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1. Starting point: argument fronting in adverbial clauses (Emonds 1969, 1976, 2004; H&T 1973)

1.1. Central adverbial clauses (temporal, conditional) resist argument fronting:

- (1) a. Her regular column, she began to write in 1995.
When she began to write her regular column in 1995, I thought she would be OK.
*When her regular column she began to write in 1995, I thought she would be OK.
*I thought she would be OK when her regular column she began to write in 1995.
*I thought she would be OK when she began to write in 1995.
b. While I was revising this paper last week, I thought of another analysis.
*While this paper I was revising last week, I thought of another analysis.
b'. *I thought of another analysis while this paper I was revising last week.
b''. *I thought of another analysis while this paper I was revising last week.
c. I won't take time off until I have finished this handout.
c'. *Until this handout I have finished, I won't take time off.
c''. *I won't take time off until this handout I have finished.

1.2. 'Peripheral adverbial clauses' are compatible with argument fronting

- (2) 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)
d. Do I still want this? I don't think so! Whereas Walter you never have to get tired of, because you don't feel like kissing him, you can just be close to him forever. (Frantzen, *Jonathan, Freedom*, 2010, Fourth Estate paperback 2011: 182)
e. It is amazing how this view could have spread about someone who changed the image of causes like Aids and landmines, and in doing so showed a possible new role for the royals. It is particularly ironic since so much of what Diana did for her fellow humans she did with no concern for publicity whatsoever. (Guardian G2 31.08.2004, page 9, col. 2)

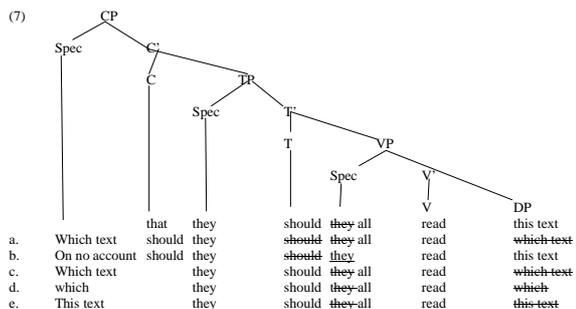
1.3. Root phenomena (Emonds 1970, 1976, 2004)

- (3) a. I told him to fix the last faucet and fix the last faucet he did.
b. You have to fix this last faucet
*and when fixed this last faucet you finally have, I will send you a check. (cf. Authier 2011: 209, (57c))
(4) a. The deputies extorted with impunity and no less corrupt was the ward boss.
b. *The deputies could extort with impunity, as long as no less corrupt was the ward boss. (Emonds 1976: 35, (36))
(5) a. Also present at the meeting were the company directors.
b. *When also present at the meeting were the company directors, nothing of substance was ever said.
(6) a. Instead the patriotic duty was dismissing 'random acts of criminality'. While criminal the rioting indubitably was, random it was not. (Guardian 6.9.12, page 36 col 2)
b. It is notable that all the above studies locate the benefits of sisterhood as arising in older childhood – once the initial sibling rivalry and the smarming pain of the knowledge that from now on there will always be someone younger and cuter than you around to grab the attention has worn off. Because wear off it does, and it did. (Guardian G2 29.10.2010, page 21 col. 2)

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2. The periphery of the clause and the distribution of root phenomena

2.1. The structure of the clause (i)



2.2. The structure of the clause (ii): the articulated CP

2.2.1. Problems for the unique CP layer: English

- (8) a. We were instructed [_{CP} that [_{CP} on no account could [_{TP} we show any of the material we brought with us as evidence]]. (Guardian 27.7.11 page 33 col 3)
b. Terry is the person [_{CP} for whom [_{CP} not even a postage stamp did [_{TP} I remember to buy]]. (cf. Culicover 1996: 456, (37b))
d. [_{CP} Many of the things they seem to be arguing for [_{CP} not only do [_{TP} I agree with]]] but ... (Guardian, 21.01.2004, page 6, col. 5)

2.2.2. Gungbe

- (9) a. Wémà lɔ we Sɛna xɛ́.
book the FOC Sena read-PERF
'The BOOK Sena has read.' (Aboh 2004a: 238, (7c))
b. Ûn lén dɔ wémà lɔ we Sɛna xɛ́.
I think-PERF that book the FOC Sena read-PERF
'I think that the BOOK Sena has read.' (Aboh 2004a: 238, (7c))
c. [_{CP} dɔ [_{FOC} wémà lɔ [_{FOC} we] [_{TP} Sɛna xɛ́]]]
d. [Nú-tɛ] we Sɛna xɛ́.
Thing+Q FOC Sena read-PERF
'What (thing) did Sena read?'
- (10) a. Dàn lɔ yà Kofi hù -i.
snake the TOPIC Kofi kill-3SG
'As for the specific snake, Kofi killed it.' (Aboh 2004a: 291, (3a))
b. Ûn dɔ dɔ dɔ dɔ yà Kofi hù -i.
I say that snake the TOPIC Kofi kill-3SG

- 'I say that, as for the specific snake, Kofi killed it.' (Aboh 2004a: 291, (3b))
c. ...[_{CP} dɔ [_{TOP} dɔ dɔ [_{TOP} yà] [_{TP} Kofi hù i]]]
d. [Gɔɔjé mé] yà, yɔkpɔ lé nɔ yì sɔ̀ndɛskùl
holidays in TOP child num hab go Sunday school
'As for the holidays, children habitually go to Sunday school.'
(Aboh 2004a : 312, (49b))
- (11) a. Kòfi yà gǎ̀nkpá mé wɛ kpɔ̀nɔ̀n lé sù-i dɔ.
Kofi TOP prison in FOC policeman NUM shut-PERF-3SG LOC
'As for Kofi, the policemen put him IN PRISON.'
b. ...[_{CP} dɔ [_{TOP} dɔ dɔ [_{TOP} yà] [_{FOC} wémà lɔ [_{FOC} we] [_{TP} ...]]]
c. CP ⇒ TopP > FocP > TP
- 2.2.3. Italian
Rizzi (2001): root wh-movement targets SpecFocP (cf. (9a)): complementary distribution wh-movement & focus movement:
- (12) a. *A chi QUESTO hanno detto (non qualcosa'altro)?
to whom THIS have-3PL say-PART (not something else)
b. *QUESTO a chi hanno detto (non qualcosa'altro)?
THIS to whom have-3PL say-PART (not something else)
- (13) Clitic left dislocation (CLLD) and (recursive) TopP*
a. Questo libro non lo voglio.
this book non it want-1SG
'This book, I don't want.'
b. Gli ho detto che questo libro non lo voglio.
him have-1SG say-PART that this book non it want-1SG
'I have told him that this book, I don't want.'
c. A Maria di questo problema gliene ho parlato.
to Maria of this problem to her -of it have -1SG talk-PART
- (14) TopP* FocP
a. It. e [_{TOP} la famiglia] [_{FOC} dove la lasci ?]
and the family where it leave-2SG
'And where do you leave your family?' (Frascarelli 2000 : 152, (184a))
b. Fr. Et [_{TOP} ton texte] [_{FOC} quand l'auras tu terminé ?]
And your text, when it have-FUT-2sg you finish-PART
'And your text, when will it be ready?'
- (15) subordinating conjunctions
a. Penso, che [_{TOP} a Gianni] gli dovrei parlare.
think-1SG that to Gianni clitic must-COND-1SG speak
b. *Penso, a Gianni, che gli dovrei parlare.
c. che > TopP
d. *Penso, di [_{TOP} a Gianni] dovergli parlare.
e. Penso, [_{TOP} a Gianni] [_{FIN} di] dovergli parlare.
think-1SG to Gianni of must clitic speak
f. TopP > di
g. ForceP (che) TopP * FocP TopP* FinP (di)

2.3. Restrictions on root transformations in English

- (16) a. [_{TP}PP Many of the things they seem to be arguing for [_{FocP} not only do [_{TP} I agree with]]] but ... (Guardian, 21.01.2004, page 6, col. 5)
 b. We were instructed [_{CP} that [_{FocP} on no account could [_{TP} we show any of the material we brought with us as evidence]]]. (Guardian 27.7.11 page 33 col 3)
- (17) a. Flights to CHICAGO we should try to avoid.
 b. Bill warned us that flights to CHICAGO we should try to avoid. (Emonds 2004: 77)
 c. [_{CP} that [_{FocP} flights to CHICAGO [_{TP} we should try to avoid]]]

2.3.1. Finiteness restriction

- (18) a. *Bill warned us flights to Chicago to avoid. (Emonds 2004: 77)
 b. *I really want that solution Robin to explore thoroughly. (Culicover and Levine 2001: 297, n.14, (ii))

Note:

English gerunds allow argument fronting (perhaps marginally):

- (19) 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))

2.3.2. Some finite domains are also incompatible with MCP²

- (i) central adverbial clauses (cf. (1))
- (20) a. *Mary used another company [(since/until) flights to Chicago they could avoid]. (Emonds 2004: 77)
 b. *If this exam you don't pass, you'll have to retake it in January.
- (ii) complements of factive predicates (21)
 (iii) sentential subjects (22);
 (iv) complement clauses to nouns (23):
- (21) a. *I regret that Mary, my antics upset as much as they did. (Alrenga 2005: 179, (16b))
 b. *Sally plans for Gerry to marry her, and it bothers me that marry her he will. (H&T 1973: 479, (102))
- (22) a. *[That [a rabbit] he pulled out of the hat] seemed to confuse him. (Green 1996: 6)
 b. *[That [playing in tomorrow's concert] will be Artur Rubinstein] is certain. (H&T 1973: 479, (71))
- (23) a. *[A warning that flights to Chicago travellers should avoid] will soon be posted. (Emonds 2004: 77)
 b. *[Their promise that only until five will they work] will be hard to keep. (Emonds 2004: 77)
 c. *[The announcement [that [speaking at today's luncheon] will be our local congressman] turned out to be false. (H&T 486: heir (173))

² For relative clauses with MCP see a.o. H&T (1973: 489-91), Green (1976), Ogle (1981) and Bianchi (1999).

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3. Central adverbial clauses have a left periphery

3.1. Left peripheral adjuncts

- (24) a. When last month she began to write her regular column again, I thought she would be OK. I thought she would be OK when last month she began to write her regular column again. (see also Breul 2004: 212, (333) and pace Hamann (1997))
 b. 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://ecrivreuse.unblog.fr/2008/08/>)

3.2. Clitic left dislocation in Romance

CLLD : allowed in adverbial clauses in French, Italian, Spanish, Catalan and Modern Greek (Haegeman 2006, see among others Bocci 2007, Cardinaletti 2009).

- (25)Fr a. Dès que ton texte je l'aurai lu, je t'appellerai. as soon as your text I it have-FUT-1SG read-PART, I you call-FUT-1SG
 'As soon as I've received your text, I'll call you.'
 b. Quand cette chanson je l'ai entendue, when that song I it have-1SG heard-FEM, j'ai pensé à mon premier amour. I have-1SG think-PART to my first love.
 'When I heard that song, I thought of my first love.'
 c. Quand cette chanson, il a dit qu'il l'aimait, when that song he have-3SG say-PART that he it like-PAST-3sg, j'en ai été très surprise. I of it have-1SG be-PART very surprised-FSG.
 'When he said that he liked that song, I was astonished.'
 d. Si ce livre tu le trouves à la Fnac, achète le. If this book you it find-2SG at the FNAC, buy it.
- (26)It. a. Se la stessa proposta la fa anche l'altro candidato, if the same proposal it-make-3SG also the other candidate non otterrà quel posto. not get-FUT-2SG that position
 b. Quando a Maria di questo problema gliene ho parlato, when to Maria of this problem to her -of it have -1SG talk-PART, mi ha capita perfettamente. me has-3SG understand-PART-FEM perfectly
 c. Se a Maria di questo problema non gliene parleremo, non potrà aiutarci if to Maria of this problem non her-of it speak-FUT-1PL, non can-FUT-3SG help us

Ledgeway (2010): his (33) from the Campania dialect: the subject *a fibbia* ('the buckle') is doubled by a left peripheral demonstrative element *chella* ('that-one').

- (27)Np. a. *Chella*, [_{DP} 'a fibbia]_i s'è rotta. that one.F the buckle.F self=IS broken
 b. *Chella*, s'è rotta [_{DP} 'a fibbia]_i.

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that one.F self=IS broken the buckle.F
 'The buckle has broken.'
 (Ledgeway 2010: 259, his (1b,c))

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. (Ledgeway 2010: 264)

Adopting the articulated left periphery developed by Benincà and Poletto (2004), Ledgeway (2010) concludes that the doubling demonstrative occupies a designated subject position in the left periphery, Subj1 (28), which is higher than FocP. (The doubling lexical DP subject (=Subj2) may occupy a number of different positions in the left periphery or in TP)

- (28) [_{FrameP} HTOP [_{FocP} che/ca [_{Topic/IntP} (LD-Top, *si*) [_{SubjP} Subj1] (LD-Top, *si* Subj2)] [_{FocP} ConFoc [_{FrameP} [_{TP} [_{SubjP} Subj2/proi]]]]]] (Ledgeway 2010: 285, his (30))

Cf. Frascarelli & Hinterhölzl (2007): Hierarchy: 'Shift topic' > FocP:

- (29) [_{ShiftP} A-Topic [_{ContrP} C-Topic [_{FocP} [_{FrameP} *G-Topic [_{FrameP} [_{TP}...
 (30) Se *chella* *saglie* a signora, ammu passate nu guaie. if that-one.F ascends the.FSG lady.F we-have passed a problem
 'If the landlady comes up, we are in trouble.' (Ledgeway 2010: 284, 28b)

⇒ Given Ledgeway's analysis of double subjects the Neapolitan conditional clause in (30) must project up to SubjP1, i.e. include the projection FocP.

Is the difference between English argument fronting and CLLD due to 'parametric variation' (however expressed, eg amount structure, presence/absence of edge feature (Basse 2008) etc) in the 'size' of the LP of the adverbial clause, with Romance LP being 'larger' than the English LP? No, not all LP phenomena are available in Romance adverbial clauses, in particular LP movements that seem to pattern with English (and lack resumptive clitics) are also unavailable:

3.3. Restrictions in Romance adverbial clauses

(i) Focus fronting is unavailable in Italian adverbial clauses³:

- (31) ??Se la PROVA ORALE non supera, non otterrà il diploma!⁴ if the exam oral non pass-3SG, non obtain-FUT-3SG the diploma
 'If it's the oral exam that he fails, he won't get the degree.' (Bocci 2007: 15, (32))

(ii) Resumptive preposing (Cardinaletti 2010), which is similar to English topicalization and does not involve a resumptive clitic, is unavailable in central adverbial clauses (32) where CLLD is available (26a):

- (32) *Se la stessa proposta fa anche l'altro candidato, if the same proposal make-3SG also the other candidate non otterrà quel posto.

³ French has very restricted argument fronting (*Le chocolat, j'adore; huit ans je devais avoir* (Abeille, Godard & Sabio 2008). I will not discuss these patterns here.

⁴ The judgments are the same if the adverbial clauses is sentence-final, Nicola Munaro (pc), Rita Manzini (pc) accepts some instances of focalization in conditionals. This needs looking into.

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not get-FUT-2sg that position (Cardinaletti 2010)

(iii) PP preposing in French and Italian need not involve a resumptive clitic (Rizzi 1997), but the clitic becomes compulsory in central adverbial clauses:⁵

- (33) a. Quand à Fred, tu *(lui) casses les pieds, il te tourne le dos. when to Fred, you (to-him) break the feet, he to-you turns the back
 'When you get on Fred's nerves, he walks away.'
 b. Quand de ses problèmes, on n'*(en) parle à personne, ils semblent insurmontables. when of one's problems, one NEG (of-them) talks to no one, they seem unsurmountable.
 'When you don't talk to anyone about your problems, they seem unsurmountable.'
 c. Et si à Paul, on *(lui) envoyait une carte, tu crois qu'il serait content? And if to Paul, one (him) sent a card, you think that he would-be happy?
 'and if we sent Paul a card, do you think he'd be happy?'
- c.lt Col capo non (ci) parla. with-the boss non clitic speak-3SG
 'He doesn't speak with the boss.'
 d.lt ? Se col capo, non *(ci) parli, non puoi capire il problema. if with-the boss non clitic speak-2SG, non can-2SG understand the problem.
 'If you don't talk to the boss, you cannot understand the problem.' (Garzonio 2008 : 7)

(iv) French fronting of a non finite infinitival clause (without a clitic (34a,b) is subject to the same restrictions as MCP. With a clitic (34c) the fronting remains acceptable in adverbial clauses.

- (34) a. Fumer dans les bureaux, on ne pourra pas. to-smoke in the offices, we will not be able to.
 b. *Dès que fumer dans les bureaux, on pourra, on le fera. as soon as to-smoke in the offices, one will-be able to, we will.
 c. Quand fumer dans les bureaux, on pourra le faire en toute impunité, when to-smoke in the offices one will-be-able it do with impunity on pourra dire que vous avez gagné. one will-be-able say that you have won

CLLD = movement to SpecTP? (cf. Zubizarreta 1998: 100, Jiménez-Fernández 2010)

(i) No CLLD with *che* deletion (Cardinaletti 1997, 2004, 2009, (16a))

- (35)lt. a. Gianni crede (che) Maria abbia fatto quella proposta. Gianni believes (that) Maria have-SUBJ make-PART that proposal
 b. Gianni crede *(che) la stessa proposta la fece il partito di maggioranza. Gianni believes (that) the same proposal it-make-PAST the party of majority

(ii) No CLLD with Aux-to-Comp (Cardinaletti 1997, 2004, 2009, (16b))

- (36)lt. a. Avendo [_{TP} Maria fatto quella proposta, ...]
 ← having Maria make-PART that proposal, ...
 b. *Avendo(la) la stessa proposta fatta il partito di maggioranza, ...
 ← having(it) the same proposal make-PART-FSG the party of majority

⁵ Judgements Jean Marc Authier (pc).

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- (iii) control (√CLLD – di ...) vs. raising complements (*CLLD):
 (37)It. a. Mi sembra, [TopP il tuo libro, [Fin di conoscerlo bene]. (Rizzi 1997: 309)
 me seems, the your book, di know-it well
 b. *?Gianni sembra, il tuo libro, conoscerlo bene.
 Gianni seems the your book know-it well

4. The double asymmetry

Table 1: A double asymmetry

	CLLD (Romance)	Bare Argument fronting (English, Romance)	Initial adjunct
Central adverbial clause	√	*	√

4.1. Embedded wh-questions

- (38) 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))
 . I want you to find out who in the family murdered Harriet and who since then has almost spent forty years trying to drive me insane. (The girl with the dragon tattoo. Stieg Larsson. 2008 Translated into English by Reg Keeland. P. 85 MacleHose Press London.) It tells us how much in 20 years books have become such a welcome art of TV culture and debate... (Observer 05.09.2010, page 29, col. 1)
 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))
 d.Fr. Je me demande bien ce qu'à Jean, on pourrait *(lui) acheter.
 I myself ask well what to Jean we could him buy
 'I wonder what we could buy for John.'

4.2. Relative clauses

- (39) 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. I libri che a Gianni Maria ??(gli) ha dato sono questi.
 the books that to Gianni Maria him have-3SG give-PART are these (Cardinaletti 1995:84)
 d.Fr. Achète-moi ce qu'à Marie tu allais *(lui) acheter.
 buy-me what to Marie you were-going (to her) to-buy
 'Buy me what you were going to buy for Mary.'

4.3. Long interrogative wh-movement

- (40) a. *How did you say that the car Bill fixed. (Rochemont 1989: 147, Breul 227, his (359))
 *Who did you say that to Sue Bill introduced? (Bocck & Jeong 2004: (3))
 b. Which surgeon did you tell me that during an operation had a heart attack? (Bresnan 1977: 194)
 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)
 ?Which TA did John say that if the student does poorly, the teacher would fire. (Collins 1998: 58, (3a))

⁶ Judgements Belletti & Rizzi 1988: 337.

- How did John say that if Mary bought the tools, Bill would fix the car? (Collins 1998: 60, (11b))
 c.It. ?Non so a chi pensi che, tuo fratello.
 non know-1SG to whom think-2SG that your brother
 lo potremmo affidare.
 him can-COND-1PL entrust
 'I don't know to whom you think that, your brother, we could entrust.' (Rizzi 2004: (64a))
 d.fr. J'aimerais bien savoir ce qu'il pense qu'à ton frère on devrait lui acheter.
 I would like to know what he thinks that to your brother one should him ask.

4.4. Long relative wh-movement

- (41) a. *?These are the patients to whom Mary suggested that the cooked vegetables we should not give in the present circumstances.
 b. These are the patients to whom Marty suggested that in the present circumstances we should not give the cooked vegetables.
 HARDWARE AND DIY STORY OPENING SOON it said, in nice , big capital spread across the window of a narrow shop that I remember long ago was called SMOKES... (Guardian 19.1.2013 page 37 col 3)
 c.It. ?Il professore a cui penso [che, quello studente].
 the professor to whom think-1SG that that student
 lo potremmo affidare.
 him can-COND-1PL entrust

4.5. Multiple fronting

In (42)(cf. (14)): CLLD > FocP: => higher TopP is available in Romance root questions. English argument fronting is degraded (42) Initial adjunct are fully licit for all speakers (44).

- (42) E la famiglia, dove la lasci?
 and the family where it leave-2SG
 'And where do you leave your family?' (Frascarelli 2000 : 152, (184a))
 (43) a. *Those petunias, when did John plant? (Bianchi & Frascarelli 2010: 12, (44f))
 b. *Your book, who will you give to? (Sobin 2009: 109, (34b))
 *Your book, who will give to me? (Sobin 2009: 109, (34c))
 (44) When you were in France, which newspaper did you read?

Multiple argument fronting (Breul 2004: 1999 ff for extensive discussion) is not readily allowed in English root clauses (45a). CLLD (45b) and adjunct fronting pattern (45c-e) differently: (i) more than one adjunct can be fronted (45c), (ii) a fronted argument can combine with a fronted adjunct (45d,e).

- (45) a. *This book, to Robin, I gave. (Culicover 1991a: 36, (117a)).
 . *Bill, that house, she took to for the weekend. (Emonds 2004: 95 (27b))
 b.It. Il libro, a Gianni, glielo darò senz'altro.
 the book, to Gianni him-it give-FUT-1SG without doubt
 'I will give Gianni the book without doubt.' (Rizzi 1997: 290, (21))
 c. If you come, most likely, we will just order a pizza.
 d. Words like that, in front of my mother, I would never say. (Rizzi 2012, his (29))

- e. I stress that if you come, most likely whatever you don't eat we will give to the dog. (Ernst 2001: 400, (8.31))

4.6. Summary

Table 2 : The double asymmetry⁷

	CLLD	Argument fronting	Initial adjunct	e.g.
(a) Central adverbial clauses	√	*	√	
(b) Embedded wh-question	√	*	√	(38)
(c) Wh-relative	√	*	√	(39)
(d) (long) Wh-question	√	*	√	(40)
(e) (long) Wh-relative	√	*	√	(41)
(f) Multiple fronting	√	*	√	(45)

Most generative accounts for (b-e) have been cast in terms of locality conditions on movement: fronted arguments in English create islands for movement, LP adjuncts and CLLD do not.

- (46) a. *[FocP which patients ... [CP [TopP the cooked vegetables ... [TP
 b. [FocP which patients ... [CP [TopP in the present circumstances ... [TP

4.7. The double asymmetry and locality constraints on movement

If the degradations in (b-e) in Table 2 can be made to follow from locality conditions on movement, it is tempting to try to capture (a) (and (f)) also in terms of locality conditions. Under this view: the restrictions on MCP would be accounted for by intervention: in order not to 'hinder' the movement a number of positions in the LP must not be activated. CLLD does not block movement to the left periphery, hence it is allowed in adverbial clauses. Infinitival VP fronting in French⁸ is incompatible with movement => it will be blocked in adverbial clauses (=47e):

- (47) a. *When [TP she t_{when} began to write her regular column
 b. *When [TopP her regular column]_o [TP she t_{when} began to write t_{do}.
 c. Quand [TopP cette chanson]_o [TP je t_{when} l'ai entendue. = (25b)
 d. *Je me demande quand, [fumer sur la terrasse], on pourra.
 I myself ask when smoke on the terrace we will-can
 e. *Dès que [TopP fumer sur la terrasse]_o [TP on t_{quand} pourra t_{tp}. = (34b)

⁷ For more instances of the double asymmetry see Haegeman (2012: chapters 2 and 3).
⁸ This is a simplification: Authier 2011 shows that the fronting affects TP. See his paper for discussion.

5. The movement derivation of temporal adverbial clauses

5.1. The proposal

According to a tradition started by Geis (published as Geis 1970, 1975, cited in Ross 1967: 211) and continued in work by Reuland (1979), Larson (1985, 1987, 1990), Declerck (1997), Demirdache and Uribe-Etxebarria (2004), Stephens (2007), Zentz (2011, 2012) and many others, temporal adverbial clauses are derived by movement of an TP-internal operator to the left periphery. Like the wh-phrase heading other free relative clauses (48b), when in English temporal clauses can be expanded to whenever (48c), with ever having the interpretation it has in free relatives (see Declerck (1997: 46-7) for discussion and references).

- (48) a. this was the time [when she began to write her regular column].
 b. I'll buy what (ever) you want to sell.
 c. When(ever) I am working on this book I forget the time. (see Declerck 1997: 46-7)

5.2. Evidence from locality(i): high and low construal and island effects⁹

- (49) I saw Mary in New York [CP when [TP she claimed [CP that [TP she would leave.]]]] (Larson 1987)
 (i) high construal: I saw her at the time that she made that claim.
 I saw Mary in New York [CP when [TP she claimed [CP that [TP she would leave] t]]
 (ii) low construal: 'I saw her at the time of her presumed departure.'
 I saw Mary in New York [CP when [TP she claimed [CP t_i that [TP she would leave t_i]]]
 (50) a. I saw Mary in New York
 [CP when [TP she made [TP the claim [CP that [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.'
 b. Gary left [CP when you asked [CP whether he would]]. (cf. Johnson 1988: 587, his (9a))
 (i) high construal: 'Gary left at the time that you asked.'
 (ii) low construal: wh-island: *'Gary left at the time you enquired about.'

This pattern extends to other temporal clauses:

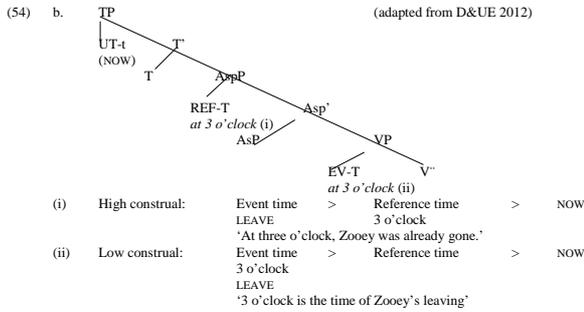
- (51) a. I can't leave until John says I can leave. (based on Larson 1990: 170: (2b))
 b. I can't leave until John makes the announcement that I can leave.
 c. I can't leave until John decides whether I can leave.
 (52) a. I saw Mary in New York after John said that she left. (Larson 1987: 261: (45a))
 b. I saw Mary in New York after John made the claim that she left.
 c. Gary left after you asked whether he would leave. (cf. Johnson 1988: 587, his (9a))
 (53) a. I haven't been there since I told you I was there. (Larson 1990: 170: (2d))
 b. I haven't been there since I made the claim that I was there.
 c. I haven't been there since John asked whether I was there.

5.3. Evidence from locality (ii): temporal modifiers in temporal clauses

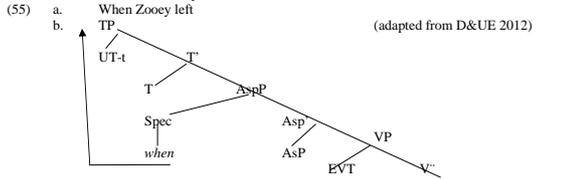
- (54) a. Zoey had left at three o'clock.

High construal of at three o'clock: modification of REF-T; low construal: modification of EV-T.

⁹ Reuland 1979 for similar evidence from Dutch.

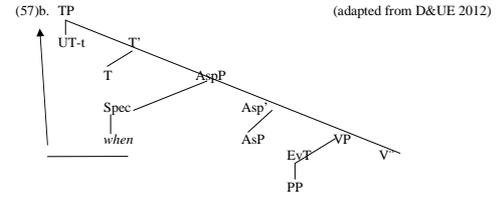
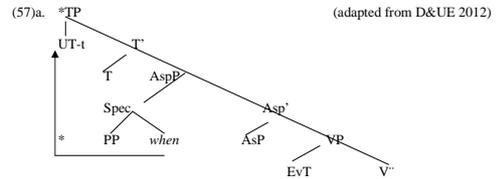


The movement derivation of temporal adverbial clauses



- (56) When Zooley had left at 3 PM (cf. Hornstein 1990), (everything was quiet).
Temporal PP in the adverbial clause can only modify (low) Event time, cannot modify (high) Reference time.
- * (i) High construal: Event time > Reference time
LEAVE 3 o'clock
*temporal adjunct at 3 PM: Reference time, in Spec AspP
- ✓ (ii) Low construal: Event time > Reference time
LEAVE = 3 o'clock
temporal adjunct at 3 PM: Event time associated with VP

D&UE 2004/2012: intervention: in (56/7) the temporal specification in SpecAspP would block the movement of the operator from AspP to derive the relative clause



5.4. Crosslinguistic support

5.4.1. The subordinating conjunction

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*, German: *wenn* (Bhatt & Pancheva 2002), Norwegian: *når* (Stephens 2006).

Old English *before* clauses were derived as 'light headed temporal relatives' (Citko 2004) 'the conjunction *before* has developed from a phrase of the form 'before the time that' (variously realized in Old English as *toforan þam timan þe*, *foran to þam timan þe*, and *toforan þam þe*') (Declerck 1998: 97-8).

5.4.2. Dutch (Reuland 1979: 167)

Dutch *toen* functions both as a temporal adverb (58a) and as a conjunction introducing an adverbial clause (58b). On the movement derivation sentence initial *toen* in (58b) would be moved from a clause-internal position.

In adverbial clauses introduced by conjunctions such as *toen* ('then'), *wanneer* ('when'), *terwijl* ('while') etc, the presence of the complementizer *dat* ('that') is marked in Standard Dutch. In Flemish varieties of Dutch *dat* is more easily admitted. Temporal adverbial clauses show the same variation in presence of *dat*: it is marked in Dutch and unmarked in Flemish (Reuland 1979: 166). On a movement analysis of temporal clauses introduced by *toen*, *wanneer* etc, the regional variation in distribution of the complementizer *dat* follows from whatever determines the regional variation in its distribution in interrogative and relative clauses. (Reuland 1979: 166). Reuland (1979: 168-9) extends the argument also to Frisian.

- (58) a. De minister bleef toen aan.
The minister stayed then on

- b. Toen (dat) de minister toen aانبleef was het land verslagen
When that the minister stayed-on was the country dismayed
- c. Wanneer (dat) de beslissing gekend is kunnen we vertrekken.
When (that) the decision known is can we leave
- d. De student weet niet wanneer (dat) de beslissing gekend zal zijn.
The student ignores when (that) the decision know will be

5.4.3. Stylistic inversion in French

- (59)Fr. a. Quand est venue Marie?
when be-3SG come-PART-FEMSG Marie
'When did Mary arrive?' (Barbosa: 2001: 42, her (77))
- b. Je me demande quand est venue Marie.
I myself ask-1SG when be-3SG come-PART-FEMSG Marie
'I wonder when Mary arrived.' (Barbosa: 2001: 42, her (78))
- (60)Fr. a. Jean a parlé de quoi?
John has talked of what
'What did John talk about?'
- b. *A parlé Jean de quoi?
c. De quoi a parlé Jean?
of what has talked John (French)
- (61)Fr. a. *? Jean a parlé pourquoi?
Jean has talked why (Rizzi 1990: 47: his (48))
b. *Pourquoi a parlé Jean?
c. Pourquoi Jean a parlé ?
d. Pourquoi Jean a-t-il parlé ?
- (62)Fr. soudain surgirent six hommes noirs.
suddenly emerge-PAST-3PL six black men
'and suddenly appear six black men.' (Lahousse 2003)
- (63)Fr. a. ?Quand a crié l'enfant.
when have-3SG cry-PART the child,
tout le monde s'est affolé.
everyone himself be-3SG panic-PART
(Kayne 1972: 108, n 13, Lahousse 2003a: 16¹⁰)
- b. ?Tu changeras d'avis quand rentrera ta femme
You change-FUT-2SG of opinion when will return your wife
- c. ? Alors que chantait Marie, une bombe a éclaté
When that sang Marie, a bomb has exploded
(Kayne 1972: 108, n 13, Lahousse 2003b: 16)
- d. Quand avait débuté le salon Sainte-Euverte...
when had started the salon Sainte Euverte
'When the Salon Sainte Euverte had opened,...' (Proust, Le Bidouis 1952:302)

Table 3 : Stylistic inversion in French adverbial clauses (from Lahousse 2003a):

¹⁰ Native speakers consulted accepted (63) and relate the markedness of the examples to the fact that SI belongs to the more formal register.

Stylistic inversion	Total nr examples	VS	No other potential trigger for SI
<i>Quand</i> ('when')	27,088	289	128
<i>Pendant que</i> ('while')	1817	51	21

6. Extending the account (i): Conditional clauses (Haegeman 2010)

6.1. Conditional clauses : the double asymmetry

- (64) a. *If these exams you don't pass, you won't get the degree.
b. *If passed these exams you had, you would have had the degree.
c. *If also interesting are the Picasso paintings, we'll stay on. (Heycock et Kroch, 1997 : 81).
*If present at the party are under age children, they won't be able to show these films.
- (65) a. 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)
b. Si ce livre-là tu le trouves à la Fnac, achète le.
If this book-there you it find-2sg at the FNAC, buy it.
c. 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
non obtain-FUT-2SG that position (Cardinaletti 2008: (22a))
- Italian: focalisation (Bocci 2007) (66a), resumptive preposing (Cinque 1990, Cardinaletti 2009) (66b) and PP preposing without clitic (Garzonio 2008, (66c)) are disallowed in conditional clauses. These three fronting operations have been shown to pattern with English argument fronting: A movement account of conditional clauses can account for the ungrammatical cases in terms of intervention.
- (66) a. ??Se la prova ORALE non supera, non otterrà il diploma!
if the ORAL exam [s/he] non pass-3SG, non get-FUT-3SG the diploma!
(Bocci 2007: his (32))
- b. *Se la stessa proposta fa anche l'altro candidato,
If the same proposal make-3SG also the other candidate,
non otterrà quel posto.
non obtain-FUT-2SG that position (Cardinaletti 2008: (19a))
- c. Se, col capo, non *(ci) parli, non puoi capire il problema.
if with-the head non *(with him) speak-2SG, non can-2SG understand the problem
'If you don't talk with the boss, you cannot understand the problem.'
(Garzonio 2008: 5 (9c))

6.2. Conditional clauses are derived by movement

Bhatt & Pancheva (2002, 2006c)

Our proposal that [conditional clauses] are interpreted as free relatives amounts to the claim that they are definite descriptions of possible worlds.' (Bhatt & Pancheva 2006: 655).

(67a) would be derived by the leftward movement of a World operator (67b):

- (67) a. If John arrives late
b. [_{CP} OP_w C^o [John arrives late in w]]

Arsenijević (2006) analyses conditionals as the relative variant of *yes/no* questions:

I analyze conditionals as *yes-no* relative clauses: a[s] restrictive relative clauses in which the truth value of a proposition is restricted. The proposition represented by the conditional clause restricts the set of worlds compatible with the proposition represented by the head clause. *Syntactically, the locus of modification is a functional projection called WorldP, the projection that specifies the truth value of clauses by containing the feature world with a value, [actual] or [possible].* (Arsenijević 2006)

Reuland (1979: 165) also extends the wh-movement analysis of temporal clauses to conditionals.

6.3. Intervention and the absence of high modal markers in conditional clauses¹¹

- (68) a. ??*If frankly he's unable to cope, we'll have to replace him. Speech act
 b. *If they luckily /fortunately arrived on time, we will be saved. Evaluative
 (Ernst 2007: 1027, Nilsen 2004).
 c. *John will do it if he may/must have time. (Declerck & Depraetere (1995: 278)
 Heinämäki 1978: 22, Palmer (1990: 121, 182) Epistemic

Hypothesis: The modal adverb is in the specifier of WorldP and either competes with the World operator (if there is one position) or blocks extraction (if adjoined to it).

(69) (representation inspired by D&UE 2012)

6.4. Crosslinguistic support

- (70)Gm. Wenn Steffi gewinnt, wird gefeiert. (B&P2006: 657)
 if Steffi wins AUX- PASSIVE celebrate-PART
 'If/when Steffi wins, there is a celebration.'

There seems to be no evidence suggesting that the syntactic behavior of *wenn* is different in conditional and in temporal clauses, i.e., it does undergo A'-movement in both cases. (Bhatt & Pancheva 2006: 657).

Also: Somali: all types of conditional clauses are modalized free relative[s] headed by the past DP *had-dii* 'the time' (Lecarme 2008: 210); Torrence 2012 and Zribi Hertz & Diagne 2003 for Wolof.

7. Extending the account (ii): Factive complement clauses

7.1. The double asymmetry

- (71) a. *Everyone resents that this statement Mary read out at the last meeting.

¹¹ Lahousse (2008: 22) and Ernst (2008:10) for French; Ernst (2008: 10) for Dutch and Chinese. Tomaszewicz (2012) for Polish. See also appendix for a cartographic analysis

- b. Everyone resents that at the last meeting, Mary read out this statement.
 c.Fr. Tout le monde regrette que, ce texte-là,
 everyone regret-3SG that this text-le,
 Marie l'aie lu devant l'assemblée.
 Marie it have-SUBJ-3SG read-PART in front of the meeting
 'Everyone regrets that Mary should have read that text in front of the meeting.'

7.2. A (factive) operator in the left periphery

Factive operator in the LP: complements of factive verbs are (weak) islands (Munsat (1986), Melvold (1986, 1991), Bianchi (2000:95) etc.)

- (72) a. How do you suppose that Maria fixed the car t? (Hegarty 1992: 1, (1b))
 b. *How did you notice [OP that Maria fixed the car t]? (Hegarty 1992: 1, (2b))
 c. *Why does Mary regret [that Bill left the company t]?
 Why does Mary regret [that Bill left the company] t?

7.3. Crosslinguistic support

Bulgarian
 invariant subordinator, *deto*, ... used in headed relative clauses, as well as a subordinating conjunction introducing complement clauses of some emotive predicates, where it alternates with the standard complementizer *če*. Complements introduced by *deto*: Factive. ...My proposal is that [73b] contain[s] a hidden relative structure underlying the apparent object clause introduced by *deto*... I would like to propose that *deto*-complements ...contain a D head realized by the demonstrative pronoun *tova* ('this') (Krapova 2008: 21)

- (73) a. Tova e ženata, [deto (ja) snimax včera].
 This is woman-the that her-CL-ACC took-picture-1SG yesterday
 'this is the woman that I photographed yesterday.'
 b. Sažaljavam, [deto/če ne možax da dojda].
 Regret-1SG that could -1SG come-1SG
 'I'm sorry that I couldn't come.' (Krapova 2008: 1, her (1))

Aboh (2005): factive complements in Gungbe = derivation of relatives (cf. Collins 1994), Tamba and Torrence (2013) on Wolof.

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