

- David Michaels, and Juan Uriagereka, 211–234. Cambridge, Mass.: MIT Press.
- Nakamura, Masanori. 1994. An economy account of *wh*-extraction in Tagalog. In *The Proceedings of the Twelfth West Coast Conference on Formal Linguistics*, ed. by Erin Duncan, Donna Farkas, and Philip Spaelti, 405–420. Stanford, Calif.: CSLI Publications.
- Payne, Thomas E. 1982. Role and reference related subject properties and ergativity in Yup'ik Eskimo and Tagalog. *Studies in Language* 6:75–106.
- Pensalfini, Robert. 1995. Malagasy phrase structure and the LCA. In *Papers from the Fifth Annual Meeting of the Southeast Asia Linguistics Society*, ed. by Shobhana L. Chellian and Willem J. De Reuse, 245–261. Tempe: Arizona State University, Program for Southeast Asian Studies.
- Safir, Ken. 1986. Relative clauses in a theory of binding and levels. *Linguistic Inquiry* 17:663–689.
- Schachter, Paul. 1976. The subject in Philippine languages: Topic, actor, actor-topic, or none of the above. In *Subject and topic*, ed. by Charles Li, 491–518. New York: Academic Press.

NOTES ON LONG ADVERBIAL
FRONTING IN ENGLISH AND THE
LEFT PERIPHERY

Liliane Haegeman

Université Charles de
Gaulle–Lille III

UMR 8258 SILEX du CNRS

The purpose of this squib is to show that in addition to the generally accepted distinction between fronted adjuncts and fronted arguments, we need to introduce a further distinction between fronted adjuncts resulting from long-distance movement and those resulting from short-distance movement (hereafter, short and long fronted adjuncts). It turns out that, distributionally, long fronted adjuncts are in many respects more like fronted arguments than like short fronted adjuncts. I will first show the need for making this distinction on the basis of English data and then provide some comparative data in support.

1 Adjunct Fronting versus Argument Fronting

In the literature on what is commonly referred to as the ‘‘left periphery of the clause,’’ a principled distinction is usually made between fronted

Versions of this squib were presented at the Linguistics Department of SOAS and at the Linguistics Department of the University of Reading. I thank both audiences for comments. Thanks are also due for generous help with data and for discussion of specific points to David Adger, Guglielmo Cinque, Siobhan Cottell, Eric Haeberli, Caroline Heycock, Ruth Huart, Harry van der Koot, Joan Maling, Jim McCloskey, Philip Miller, Bernadette Plunkett, Andrew Simpson, and Neil Smith. I thank two anonymous reviewers for *Linguistic Inquiry* for their very useful comments.

adjuncts¹ and topicalized arguments (see, e.g., Cinque 1990, Culicover 1993, Koizumi 1995, Browning 1996, Rizzi 1997). I refer to the works cited for specific implementations of the contrast. With respect to adjunct fronting, I will be particularly interested in the fronting of temporal adjuncts. Other, VP-related adjuncts may to some extent pattern differently (see, e.g., Cinque 1990:93–95) and should probably be subject to future research.

One contrast between fronted arguments and fronted adjuncts is that the former block subject extraction while the latter do not (see, e.g., Baltin 1982, Rizzi 1997).

- (1) a. *This is a man who liberty would never grant to us.
(Rizzi 1997:307, (71b))
b. *I wonder who, this book, would buy around Christmas.
(Rizzi 1997:307, (76a))
c. John Prescott is the person who in future t will be in charge of major negotiations.

In fact, not only do fronted temporal adjuncts not block subject extraction, in certain cases they actually may make it possible to extract a subject whose extraction would otherwise have been ungrammatical. Specifically, fronted temporal adjuncts give rise to the so-called adverb effect (Culicover 1993, Browning 1996, Rizzi 1997, Sobin 2002); namely, fronted adjuncts enable the *that*-trace effect to be overcome. Fronted arguments do not have this effect.

- (2) a. *This is the man who I think that t will buy your house next year.
b. This is the man who I think that, next year, t will buy your house.
c. *This is the man who I think that, your house, t will buy next year.

Obviously, the ungrammaticality of (2c) is not surprising, given that fronted arguments block subject extraction anyway as shown by (1). Various accounts have been offered (Culicover 1993, Browning 1996, Rizzi 1997) for the adverb effect (2b).

A related contrast between topics and preposed adjuncts is that topics determine some island effects on nonsubject extraction as well, while locally fronted adjuncts do not.²

¹ I use the term loosely in this squib: the ‘‘fronted adjuncts’’ we are interested in here might well be base-generated in the left periphery (see Cinque 1990:93–95, Browning 1996).

² I thank an anonymous reviewer for *Linguistic Inquiry* for pointing out the data in (3). The reviewer also points out that the contrast is not as sharp in Italian.

- (i) a. ?lo studente a cui, il tuo libro, lo dar  domani
the student to whom the your book it I-will-give tomorrow

- (3) a. ??The student to whom, your book, I will give tomorrow.
 b. The student to whom, tomorrow, I will give your book.

A third property distinguishing adjunct fronting and argument fronting that has perhaps not so often been signaled in the current literature is that while English fronted arguments are typically restricted to root clauses or clauses with root behavior (Emonds 1970, 2000, Rutherford 1970, Hooper and Thompson 1973, Andersson 1975, Green 1976, Haegeman 1984a,b, 2001, 2002a,c, Maki, Kaiser, and Ochi 1999, Heycock 2002), fronted adjuncts do not have this restriction.

- (4) a. *If these exams you don't pass, you won't get the degree.
 b. If next week you cannot get hold of me, try again later.
 (5) a. *While her book Mary was writing this time last year, her children were staying with her mother.
 b. While around this time last year Mary was writing her book, her children were staying with her mother.
 (6) a. *When her regular column she began to write for the *Times*, I thought she would be OK.
 b. When last month she began to write a regular column for the *Times*, I thought she would be OK.

Argument fronting becomes possible in adverbial clauses with rootlike properties. (7) provides an example from the literature with contrastive *while*.

- (7) His face not many admired, while *his character* still fewer felt they could praise. (Quirk et al. 1985:1378)

(7) is an instance of what Hornstein (1990:206 n. 19) refers to as ‘‘a secondary conjunctive interpretation that all these connectives (*as*, *while*, *when*) shade into. They get an interpretation similar to *and* in these contexts.’’³ (8a–b) are attested examples from journalistic prose of argument fronting in adverbial clauses with rootlike properties that are introduced by the conjunctions *because* and *although*.

- (8) a. I think we have more or less solved the problem for donkeys here, because those we haven't got, we know about.
 (*Guardian*, G2, 18.2.3, p. 3, col. 2)

-
- b. lo studente a cui, domani, daró il tuo libro
 the student to whom tomorrow I-will-give the your book
 ‘the student to whom tomorrow, I will give your book’

This contrast between English and Italian is obviously also interesting. It is probably related to the fact that Romance clitic left-dislocation, illustrated in (ia), is less restricted than argument fronting in English (see Cinque 1990:58 and Haegeman 2002c for discussion).

³ The *while*-clause is coordinated in the strict sense of the term. See Haegeman 2002a,c for arguments.

- b. We don't look to his paintings for commonplace truths,
though truths they contain none the less.
(*Guardian*, G2, 18.2.3, p. 8, col. 1)

The contrasts illustrated in (5) and (7) are not immediately compatible with the analysis offered by Rizzi (1997) in which fronted arguments move to the specifier of TopP and fronted adjuncts are adjoined to TopP (a similar account is assumed in Roberts 2001). If both types of fronting always involve the projection TopP, then it is not clear how one can be ruled out while the other is grammatical. Elsewhere (Haegeman 2001), I have proposed that, as suggested by Rizzi himself (1997:nn. 26, 30, 32), some fronted adjuncts may but need not be adjoined to TopP. Specifically, temporal adverbs may also be somewhat lower in the left periphery (or perhaps even be on the left edge of IP; see Haegeman 2002b). One option is that fronted adjuncts are associated with Rizzi's FinP; an alternative is that they are hosted by a specialized projection (Rizzi 2001:104, based on Haegeman 2000). See also Browning 1996 for an account distinguishing topics from adjuncts.

2 Long Adverb Fronting

The data above seem to warrant a syntactic distinction between fronted adjuncts and topicalized arguments in the left periphery. Now consider the data in (9).

- (9) a. Next year there will be an improvement in the functioning of the railways.
b. Next year the prime minister believes that there will be a definite improvement in the functioning of the railways.

(9a) and (9b) are similar in that in each of them, a temporal adjunct is fronted; but they differ in that in (9a) the adjunct is in the periphery of the clause it is construed with, while in (9b) the adjunct has undergone long movement and ends up in the periphery of a higher clause (for an early discussion, see Postal and Ross 1970; see also Cinque 1990:93–95, Hukari and Levine 1995, Bouma, Malouf, and Sag 2001). Clearly, in (9b) *next year* continues to specify the time of the lower clause, though. At first sight, the fronted adjuncts seem to occupy the same position in (9a) and in (9b), namely, a left-peripheral position immediately preceding a canonical subject. I will show, however, that the relation between the fronted adjunct and the clause that it precedes in (9a) differs from that in (9b): with respect to the three properties mentioned in section 1, long fronted adjuncts seem to behave more like fronted arguments.

While we saw in section 1 that short adjunct fronting does not block subject extraction (10b), long adjunct fronting does (10c).

- (10) a. *This is the linguist who I think t will get appointed in Geneva.

- b. This is the linguist who *next year* t will get appointed in Geneva.
- c. ??/*This is the linguist who *next year* t expects that all his students will have a job.

As expected, while short fronted adjuncts may alleviate *that*-trace effects (11a–b), long fronted adjuncts do not do so (11c–d). To the best of my knowledge, this point is not discussed in the relevant literature.

- (11) a. *This is the linguist who I think that t will get appointed in Geneva.
- b. This is the linguist who I think that next year t will get appointed in Geneva.
- c. *This is the linguist who I think that t expects that all his students will have a job.
- d. *This is the linguist who I think that next year t expects that all his students will have a job.

Just as topics determine some island effects with nonsubject extraction (see (4), so nonsubject fronting across long fronted adjuncts is degraded (and even ungrammatical for some speakers). In (12), the fronted adjuncts *on Tuesday* and *during my time as university president* cannot be construed with the lower clause.

- (12) a. I called up my mother, who, on Tuesday, I had told it is likely that Sandy will visit Leslie.
- b. These are the investigators who, during my time as university president, I told there were never any illegitimate appropriations of money.

With respect to extraction, long moved adjuncts are then more like fronted arguments, and they differ from short fronted adjuncts. The similarity with argument fronting is also revealed by the fact that long extracted adjuncts resist nonroot environments, see (13a–c). (13c) is grammatical, but its natural interpretation is that in which *this afternoon* is construed as a temporal modifier of the higher clause (*say*); crucially, the fronted adjunct cannot be construed as a temporal modifier of the embedded clause (*rain*). Once again, rootlike adverbial clauses allow long fronted adjuncts more easily; see (13d–e).⁴

- (13) a. This afternoon they say that it will rain.
- b. If this afternoon it rains again, we go back.
- c. If this afternoon they say that it will rain, we won't go.

⁴ There is fairly widespread agreement that such adverbial clauses have root properties. See among others Rutherford 1970, Hooper and Thompson 1973, Haegeman 1984a,b, 2001, 2002a,c, Verstraete 2002, and the references cited there.

- d. Last week he did not play well, while this week they predict he will be in much better shape.
- e. On average we see the rate of increase of house prices slowing from the clearly unsustainable rates that we've seen in recent months, slowing very sharply over the next two years, so that two years from now we would think that the central projection is one in which house prices would not really be rising at all.
(*Guardian*, 13.3.3, p. 11, col. 8)

The data discussed here suggest that short fronted adjuncts differ systematically from long fronted ones and that the latter share some of their properties with fronted arguments (but see Cinque 1990:93–95 for discussion).

That the two types of adjunct fronting should differ is not really unexpected. While short fronted adjuncts may be viewed as scene setters (cf. Poletto 1997) modifying the temporal coordinates of the clausal domain (IP, or FinP) with which they are associated, long fronted adjuncts are not interpreted as scene setters of the domain they immediately c-command; rather, they modify the lower domain. With respect to the higher clause, they behave like topics in the sense that (14a) is to be read somehow like (14b).

- (14) a. Tomorrow he says that he cannot come.
- b. 'About tomorrow, he says that he cannot come.'

Though Browning (1996) does not introduce the issue of long fronted adjuncts, the contrasts signaled above follow quite naturally from her account. Using a minimalist formalism, she proposes that what I have referred to here as short fronted adjuncts are in fact base-generated in the CP area and fronted arguments are moved there. It is plausible that for long fronted adjuncts too, a movement analysis would be invoked.

Rizzi's (1997) account of the left periphery also can be adapted to make the distinction between the two types of adjuncts. Following the analysis in the main body of his paper, one might propose that long moved adjuncts are like topics and associate with the specialized TopP, while short moved adjuncts might be argued to be associated with FinP (see Rizzi's footnotes 26, 30, and 32), the lower functional projection.⁵ An alternative is to propose that a locally preposed adverb targets a specialized head situated in the lower part of the CP field. Expanding on Haegeman 2000, Rizzi (2001:104) postulates a lower projection ModP.⁶ Whichever solution is adopted, though, the landing

⁵ Alternatively, short fronted adjuncts might even be located on the left edge of IP (Haegeman 2002b).

⁶ For an early, slightly different implementation of a projection ModP, see Bowers 1993:606, fn. 10; see also Haegeman 2002c for additional discussion.

site for locally fronted adjuncts has to remain excluded for fronted arguments and for long fronted adjuncts.

3 Some Comparative Data

This squib focuses on English adjunct fronting, but the contrast between short and long fronting is definitely not English-specific.

In Dutch, for instance, both short fronted adjuncts and long fronted adjuncts may function as the first constituent in a verb-second pattern, but while the former allow a neutral stress pattern, the latter are stressed, like fronted arguments (see Cardinaletti 1992).

- (15) a. Morgen ga ik naar Gent.
tomorrow go I to Ghent
'Tomorrow, I go to Ghent.'
- b. MORGEN denk ik dat ik naar Gent ga.
tomorrow think I that I to Ghent go
'TOMORROW, I think I'll go to Ghent.'
- c. BONEN lust ik niet.
beans like I not
'BEANS, I don't like.'

In French, as shown by Rizzi (1997), short fronted adjuncts do not block subject extraction ((16a), (17a)), while fronted arguments do ((16b), (17b)). Again, long fronted adjuncts also block subject extraction: in (16c) and (17c), *l'année prochaine* 'next year' is construed with the lower clause (CP₂).

- (16) a. Voici l'homme [_{CP} qui l'année prochaine [_{IP} t
this is the man that the year next
pourra nous aider]].
could us help
'This is the man that will be able to help us next year.'
(Rizzi 1997:319, (112b))
- b. *Voici un homme [_{CP} qui ton livre [_{IP} t pourrait
this is a man that your book could
l'acheter l'année prochaine]].
it buy the year next
'This is a man that could buy your book next year.'
(cf. Rizzi 1997:306, (67b))
- c. *Voici le professeur [_{CP}₁ qui l'année prochaine [_{IP} t_i
this is the professor that the year next
espère [_{CP}₂ que [_{IP} tous ses étudiants termineront
hopes that all his students finish-FUT
leur mémoire]]]].
their paper
'This is the professor who hopes that next year all his
students will finish their papers.'

- (17) a. Voici l'homme [_{CP} que [_{IP} je crois [_{CP} qui l'année
this is the man that I think that the year
prochaine [_{IP} t pourra nous aider]]]].
next could us help
'This is the man that I think that next year will be able
to help us.'
(Rizzi 1997:319, (112b))
- b. *Voici un homme [_{CP} que [_{IP} je crois [_{CP} qui ton
this is a man that I think that your
livre [_{IP} t pourrait l'acheter l'année prochaine]]]].
book could it buy the year next
'This is a man that I think that could buy your book
next year.'
(cf. Rizzi 1997:306, (67b))
- c. *Voici le professeur [_{CP₁} que [_{IP} je pense [_{CP} qui
this is the professor who I think that
l'année prochaine [_{IP} t_i espère [_{CP₂} que [_{IP} tous ses
the year next hopes that all his
étudiants termineront leur mémoire]]]]]].
students finish-FUT their paper
'This is the professor who hopes, I think, that next year
all his students will finish their papers.'

4 Conclusion

This squib provides empirical evidence for distinguishing short fronted temporal adjuncts from long fronted temporal adjuncts in English. It has shown that long fronted temporal adjuncts pattern like fronted arguments. The topiclike behavior of long fronted adjuncts can be interpretively motivated: such adjuncts do not function as scene setters of the higher clause. Some crosslinguistic support is given for the proposal. Further research will be required to establish whether all types of long fronted adjuncts display similar behavior.

References

- Andersson, Lars G. 1975. Form and function of subordinate clauses. Doctoral dissertation, University of Goteborg.
- Baltin, Mark. 1982. A landing site theory of movement rules. *Linguistic Inquiry* 13:1–38.
- Bouma, Gosse, Robert Malouf, and Ivan A. Sag. 2001. Satisfying constraints on extraction and adjunction. *Natural Language & Linguistic Theory* 19:1–65.
- Bowers, John. 1993. The syntax of predication. *Linguistic Inquiry* 24: 591–656.
- Browning, M. A. 1996. CP recursion and *that-t* effects. *Linguistic Inquiry* 27:237–256.

- Cardinaletti, Anna. 1992. SpecCP in verb second languages. In *Geneva generative papers 0*, 1–9. Geneva: University of Geneva, Department of Linguistics.
- Cinque, Guglielmo. 1990. *Types of \bar{A} -dependencies*. Cambridge, Mass.: MIT Press.
- Culicover, Peter. 1993. The adverb effect: Evidence against ECP accounts of the *that-t* effect. In *NELS 23*, vol. 1, ed. by Amy J. Schafer, 97–110. Amherst: University of Massachusetts, GLSA.
- Emonds, Joseph. 1970. Root and structure-preserving transformations. Doctoral dissertation, MIT, Cambridge, Mass.
- Emonds, Joseph. 2000. Unspecified categories as the key to root constructions. Paper presented at The Peripheries Conference, York, 2000.
- Green, Georgia. 1976. Main clause phenomena in subordinate clauses. *Language* 52:387–397.
- Haegeman, Liliane. 1984a. Pragmatic conditionals in English. *Studia Anglica Posnaniensia* 18:485–502.
- Haegeman, Liliane. 1984b. Remarks on adverbial clauses and definite anaphora. *Linguistic Inquiry* 15:712–715.
- Haegeman, Liliane. 2000. Inversion, non-adjacent inversion and adjuncts in CP. *Transactions of the Philological Society* 98: 121–160.
- Haegeman, Liliane. 2001. Speculations on adverbial fronting and the left periphery. Paper presented at the Tournesol conference, ‘‘Tems et Point de Vue/Tense and Point of View,’’ France/Flanders (GOA-UIA Anvers, Jeune * quipe syntaxe – U. Paris*), December 2001.
- Haegeman, Liliane. 2002a. Anchoring to speaker: Adverbial clauses and the structure of CP. Paper circulated at ‘‘The Syntax-Semantics Interface in the CP-Domain,’’ Zentrum f r Allgemeine Sprachwissenschaft (ZAS), Berlin, 6–8 March 2002. To appear in *Georgetown University working papers*.
- Haegeman, Liliane. 2002b. Sentence-medial NP-adjuncts in English. *Nordic Journal of Linguistics* 25:79–108.
- Haegeman, Liliane. 2002c. The syntax of adverbial clauses and its consequences for topicalisation. Ms., SILEX, Universit  de Lille.
- Heycock, Caroline. 2002. Embedded root phenomena. Ms., University of Edinburgh.
- Hooper, Joan, and Sandra Thompson. 1973. On the applicability of root transformations. *Linguistic Inquiry* 4:465–497.
- Hornstein, Norbert. 1990. *As time goes by*. Cambridge, Mass.: MIT Press.
- Hukari, Thomas, and Robert Levine. 1995. Adjunct extraction. *Journal of Linguistics* 31:195–226.
- Koizumi, Masatoshi. 1995. Phrase structure in minimalist syntax. Doctoral dissertation, MIT, Cambridge, Mass.

- Maki, Hideki, Lizanne Kaiser, and Masao Ochi. 1999. Embedded topicalization in English and Japanese. *Lingua* 109:1–14.
- Poletto, Cecilia. 1997. Rhaetoromance verb second: Split CP and subject positions. Paper presented at “Incontro di Grammatica Generativa,” Scuola Normale, Pisa.
- Postal, Paul M., and John Robert Ross. 1970. A problem of adverb preposing. *Linguistic Inquiry* 1:145–146.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. *A comprehensive grammar of the English language*. London: Longman.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar*, ed. by Liliane Haegeman, 289–330. Dordrecht: Kluwer.
- Rizzi, Luigi. 2001. Relativized Minimality. In *The handbook of contemporary syntactic theory*, ed. by Mark Baltin and Chris Collins, 89–110. Oxford: Blackwell.
- Roberts, Ian. 2001. Head movement. In *The handbook of contemporary syntactic theory*, ed. by Mark Baltin and Chris Collins, 113–147. Oxford: Blackwell.
- Rutherford, William. 1970. Some observations concerning subordinate clauses in English. *Language* 46:97–115.
- Sobin, Nicholas. 2002. The Comp-trace effect, the adverb effect and minimal CP. *Journal of Linguistics* 38:527–560.
- Verstraete, Jean-Christophe. 2002. Interpersonal grammar and clause combining in English. Doctoral dissertation, University of Leuven.

THE EPP AND THE SUBJECT
CONDITION UNDER SLUICING
Howard Lasnik
University of Maryland
Myung-Kwan Park
Dongguk University

1 Introduction

The Extended Projection Principle (EPP), first formulated by Chomsky (1981), is a topic of continuing interest. On its original conception, the EPP requires that a clause have a subject. Chomsky (1995) later suggested instead that the EPP reduces to a strong feature of a functional head high in the clause structure, combined with a PF-based generalized pied-piping requirement. Most recently, Chomsky (2000, 2001a,b) has rejected feature-based movement in favor of a relation of long-distance agreement, Agree. On this conception, the EPP has nothing to do with feature checking in the sense of Chomsky (1995).

We are indebted to two anonymous *Linguistic Inquiry* reviewers for very helpful questions and suggestions. We should point out that, as is standard, the judgments reported are relative rather than absolute. In some cases, the contrasts are admittedly subtle, but the large majority of speakers we interviewed do report contrasts in the direction we indicate.

The second author would also like to acknowledge the financial support of Dongguk University Research Grant in the program year of 2003.