in some languages [cf. John thinks (that) Mary is bald] (Zubizaretta 2001: 201).
- a 'factive (assertion) operator'... 'Since the assertion operator is a positive operator ('it is truly a fact that...'), factives indicate that positive operators induce weak island [sic] to the same effect as negative operators.' (Starke 2004: 260).
- Neeleman \& Vermeulen (2011: 5, (29)): in (ia), 'John invited Pia' is 'asserted'. This use of even -and the associated 'assertion'- is compatible with embedded clauses that resist MCP and are often taken to not be assertions:

| (i) $\quad$ a. John invited even Pia. |  |
| :--- | :--- | :--- |
|  | b. When John invited even Pia, we knew there was something wrong. |

### 2.4. The double asymmetry

Table 2: A double asymmetry

|  | 2 |  |  |
| :--- | :---: | :---: | :---: |
|  | CLLD | Argument fronting | Initial adjunct |
| Central adverbial | $\sqrt{ }$ | $*$ | $\sqrt{ }$ |
| Root $w h$-question | $\sqrt{ }$ | $*$ | $\sqrt{ }$ |

(17) a. *Robin knows where , the birdseed, you are going to put. (Culicover 1992: 5, (6c))
b. Lee forgot which dishes, under normal circumstances, you would put on the table.
(Culicover 1992: 9, (17d))
c.It. Non so proprio chi, questo libro, potrebbe recensirlo . non know-1SG honestly who, this book, can-COND-3SG-review-it 'I honestly don't know who could review this book.' (based on Cinque 1990: 58, (1b))
(18) 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.It ? Ecco lo studente a cui, il tuo libro, lo darò domani. this is the student to whom the your book it give-FUT-1SG tomorrow
(19) a. $\quad$ Who did you say [that to Sue Bill introduced]? (Boeckx \& Jeong 2004: (3))
b. Which book did Leslie say [that for all intents and purposes John co-authored with Mary]?
(Bošković 2011: 34, note 34, his (i), cf. Culicover 1992)
$\begin{array}{llll}\text { c. It. } & \begin{array}{ll}\text { ?Non so } & \text { a chi } \\ \text { non know-1SG } & \text { to whom }\end{array} & \begin{array}{l}\text { pensi } \\ \text { think-2SG }\end{array} & \begin{array}{c}\text { [che, tuo fratello, } \\ \text { that your brother }\end{array}\end{array}$
lo potremmo affidare.]
him can-COND-1PL entrust
(Rizzi 2004: (64a))
'I don't know to whom you think that, your brother, we could entrust.'
a. $\quad$ This book, to Robin ${ }_{\mathrm{j}}$ I gave.
b. *Bill, that house, she took to for the weekend.
(Culicover 1991a: 36, (117a)). ${ }^{5}$
(Emonds 2004: 95 (27b))
c. Last week, in Paris, after a hard day's work, he met his agent again.
d. Deep down, as I grew up, I rued the fact I hadn't taken that path.
(Guardian 05.05.2009, page 2, col. 5)
e.It. Il libro, a Gianni, glielo darò the book, to Gianni him-it give-FUT-1SG without doubt 'I will give Gianni the book without doubt.'
(Rizzi 1997: 290, (21))

Table 3 : the double asymmetry

|  |  | 1 |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | CLLD | Argument fronting | Initial adjunct |
| (a) | Central adverbial clauses | $\sqrt{2}$ | $*$ | $\sqrt{ }$ |
| (b) | Root $W h$-question | $\checkmark$ | $*$ | $\sqrt{ }$ |
| (c) | Embedded wh-question | $\sqrt{ }$ | $*$ | $\sqrt{ }$ |
| (d) | Wh-relative | $\checkmark$ | $*$ | $\sqrt{ }$ |
| (e) | (long) $W h$-extraction | $\checkmark$ | $*$ | $\sqrt{ }$ |
| (f) | Multiple | $\sqrt{ }$ | $*$ | $\sqrt{ }$ |



- Typically accounts for (c-f) in Table 3 will be phrased in terms of locality conditions on movement: fronted arguments in English lead to island violations, LP adjuncts and CLLD do not. If (c-f) in Table 3 can be made to follow from locality conditions on movement, then it is tempting to try to capture (a) [and (b)] also in terms of locality conditions on movement. The effect of truncation would be a byproduct of movement: in order not to 'hinder' the movement a number of positions in the LP cannot be filled.


## 3. The movement derivation of temporal adverbial clauses

- According to a tradition started by Geis (published as Geis 1970, 1975, but already cited in Ross 1967: 211) and continued in work by Larson (1985, 1987, 1990), Declerck (1997), Demirdache and UribeEtxebarria (2004), Stephens (2007), Bhatt \& Pancheva (2006), Tomaszewicz (2008), Zentz (2011, 2012) and many others, temporal (and conditional) adverbial clauses are derived by movement of an operator from a TP-internal position to the left periphery.
- In many languages the 'conjunction' introducing temporal clauses is isomorphic with an interrogative (or relative) wh-operator. French: quand, Italian: quando, Spanish: cuando, Catalan: quan, Dutch: wanneer, Germann: wenn (Bhatt \& Pancheva 2002), Norwegian: når (Stephens 2006). Lipták (2005: 139): Hungarian temporal clauses are derived by a wh-strategy; Zribi-Hertz \& Diagne (1999) show that Wolof temporal clauses are (free) relatives.
- Old English before clauses were 'light headed temporal relatives' (Citko 2004), with the D head overt. the conjunction before has developed from a phrase of the form 'before the time that' (variously realized in Old English as toforan pam timan pe, foran to bam timan pe, and toforan pam pe) (Declerck 1998: 97-8)
- Zentz (2011, 2012/GIST5): in Akoose, a Bantu language, the finite verb in temporal clauses displays whagreement, also found in relative clauses.


### 3.1. Temporal 'relative' clauses

(22) a. this was the moment [when I decided to write it]. (Guardian 01.11.2008, page 14, col. 4)
b. When(ever) I am working on this book, I forget the time. (cf. Declerck 1998)

### 3.2. High and low construal and island effects

(23) I saw Mary in New York when [Tе ${ }_{\text {TP }}$ she claimed [ ${ }_{\text {CP }}$ that [ ${ }_{\text {TP }}$ she would leave.]]] (Larson 1987)
(i) high construal: 'I saw her at the time that she made that claim.'

(ii) low construal 'I saw her at the time of her presumed departure.' I saw Mary in New York [ ${ }_{C P}$ when ${ }_{i}{ }_{T P}$ she claimed [ ${ }_{C P} t_{i}$ that [TPP she would leave $t_{i}$ ]]]]
(24) I saw Mary in New York
when [ ${ }_{\mathrm{TP}}$ she made [ ${ }_{\mathrm{DP}}$ the claim [ ${ }_{\mathrm{CP}}$ that [ ${ }_{\mathrm{TP}}$ she would leave.]]]]
(i) high construal: 'I saw her at the time that she made that claim.'
(ii) low construal: CNPC *'I saw her at the time of her presumed departure. '

### 3.3. Prepositional adverbial clauses also display high/low construal

(25) a. I can't leave until John says I can leave. (based on Larson 1990b: 170, (2b))

Mittie drove until Daniel said she should stop. (from Geis 1970, cited in Johnson 1988:
b. I saw Mary in New York before John said that she left. (Larson 1987: 261, (45a))

Liz left before you said she had. (from Geis 1970, cited in Johnson 1988: 586, (6a))
c. I saw Mary in New York after John said that she left. (Larson 1987: 261, (45a))

Sam fell after you said he would. (from Geis 1970, cited in Johnson 1988: 586, (6b))
d. I haven't been there since I told you I was there. (Larson 1990b: 170, (2d))

Betsy has used eye shadow (ever) since John said she has. (from Geis 1970, cited in Johnson 1988: 586, (6c))

### 3.4. Cross-linguistic support

3.4.1. French stylistic inversion
(27) Soudain surgirent six hommes noirs. suddenly emerge-PAST-3PL six men black

| a. | ?Quand a crié l'enfant, <br> when have-3SG cry-PART the child, |  |
| :---: | :---: | :---: |
|  |  |  |
|  | tout le monde s'est | affolé. |
|  | Everyone himself be-3SG | panic-PART |
| b. | ?Tu changeras d'avis you change-FUT-2SG of opinion | quand rentrera ta femme. |
|  |  | when return-FUT-3SG your wife |
| c. | ?Alors que chantait | chantait Marie, |
|  | then that (=when) sing-PAST | sing-PAST-3SG Marie, |
|  | une bombe | éclaté. |
|  | a bomb have-3SG | explode-PART |
|  | (Kayne 1972: 108, n 13, Lahousse 2003a: $16{ }^{6}$ ) |  |

(29) Quand avait débuté le salon Sainte-Euverte...
when have-PAST-3SG start-part the salon Sainte Euverte
'When the Salon Sainte Euverte had opened,...' (Proust, Le Bidois 1952:302)

- quantitative data (from Lahousse 2003a):

| Stylistic inversion | Total | No additional triggering factor |
| :--- | :--- | :--- |
| Quand ('when') adverbials | 289 | 128 |
| Pendant que ('while') | 51 | 21 |

SI in French central adverbial clauses (based on Lahousse 2003a; Frantext (1995-2000))

### 3.4.2. VP ellipsis (Takahashi 2008a,b)

A VP in a when-clause cannot easily antecede VP ellipsis. (41) is based on Takahashi's examples:
(30) Context: Shoichi works at a day care with three babies, John, Bill, and Jesse, each of whom has a certain problem. John only has good digestion when Agnes feeds him. Bill sometimes refuses to eat. Jesse is a loud crier.

Sally: How was your day at work?
a. S1: A nightmare!!! Lots of things went wrong. Agnes was absent when John ate lunch. Bill didn't eat lunch. Jesse cried for hours.
b. S1: A nightmare!!! Lots of things went wrong. Agnes was absent when John ate lunch. *Bill didn't <eat lunch>. Jesse cried for hours.

## 4. VP ellipsis and the derivation of adverbial clauses

4.1. VP ellipsis as VP topicalization: English (Johnson 2001, Aelbrecht 2010b, Authier 2011)

English VPE/ 'trace' of VPT: licensed by finite auxiliary \& by to
(31) a. Jane wouldn't eat grapefruit and Holly wouldn't $\varnothing$ either.
b. Jane hasn't eaten any grapefruit and Holly hasn't $\varnothing$ either.
c. Mag Wildwood wants to read Fred's story, and I also want *(to) Ø.
(Johnson 2001: 440 (his 5d)).
(32) She claimed that...
a. eat grapefruit, Holly wouldn't $t$.
b. eaten grapefruit, Holly hasn't $t$.
c. eat grapefruit, Holly wants *(to) t. (cf. Johnson 2001: 444, his (17))

- Johnson: 'this is a pretty close fit, and it encourages thinking of the licensing condition on (VP) Ellipsis in terms of the licensing condition on traces' (2001: 444). ... 'for a VP to elide, it must first topicalize' (2001: 446) ... '[t]his proposal, then, gives VP Ellipsis an analysis parallel to the Topic Drop phenomenon that Huang (1984), among others, discusses' (2001: 447). ${ }^{7}$
(33) a. Mag Wildwood wants to read Fred's story, and I also want to $\emptyset$.
b Mag Wildwood wants to read Fred's story, and [read Fred's story] I also want to.
(34) a. *Mag Wildwood came [to read Fred's story], and I also came [to Ø]. (Johnson 2001: 445,
b. $\quad *\left[\right.$ Read Fred's story] I also came [to $\mathrm{t}_{\mathrm{vp}}$ ]
c. $\quad$ I also came [[ read Fred's story] to $\mathrm{t}_{\mathrm{vp}}$ ]
4.2.French: TP ellipsis as TP topicalization (Authier 2011)

Authier (2011: 202): 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 modal [TP] ellipsis is licensed by topicalization.
(35) a Je veux pas laver tes chaussettes, mais nettoyer l'évier, je veux bien. I want not wash your socks 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 Peux-tu nettoyer l'évier? Je veux bien $\emptyset$.
Can-you clean the sink I want well
4.3. VPE vs. VPT : asymmetries (examples from Aelbrecht \& Haegeman to appear)
(i) temporal adverbial clauses
(36) 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 when she did $\emptyset$, her life changed entirely.
(ii) $w h$-clauses
a. *I knew that one student presented this article in my class but I can't recall now [which of the students [present this article] did t ].
b. I knew that some students presented this article in my class but I couldn't recall [which of the students didn't $\emptyset]$.
(38) a. *I know that one student presented this article in my class but I can't recall the student [who [present this article] did t].
b. I know that some students presented this article in my class but I can't recall the students [who didn't Ø].
(iii) multiple fronting:
(39) a. $\quad$ [Increase in value] the old house he was sure would. (Emonds 2004: 95)
b. $\quad$ The old house [increase in value] he was sure would. (Emonds 2004: 95)
c She doubted whether the new house might increase in value, but [the old house] she was sure would $\emptyset$.

## Conclusion:

Aelbrecht \& Haegeman (to appear): VPE is not derived by VPT, their distribution differs. Specifically: VPT leads to intervention effects while VPE does not seem to do so.

UNLESS.
4.4. Rescue by PF deletion (Bošković 2011): VP ellipsis as VP topicalization (ii)?
4.4.1. Repair by ellipsis (cf. Saito 2001)

Rescue of island violations by ellipsis of island:
(40) a *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 [a man who bit t.]
c She kissed a man who bit one of my friends, but Tom does not realize which one $\emptyset$. (Ross 1969: 276)

Authier (2011: 212; based on Bošković 2011; Chomsky 1972; Ross 1969):
(i) When a $w h$-moved element crosses an island boundary, the island is *-marked and ...
(ii) when it crosses an intervener, leading to a potential intervention effect, the intervener is *-marked (i.e. $a *$ is assigned to the element that has caused a locality-of-movement violation). ${ }^{8}$

The presence of a * in the final PF representation leads to a violation. However, such a violation will not occur if the *-marked element is deleted at PF since no * is present in the final PF representation.
(i) Ellipsis of island (Ross 1969: 276):
(40) d *She kissed a man who bit one of my friends, but Tom does not realize which one [Tр she kissed [DP* a man who bit t.]]
e *She kissed a man who bit one of my friends, but Tom does not realize which one $\mathrm{E}_{\text {TP }}$-she kissed [pp* a man who bit t.]
(ii) Ellipsis of the intervener:

- Authier (2011) VPE has a wider distribution than VPT:
- Repair by ellipsis: the offending fronted VP is an intervener (*; by VPE the violation is removed).
(41) a. *I know that one student presented this article in my class but I can't recall the student [who [vp present this article]* did t].
b. I know that one student presented this article in my class but I can't recall the student [who [present this article]* did t].
4.4.2. Consequences of Authier's proposals for the derivation of adverbial clauses
(42) Mary wanted to move to London
a. *and when [move to London]* she did t , her life changed entirely.
b. and when she did $\emptyset$, her life changed entirely.
- Repair by ellipsis: the offending fronted constituent in (42a) is an intervener (*); by VPE the 'troublemaker' is eliminated and the locality violation is removed.
c. and after [move to Londen]* she did t , her life changed entirely.

If (42a) is 'rescued by ellipsis' (following Authier 2011, Bošković 2011), then:
$\Rightarrow$ (i) in the offending pattern the to-be-deleted constituent $=$ a starred intervener (Bošković's 'troublemaker').
$\Rightarrow$ (ii) the 'troublemaker' = intervener for another element which moves across it.
$\Rightarrow$ (iii) movement of operator in adverbial clause.
$\Rightarrow$ (iv) the 'troublemaker' must have been able to move to a LP position
It is not clear how such a movement account of V/TPE would fare with a 'strict' truncation analysis: (i) according to such an analysis there is by definition simply no room to move the to-be-elided V/TP in the truncated structure; moreover, (ii) the truncation analysis does not predict any intervention effects.

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Notes
This research is funded by FWO Belgium as part of project 2009-Odysseus-Haegeman-G091409. See (16) for gerunds.
Rizzi (2001: 288) gives Italian examples and Authier (2011: 208) gives French examples for FocP>TopP. See Emonds (1976: 7, note 5) for an early suggestion of the use of [+ASSERTION].
5 See Breul (2004: 199-205) for discussion of multiple fronting in English. The English examples are much improved if the first constituent is a topicalized constituent and the second is focalized. This follows from a feature based account on intervention as in Starke (2001), Rizzi (2004).
$6 \quad$ Native speakers I consulted accepted (28) and relate the markedness of the examples to the fact that SI belongs to the more formal register.
7 The match is not perfect, cf. Johnson (2001: 444), Kim (2003: 278). Observe also that in many languages topic drop is a MCP, unlike VPE.
$8 \quad$ Based on the following contrasts:
(i)It. a. *Gianni sembra a Maria essere stanco.

Gianni seems to Maria be tired
b. A Maria, Gianni sembra essere stanco.

To Maria Gianni seems be tired
See also Saito (2001)

