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Counterfactual *may have*

0. Introduction¹

Consider this newspaper headline:

(1) Swift launch *may have saved* Penlee lives (*Gdn.*, 15 Mar 1983, p.1).

The story concerned an inquiry into a marine disaster in which all lives had been lost. The intended sense of *may have saved* is therefore given by the paraphrase ‘it is possible that ... would have saved’, a past “hypothetical” (= counterfactual conditional) sense. Now many speakers of English would not use *may have* in this way. For them *might have* is required in (1), since *may have* would suggest a non-conditional epistemic sense, ‘it is possible that ... saved/has saved’. The latter sense of *may have*, in which the possibility is open, is conveniently illustrated in the headline over the back page continuation of the same story:

(2) Lifeboat launch delay *may have cost* lives (*ibid.*, p.28).

The usage in (2) is uncontroversial, I take it, and normal for most speakers of English.

What then is the explanation for (1)? – what I shall refer to as an example of “counterfactual” *may have*, by which I mean a usage implying a rejected or unreal hypothesis about the past. (1) cannot be dismissed as an accidental error or as a deliberate licence to save space in a headline, because it is a usage that occurs quite often now both in speech and in print.

0.1. Organisation of paper

I am concerned here to describe exactly the usage in (1), to see whether it is an example of incipient change, to relate it to other properties of the English auxiliary system, and to raise some sociolinguistic and methodological issues. I begin with a selection of attested examples (‘ 1). There follows a review of six internal factors: other circumstances in present-day English where *may* and *might* are interchangeable (‘ 2); modals in conditional apodoses (‘ 3); the *have* of unreality (‘ 4); blending (‘ 5); tense marking (‘ 6); obsolescence of *may* (‘ 7). Then the following external factors are discussed: register differences (‘ 8); prescriptive grammar (‘ 9); dialect differences and borrowing (‘ 10). The concluding section is concerned with the interaction of internal and external factors (‘ 11).

¹ I have been working on this paper for a long time, on and (mostly) off. Some of the ideas were presented in lecture form at the University of Nijmegen on 11th March 1986, where useful comments were made by Herman Wekker and others. Different parts were plundered for a lecture given in Sweden, Finland and Germany in April/May 1989. I am grateful for the various suggestions made at the ICHL IX workshop and by Professor Dwight Bolinger and Gilbert Youmans, not all of which I have had the time or the grace to follow up.

0.2. Labels

Of course it is arguable whether the change under discussion is syntactic at all. It would make sense to view it as a lexical substitution, as a semantic change,² or as a morphological change. However, to the extent that modals are a closed category with a syntactic distribution different from other verbs, and to the extent that their interaction with tense is a matter of syntax, the rise of counterfactual *may have* is a symptom of syntactic change.

As for the theme of this volume, internal and external factors, I shall take these terms relative to the morphosyntax of a given English dialect. External factors, then, will include all matters of attitude to language, of stylistic and social variation, and of interdialectal influence (foreign influence does not seem relevant here). I shall have nothing to say about discourse factors.

1. Examples

Here is a selection of the examples I have noted over the last few years, classified on the basis of paraphrase.

1.1.

In the group to which (1) belongs, *may (...)* *have* is paraphrasable by 'it is possible that ... would (...) have':

- (3)
 - a. Earlier launch '*may not have saved* lifeboat' [headline].
 - b. An earlier launch of the Penlee lifeboat *may still have resulted* in the final tragedy, in which 16 people died, the inquiry into the disaster was told on its final day yesterday (*Gdn.*, 28 Apr 1983, p.3)
- (4) Anyone off to France this summer will doubtless be anticipating the benefits of a pound valued at 12 francs. They will equally be aware the franc *may have been* even lower had it not been for President Mitterand's austerity package in the spring (*Gdn.*, 3 Aug 1983, p.19).
- (5) Funds from a "Save Carol" campaign in her home town have belatedly paid some of her legal bills, but they *may not have been* necessary had the resources for expert rebuttal of the prosecution theory ... been forthcoming at the appropriate time (*Gdn.*, 21 Oct 1983, p.15).

² I considered treating counterfactual *may have* as a semantic change in *may (have)* from open possibility to counterfactuality. Broadly it fits in with at least one of the three tendencies for semantic change described in recent work by Elizabeth Traugott (1990: 500), namely development of metalinguistic meaning: counterfactuality has a greater textually cohesive function than open possibility, since it presupposes an underlying protasis. I have not pursued this approach, however, since we are not really dealing here with the development of a new meaning, rather the borrowing of an existing meaning from another form.

- (6) Some US officials are quoted here as saying that the ... coup in Guatemala ... *may never have happened* if Congress had not voted to cut off some \$40 million of American aid to the country (*Gdn.*, 10 Aug 1983, p.6).
- (7) The whole thing *may never have happened* if it hadn't been for a chance meeting (*Old.Ad.*, 7 Jul 1983, p.3).
- (8) ... since he *may have been* a success had he learned some human relations skills (Brown Corpus J, 1961)
- (9) It *may not have made* any difference if they had ... (*Gdn.*, 1 Nov 1983, p.9).
- (10) On the other hand there are times when Hudson meticulously points out loose ends which the reader *may have* otherwise³ not *noticed* (Donna Jo Napoli, *Journal of Linguistics*, 1986, 22:191)
- (11) What seems clear ... is that *on, along, and away* ... mark continuative/iterative aspect; that is, they portray a situation which *may otherwise have stopped* as continuing (Laurel J. Brinton, *The development of English aspectual systems*, Cambridge, 1988, p.175)
- (12) It's easy to turn the page.
Just as easy as it is to switch TV channels.
This has never prevented the [*sic*] Yorkshire Television's hard-hitting documentary series, 'FIRST TUESDAY', from saying "Go"; when "Stop" *may have been* more popular.
Or taking the lid off a news story; when it *might have been* safer to sit on it.
(advertisement, *Gdn.*, 5 Oct 1989, p.7)
- (13) ... but it had to be done in one fell swoop now – or it *may never have come* into being (student letter, May 1984)
- (14) A fire brigade spokesman said yesterday: "He thought quickly and acted commendably in a situation where lesser men *may have panicked*." (*Gdn.*, 17 Oct 1984, p.4)
- (15) "If they had released me at the end of October, the members *may have got* together and started a row." (*Gdn.*, 22 Dec 1984, p.11)
- (16) ... it seems quite possible that the English construction *may have come* into existence even if don had not also had the function of verb substitute (B. Trnka, *On the Syntax of the English Verb from Caxton to Dryden*, Prague, 1930, p.52; non-native speaker)
- (17) Equally, if the order and allocation of tales were changing, it is quite likely that both *may have been* subsequently *changed* by Chaucer in some further revision if he had lived to make one. (N. F. Blake, *English Studies*, 1985, 66:171)

³ I take *otherwise* in (10) to mean 'if Hudson had not pointed out the loose ends', a counterfactual reading, which seems more likely than the non-counterfactual 'in any other way'. Example (11) is very similar.

- (18) Without our help! she *may have* died (caption to photo of child filling bucket, WaterAid charity appeal, Feb 1987)
- (19) Two years ago, Mrs X *may have had* nowhere to turn to – but thanks to ... she was put in touch with ... (*Old.Ad.*, 28 Dec 1989, p.8)
- (20) Words such as “body-building” ... are also, arguably, words that *may never have been linked* if advertising did not exist (student dissertation May 1987; student brought up in Zimbabwe)
- (21) Had we known about Mrs Westbrook’s illness we would have taken this into consideration, and the case *may not have ended up* in court. (*Gdn.*, 17 Dec 1982, p.4)
- (22) Had Austrian politics taken a less controversial turn two years ago during the presidential election campaign then this historical trauma *might have been* more calmly *addressed* during next month’s commemoration of the Anschluss’s 50th anniversary, but the debate *may have been* less thorough. (Misha Glenny, *Gdn.*, 11 Feb 1988, p.10; unknown if native speaker)
- (23) Had the author not recently acquired copies of Eyre’s earlier letter to Bosco, this item *may have remained* no more than a curio in the college museum. (James M. Lawlor, *Innes Review*, 1985, 36:97; example supplied by A. MacDonald, p.c)
- (24) ... and if an ‘ordinary’ woman had been there, we *may have been surprised* by her reaction to the same situation (letter, *RT*, 19-25 Feb 1983, p.72)
- (25) If he’d have lived [*sic*], the entire technological development of Britain *may have been* different. (*Gdn.*, 10 Nov 1986, p.18)
- (26) ... relevant safety warnings were not made public. If they had been, action *may have been taken* and the disaster *avoided*. (*Consumer Which*, April 1989, quoted in *Gdn.*, 6 Apr 1989, p.20)
- (27) If they had not been there, Mr Scrafton *may not have hit* the boy quite so hard and only caused injury (*Old.Ad.*, 8 Sep 1983, p.9).
- (28) Your new Barclaycard credit limit is intended to ... increase the range of transactions that can be settled with your Barclaycard. Many higher value purchases, which previously *may have taken* you over your limit, will now be possible. (promotional leaflet, Jun 1988)

1.2.

Certain examples seem to belong with (3-28) semantically but require a modified paraphrase, either because they include the idiom *may/might well*⁴ or because of the superordinate clause:

⁴ This idiomatic use of *well* requires the presence of *may*, *might*, *can* or *could*. (Professor Dwight Bolinger notes a similar usage in *You well know that...* (p.c. 10 Sep 1989).) Even when *well* is replaced by another adverb, it seems to belong in the *it is possible* clause of the paraphrase (‘it is highly possible, it is indeed possible’, etc) rather than with the lexical verb. Incidentally, Bolinger’s suggestion that *may well have* was resisting counterfactual use (1988) must be withdrawn in the light of examples (30-33 and 40), plus some quoted by Chalker (1989: 62).

- (29) How successful such an academy *may have proved* to be will never be known (student essay, May 1984; "academy" never formed)
- (30) ... sufficient for the British and Australian Governments' contemporary suppression of the fact that a Japanese submarine had been involved: exposure *may well have caused* an outcry in Australia at a time when fear of war with Japan was matched only by lack of preparation for it (*Gdn.*, 6 Apr 1989, p.38)
- (31) Both universities might well fly their flags on the birthday of Queen Catherine Parr, but for whom it seems there *may well have been* no colleges or gardens. (Mavis Batey, *Oxford Today*, 1989, 2.1:27)
- (32) One English Heritage spokesman admitted: "Had we realised the site was as impressive as it is, we *may well have sought* a different solution." (*Ind.*, 15 Apr 1989, p.28)
- (33) Yet as Nist ... indicates, English *may well have become* bankrupt had it not had the influx of vocabulary. (student essay, Univ of York, Apr 1989)

1.3.

In a few examples it can be argued that the meaning of *may* is "dynamic" (Palmer 1979: 36-37) or "root" (Coates 1983: 18-21) possibility, in which case a suitable paraphrase is 'it would have been possible for ... to ...'.⁵ However, an epistemic reading cannot be ruled out, and it is not always clear whether we have an epistemic or a root sense or indeed a merger of the two (cf. Coates 1983: 163-164):

- (34) The facility STOP BEFORE SORT (not implemented at Queen's) *may have alleviated* this situation (*ALLC Bltn*, 1983, 11:70)
- (35) Whitehall sources said that the decision to deport the five amounted to an admission that while the available information pointed firmly to illegal activities, it *may not have secured* a connection [*sic*; read conviction] (*Gdn.*, 15 Mar 1984, p.2)
- (36) ... but she proved that she was of true blue blood by not being quite rude to him in return as I'm sure many lesser mortals *may have been* (letter, *RT*, 7-13 Jan 1984, p.76)
- (37) I'm not saying that's a hundred percent success rate, because some of them *may have survived* anyway (Geoffrey Pattie, *ITN News*, 15 Feb 1984; discussing advanced medical treatment given to wounded men, all of whom were known to have survived).
- (38) ... and I was thankful that I had no children staying up late who *may have heard* the crudity and vulgarity of some parts (letter (Rochdale address), *RT*, 19-25 Jan 1985, p.80)
- (39) ... the editor *may have served* his reader better by judicious repunctuation so as to clarify the sense. He does, after all, have no qualms about repointing the poems. (John Gouws [S. African], *Notes & Queries*, 1986, 33:411)

⁵ Again the adverb *well* in (40) is incompatible with the chosen paraphrase.

- (40) With Nægling intact, [Beowulf] *may well have killed* the dragon unaided (Bruce Mitchell, *Neophilologus*, 1963, 47:138, cited in turn by R. W. Zandvoort, *English Studies*, 1963, 44:282, and Visser (1963-73: ' 1670))
- (41) There are a number of questions and points that Lord Lane *may have taken* into consideration if he were really serious about appropriate sentencing for sexual crimes against females. (letter, *Gdn.*, 3 Aug 1989, p.18)

1.4.

The distinction between epistemic and root senses does not appear to affect the point under discussion, however, except in relation to competition with another variant, *could have* (see ' 3.2). What is noticeable is that only 7 of 41 examples above have a clausal protasis directly preceding the apodosis (15, 23-27, 32): most have a protasis which is non-clausal or verbless, or unstated, or which follows the apodosis, or which precedes the apodosis but with another clause intervening.

One inference would be that counterfactual *may have* is a sporadic error occurring most often in non-salient positions, perhaps in anacoluthon. However, the sheer number of attestations and the fact that many observers (and in one or two cases, the original writers) accept these examples even when studied at leisure, makes anacoluthon an inadequate explanation overall. And it may be that explicit protases are actually rather rare in general. For example, when *might* appeared in epistemic hypothetical (unreal) use, Coates found an expressed condition in only 17% of cases (1983: 159).

2. *May* and *might*

Are *may* and *might* to be treated as forms of the same lexeme? Palmer decides that they are, and lists both under MAY (1979: 32-33); Coates assumes without argument that they are not, and lists MAY and MIGHT as separate lexemes (1983: 7). In order to avoid prejudging an important question, I shall do without capitalization for lexemes.

2.1. Epistemic *may/might have*

Palmer notes that *may* in epistemic use can be paraphrased by 'it is possible that ...' (1979: 41), that the modality is generally in the present, and that if the proposition is in the past, *have* is used before the main verb (1979: 50); this is of course the usage illustrated in (2). He describes *might* as the tentative form of *may*. It "is used exactly as *may* is", and "in epistemic modality it seems to have no clear implication of conditionality" (1979: 48). Thus we have near-synonymous pairs like:

- (42) a. They may have recognised us.
'It is possible that they recognised us'.

- b. They might have recognised us.

'It is tentatively possible that they recognised us'.

Coates, incidentally, finds little difference in meaning between epistemic *may* and *might* in her corpus: *might* "seems no longer to be used as the tentative form of MAY, but simply as an alternative form for the expression of the modality 'it is possible that ...'" (1983: 153).⁶

2.2. Counterfactual *may have*

Example (42)b without further context is ambiguous, since a possible reading is 'it is (tentatively) possible that they would have recognised us (but it never happened)' – in other words the clause may be an incomplete conditional, an apodosis with protasis implicit, and *might have* a counterfactual modal. In the dialect type described by Palmer and Coates, any distinction of tentativeness between *may* and *might* is neutralised in this reading of (42)b. (I summarise part of the discussion in Palmer 1979: 142-144.)

The dialects which provide examples (1) and (3-41), then, presumably have complete parallelism between (42)a and (42)b, since (42)a *also* becomes ambiguous between a non-conditional epistemic reading (the "traditional" one) and a counterfactual reading (the new usage). Both forms can then have a counterfactual meaning, perhaps with a distinction of tentativeness: cf. examples (12) and (22) above, where they are used in parallel.

2.3. Other *may/might* interchanges

I have a few examples of a similar use of *may* for traditional *might* in present unreal conditionals:

- (43) In today's violent world, people *may* not *feel* quite as vulnerable out of doors if they had a telephone in their pocket. (*Ind.*, 24 Oct 1989, p.14)
- (44) ... if I were to be attacked by an assailant wielding a rubber dagger, I think laughing at him *may be* just as effective as any knowledge of the fighting arts (letter, *RT*, 23-29 Jul 1983, p.60)
- (45) If, improbably, the present generation of leaders were to feel too tarnished to remain in power, the result *may not be* to the West's benefit. (*Ind.*, 15 Apr 1989, p.16)
- (46) And even if there were such a thing as totally independent advice, it *may not turn out* to be the best (Margaret Dibben, *Gdn.*, 2 Feb 1985, p.25).
- (47) Perhaps if these cowardly thugs were put before television cameras and forced to explain their appalling actions, then others *may think* twice before copying similar attacks [*sic!*] (Nicolette Webster, *MEN*, 20 Feb 1985, p.10)

⁶ As for root meanings, Palmer is doubtful about the status of non-epistemic *may/might* in present-day English (1979: 157-160), but Coates (1983: 139-165) provides some clear examples. The decline of dynamic *may* between the fifteenth and nineteenth centuries is plotted by Simon-Vandenberg (1983).

(48) If the same reaction were going on in the open, several different end products *may be* possible, ... (*Gdn.*, 15 Nov 1984, p.15).

However, (48) is perhaps an anomalous example in that *may* and *possible* are at least partly tautologous, and there may be contamination, e.g. from:

(48') ... it may be that several different end products are/would be possible.

Replacement of *might* by *may* can also be found in the failure of sequence of tenses in indirect and free indirect reported speech (cf. Wood 1955: 247; Visser 1963-73: ' 1663; Coates 1983: 155) and in other kinds of dependent clause:

(49) At the bottom they found a shovel [*sic no comma*] raising hopes that the lost men *may have dug* themselves into a snow hole to shelter (*Gdn.*, 27 Jan 1984, p.26)⁷

(50) ... but Sheriff Johnston upheld the police contention that the refusal was on the proper grounds that the licence *may not have been used* in good faith (*Gdn.*, 5 Apr 1983, p.3).

(51) One member of the Central Committee, General Ogarkov, retained his place despite rumours that he *may have been dropped* (BBC World Service News, 7 Mar 1986, attested by A. MacDonald, p.c.)

(52) No one was hurt. My girl friend was taken to a hotel in town and I went to see her as I thought she *may have been injured*. (LOB Corpus F, 1961)

(53) He described Mr Smith's action as 'foolish in the extreme' and said if he had had time to reflect he *may not have killed* himself (*Old.Ad.*, 14 Mar 1985, p.9)

(54) The news ends fears that Mr Barnett (60), former Chief Secretary to the Treasury, *may be forced* to leave Parliament because he did not have a seat (*Old.Ad.*, 21 Apr 1983, p.11).

(55) Residents had been concerned that the school *may be built* off Sandy Lane which they felt was too far away for most of the pupils (*Old.Ad.* 20 Jan 1983, n.p.)

(56) I thought initially that her reply [quotation] *may be* a substandard construction I was forced to abandon this idea. (student essay, Apr 1989)

(57) Patterns of future research could not be predicted and even seemingly irrelevant material might be of future value. Acquisitions policies could be undermined by sale of valuable material which had been a central feature of the collection. Scholars and research students *may well have based* their research on the presence of the materials considered for sale (*THES*, 27 Jan 1984, p.6; report of document on sale of valuables by university libraries, in free indirect speech in this para.)

(58) The concrete shielding *may crack or be damaged* on first impact of collapse but even if it was not the fire would burn it away ... (*Gdn. Weekly*, 9 Mar 1986, p.3)

(59) Professor Rabin ... claimed that volunteers were not told of all the possible risks; that they were not told to warn their GPs that they were taking part in the trial; that under

⁷ Example (49) may be unreal – the story doesn't make clear whether or not the men had in fact dug themselves into a snow hole – but it is not the apodosis of a conditional.

the contract they were obliged to sign they *may not have been able* to claim compensation if they were damaged by the drug; and that Charterhouse did not plan to keep track of them after the trial had finished (*Gdn.*, 31 Jan 1984, p.26).

- (60) The log walls, the stove's heat ... dulled Jim's thoughts. He *may as well have been* asleep; his father was lost to duty and nostalgia (Hugh Brody, "Jim's Journey", *Granta*, 1984, 10:239; free indirect speech?)
- (61) Rask ... was slow in coming to terms with the facts of change; in his 1818 masterpiece he was still asking what *attested* languages Old Norse *may have originated* from (Weinreich – Labov – Herzog, "Empirical foundations for a theory of language change", in *Directions for historical linguistics: a symposium*, Lehmann – Malkiel (eds) 1968: 104 n.7)

Further examples are given by Visser (1963-73: ' 1670), with an indirect reference to Joyce (1910: 84), who described this as a peculiarity of Irish English. That some of these examples probably show contamination from the related *direct* discourse does not detract from their relevance here. Examples (51-56) are clearly counterfactual, so that (51-53) can be added to the collection of counterfactual *may have* examples in ' ' 1.1-1.3.

3. Modals in conditional apodoses

It is often claimed that the apodosis of an unreal conditional requires a modal verb in the past tense (see e.g. Palmer 1974: 141). Past time is distinguished by the addition of *have* to the verbal groups, finite in the protasis and non-finite in the apodosis:

- (62) a. If you disagreed/should disagree/were to disagree with her next week, she *would fire* you.
- b. If you had disagreed with her last week, she *would have fired* you.

Alternatives to *would* in sentences like (62) are *should*, *could*, *might*, *ought* (on the margins of the modal system), and perhaps *need* and *dare* (especially when non-affirmative).

3.1. *Must*

Palmer includes *must* here (1979: 143), with the example (from Huddleston 1977: 46):

- (63) If he had stayed in the army, he *must have become* a colonel.

I find this example ungrammatical, probably because in my dialect of English *must* normally has no past tense form (which Palmer mentions as the reason for what he calls the exceptional use in this instance of a present tense modal for unreality).

It may be possible to relate the confusion of present *may* and past *might* directly to the use of *must*. *Must* was once a past tense form, later became a present tense as well, and most recently has become almost entirely a present tense form (cf. also *ought*).⁸ Most handbooks

⁸ Jørgensen (1984) reviews the evidence and decides that *ought* is still on balance a past tense form.

do not recognise a past tense use of *must*, though some notice its retention in reported speech or in subordinate clauses generally (e.g. Poutsma 1928: 58-59, Palmer 1979: 98). The point is discussed at length by Jacobsson (1979: 303-306). First some examples to show that past root *must* is still occasionally found:

- (64) But Boon didn't know this. He *must seduce* me. And he had so little time: only from the time the train left until dark (William Faulkner, *The Reivers*, 1962, ch.III [Random House edn., p.46]).
- (65) Therefore some re-formulation was necessitated by the theory of change in order to prevent a breakdown of communication. Again, the re-formulation *must conform* to the theory of grammar and yield surface results similar to those produced by the earlier grammar. There were no further constraints It was a matter of chance that the actual solution was as indicated (Lightfoot 1979: 407, and similar usage p.406).⁹
- (66) ... made it sound like a secret society which I *must* at once *join* (Robert Robinson, *BBC Radio 4*, 4 Jan 1984; context clearly implies past tense).

Then some historical examples of counterfactual (i.e. past counterfactual conditional) *must have*:

- (67) But it would have secured me nothing, as there would have been no funds for my maintenance at the University ... , and my career at Oxford **must have been** unfortunate (Anthony Trollope, *An Autobiography*, 1883, ch.I [OUP edn., 1950, pp.10-11])
- (68) They had got the vote for two reasons – because for years before the war they had made themselves nuisances and because during the war they had proved to be essential. Had they not volunteered they *must have been conscripted* for national service (*Gdn.*, 21 Jan 1984, reprinted from 21 Jan 1934).

Must is a present tense form with a few remnant past tense uses, probably because it has no related past tense partner. *May* is now beginning to behave in the same way, though of course there is in many dialects a corresponding past tense form. It is just conceivable that *may* has been influenced by *must*, especially if *may* and *might* are not regarded as tensed members of the same lexeme, though [so far] I do not take this suggestion very seriously.

3.2. *Could*

Recall examples (3), repeated here as (69):

- (69) a. Earlier launch '*may not have saved* lifeboat' [headline].

⁹ Lightfoot himself denies elsewhere that this is possible: 'NE *must* and *ought*, historically past tenses, never carry past sense' (1979: 104).

- b. An earlier launch of the Penlee lifeboat *may still have resulted* in the final tragedy, in which 16 people died, the inquiry into the disaster was told on its final day yesterday.

For some speakers *could have* is roughly synonymous with counterfactual *may have* or *might have*,¹⁰ allowing the use of *could* – sometimes even a *preference* for it – in a sentence like (69)b, thus:

- (69) b'. An earlier launch of the Penlee lifeboat *could still have resulted* in the final tragedy

It is possible that counterfactual *might have* will be overwhelmed by the advance of *could have*, especially in American English, and that replacement by *may have* is no more than a minor diversion. Certainly when full statistics are gathered it will be necessary to deal with all three variants.¹¹ Notice, however, that the substitution of *could have* is not suitable in negative examples like (69)a:

- (69) a'. !Earlier launch '*could not have saved* lifeboat'.

The reason is that *could* normally falls within the scope of a negative, whereas with *may/might* the unmarked case has negation within the scope of the modal. Hence (69)a would not be synonymous with (69)a. This fact, plus the dynamic meaning attributed to *could* whenever salient, means that *could have* is not at present a pure morphosyntactic variant of counterfactual *may/might have*.

3.3. *Can*

Example (70) is almost an example of counterfactual *can have*:

- (70) The two immediate regulations to be enforced on Thames pleasure craft are disturbing. Firstly, a short safety drill ... *cannot realistically be expected to have had* any significant helpful effect upon the partying and drinking people aboard the ill-fated Marchioness last weekend, given the speed with which she sank. (letter, *Gdn.*, 24 Aug 89, p.20)

Admittedly we do not quite get *cannot have had*, but even so the counterfactual hypothesis of (70) would for many speakers require a conditional (past-tense) modal either in the *expect* clause or in a finite embedded clause, thus *could not ... be expected to have had* or *could not have been expected to have (had)* or *cannot ... be expected that ... would have had*.

¹⁰ Coates argues that epistemic *could* expresses a more tentative possibility than *might* in her corpus (1983: 165-167, and cf. also 121-122 on *could have*).

¹¹ A recent study by Collins (1988) comparing British and Australian preferences in the usage of *can*, *could*, *may*, and *might* is of some relevance here, though Collins nowhere distinguishes counterfactuals within his more general Hypothetical category.

3.4. *Will*

I have come across one example recently of a clear counterfactual where *will have* appears instead of the expected *would have*:

- (71) With any other ruling party this sort of information *will have cast* doubts on the timing, and possibly the holding of the election. It all suggests that the Jaruzelski leadership not only prepared its own death warrant but ... (*Gdn.* 8 Jun 1989, p.23)

I do not yet know whether (70-71) are isolated errors or a sign that the link between past tense and counterfactuality/unreality is becoming weaker with all modal verbs and not just *may*. With *dare* and *need* apparent present-tense forms have long been used for past tense, including counterfactuals; see e.g. Visser (1963-73: ' ' 1348-1349, 1363).

4. The *have* of unreality

The anomalous use of *have* as an auxiliary implying unreality or lack of fulfilment is discussed by Visser (1963-73: ' ' 2154-2157). The close association between *have* and unreality appears from the frequent occurrence of clauses where the marking of unreality by finite past *had/'d* is apparently reinforced by a superfluous *have*:¹²

- (72) If I'd have known, ...
 (73) I wish we hadn'ta moved so fast with the sonofabitch. (1987 Tom Wolfe, *The Bonfire of the Vanities*, ch.19 [Bantam ed. 1988, p.426])

Another example occurs in the protasis of (25). It seems to be specifically the *have*-auxiliary rather than perfective aspect which has the association with unreality, to judge from the historical evidence in Rydén – Brorström's study of variation between *be* and *have* as auxiliaries of the perfective. They show that unreality (rejected condition) almost guarantees the choice of *have* even in texts and with main verbs that might otherwise allow *be* (1987: 186).

Traditionally the unreality of counterfactual *might have* is signalled by the choice of *might* rather than *may*. If the distinction between unreality and open possibility is not to be neutralised in dialects which permit counterfactual *may have*, then it must be marked in some other way, perhaps by a greater or different use of perfective *have*. A possible line of research would be to look for a correlation, whether dialectal or diachronic, between counterfactual *may have* and the use of *have* as a marker of unreality. This might show up in, say, a greater use of the double perfect in (72-73) or of the c variant in the (74) type:

¹² Professor Bolinger points out (p.c., 10 Sep 1989) that the HAVE of (72-73) is not superfluous prosodically.

Whether 'd in (25, 72) stands for *had* or *would* is discussed in Visser (1963-73: ' 2157) and more recently Wekker (1987: 460-462). Compare here Lakoff's analysis (1987: 562-5) of the 'strange existential'

a. There's a man been shot.
 where 's is a contraction of *has*, not *is*. Here the auxiliary cannot be used in uncontracted form – a 'rational property' which depends on phonological identity with its 'ancestor' element, the 's = *is* of normal existentials.

- (74) a. I would have liked to see that film.
 b. I would like to have seen that film.
 c. I would have liked to have seen that film.

5. *Blending*

Example (48), with present unreal *may*, invited explanation as a blend. A similar suggestion can be made for counterfactual *may have*. Examples like (31) and (39), repeated here as (75) and (76), are accepted by some speakers who generally reject counterfactual *may have*:

(75) Both universities might well fly their flags on the birthday of Queen Catherine Parr, but for whom it seems there *may well have been* no colleges or gardens.

(76) ... the editor *may have served* his reader better by judicious repunctuation so as to clarify the sense. He does, after all, have no qualms about repointing the poems.

Apparently the *may/might* distinction involving degree of tentativeness can be more salient than that involving open possibility vs. counterfactuality; the lack of explicit protasis is probably relevant. Now in all dialects which use them at all, both *may* and *might* are fully grammatical if something like (76) is embedded in an epistemic clause:

(76) It *may/might* be that the editor would have served his reader better ...

Any contrast in meaning between *may* and *might* in (76) is confined to degree of tentativeness, and *may* can easily carry intonational focus to signal precise degree of doubt. This raises the possibility that in general the grammaticalisation of (77)a with counterfactual meaning is licensed by the existence of the types (77)b and also (77)c,d:

- (77) a. X *may have Ved*
 b. It *may be that X would have Ved*
 c. *Maybe X would have Ved*
 d. X *maybe would have Ved*

Then (77)a would originate in part at least as a blend construction, possibly through clause union. Compare too the sentence-adverb analysis of double modals, on which see e.g.

Butters (1973: 283-284 n.3).

Another route to the introduction of counterfactual *may have* has been suggested by Professor Bolinger (p.c., 10 Sep 1989). He offers the following dialogue with four different responses to the original question:

- (78) Weren't you able to prevent it? –
 a. We might have [prevented it], but we didn't.
 b. We might have been (able to), but we didn't.
 c. We may have been (able to). [Who knows?] But we didn't.
 d. *We may have [prevented it], but we didn't.

If (78)c conforms to the standard dialect – Bolinger says yes, I'm just not sure – then his idea is that the possibility of a possibility, as in (78)b,c, provides a bridge between the simple possibility examples (78)a,d, allowing counterfactual *may have* in at d, a point of least resistance. (I notice too that Palmer (1979: 158) floats the idea of explaining a slightly different *may/might* pattern as a possible blend construction involving epistemic possibility.)

6. Weakening of tense marking

It has been suggested that *may* is perhaps being mistaken for a past tense form (Howard 1984: 124, cited by Wekker 1987: 459). At first sight this is unlikely, since the more common development in modals is for past tenses to start being used as presents (cf. *must*, *ought*, discussed in ' 3 above). Furthermore Coates notes the occasional use even now of past tense *might* (epistemic and root) in relative clauses and as an independent past epistemic (1983: 156-157). But example (58), repeated here as (79) in a larger context, does provide some support for Howard's idea:

(79) ... a basic design fault ... which meant that a few seconds of seismic shock could sever the bolts supporting the 2,000-ton pressure vessel. This could mean it crashing 18 feet to the ground. This could split the vessel ... but even if it did not it would cut the cooling pipes and I know of nothing that would prevent a fire of devastating proportions. The concrete shielding *may crack or be damaged* on first impact of collapse but even if it was not the fire would burn it away ... (*Gdn. Weekly*, 9 Mar 1986, p.3)

Apart from an irrelevant first person *know*, there are nine finite verbs parallel to *may*, and all are in the past tense. This brings us back to the question of whether *may* and *might* are different tense forms of the same lexeme. (79) and the like suggest that for some speakers they are not. I have just come across a suggestion to the same effect specifically for Australian English (Rodney Huddleston, quoted by Collins 1988: 284 n.9).

If we compare the history of *must* we find some support for this hypothesis. Although the main development is that past tense *must* became a present tense while present tense *mote* disappeared, there are sporadic examples of past tense use of *mote* – i.e. the opposite phenomenon – before its final obsolescence.¹³ The history of *owe/ought* is rather different, as historically it was not a preterite-present like *must* and *may*, but even here there is one possible occurrence of the present tense in past use during the period of its replacement by what had been the past tense (*MED* s.v. *ouen* v. 4e.(b)). I am here drawing an analogy between the late Middle English behaviour of *must* and *ought* and current changes in *may*, rather than suggesting a direct contemporary influence of *must* on *may* (cf. ' 3.1).

Is a general weakening of sequence-of-tense rules in progress? Examples (49-61) and (79) suggested that possibility for *may*, (63) and (67-68) for *must*, and (70-71) for *can* and

¹³ See *OED* s.v. *mote* v.1 1b. An additional factor is confusion with *mought*, a variant of *might*; see *OED* s.vv.

will. Note too this apparent failure of sequence of tenses when the auxiliary (*would?*) is omitted altogether from the apodosis:

(80) She looked delighted. This kind, he thought. *Holds* hands with a gorilla as long as it had pants on. (Anne Blaisdell, *Greenmask*, p.78; quoted in Strang 1970: 67)

For present purposes I cannot look into the behaviour of verbs other than *may*, but a diachronic corpus investigation should be feasible.

7. Obsolescence of *may*

May is odd even among modals. For some speakers it has no contracted negative, and it does not occur in epistemic questions. We shall see that *may* seems to be regarded by some speakers as more formal than *might*. Coates writes: "My data leads me to think that MAY and MIGHT, in their Epistemic usage, are usually interchangeable. Recent work on child language ... and regional dialects ... indicates that *might* is superseding *may* as the main exponent of Epistemic Possibility" (1983: 147). Collins supports this judgement for Australian English (1988: 283-284). Is the form *may* actually obsolescent?

Another possibility must be considered as well. Simon-Vandenberg (1983, 1984) and Kytö (1987) present evidence that *can/could* has been gradually taking over several functions of *may/might*. It is arguable therefore that the *whole may/might* paradigm is becoming marginalised and is perhaps on the way to obsolescence. If there is any truth in this, then a slightly chaotic swapping of forms is not so surprising. I offer the comparison of the apostrophe in written English, probably doomed to extinction fairly soon, and simultaneously losing and gaining territory in its terminal throes (*orange's 4 for 30p.*, *Linguistic's*, *mens clothing*, etc.).

It is difficult to spot the long-term trend here without some careful statistical work, which I have not attempted. (Both Kytö and Simon-Vandenberg treat *may/might* as a single lexeme.) My provisional view, based on evidence discussed in this paper, is that *may* is in a steeper decline than *might*.

8. Stylistic variation

There are strong indications that, in general, *may* is regarded as being more formal or more genteel than *might*. This is implicit in the discussion by Partridge and Clark (1951: 259, cited by Visser 1963-73: ' 1670). Coates compares surveys which have differed in their findings as to the relative frequencies of *may* and *might*, conducts a small test of her own, and concludes that "it may be that MAY, which is distinguished from CAN in its Root uses in terms of formality ... , tends to be more commonly used [than MIGHT] as an Epistemic modal in formal contexts" (1983: 154-155).

Perhaps this is related to the knowledge that *may* is the old-fashioned modal of permission:

(81)

a. May I have a chocolate?

where majority usage nowadays is

b. Can I have a chocolate?

Pairs like (81)a,b might lead to an association of *may* with formality or old-fashionedness.¹⁴ The use of counterfactual *may have* would then be an instance of hypercorrection.

I have made informal use of a short questionnaire with ten examples on it.¹⁵ One thoughtful respondent rejected nine examples of counterfactual *may have*, and accepted only (3)a,b precisely because (3) was explicitly from a newspaper (I had not given the provenance of the others). She added the revealing comment that “*may* wouldn’t be used [in ordinary speech] because it sounds far too ‘posh’ and even archaic”, and that “*might* could be used but still ... in some cases sounds too ‘posh’”; she thought *could* a more likely substitute for either of them in her Sheffield speech in the non-negative examples.

There are some interesting indications in the results as to how counterfactual *may have* is perceived. One informant rejected most examples as “very strange” or “not possible”, apart from two. One was the (5) type, with the comment “*might* implies more doubt”. Here there seems to be interference from the potential timelessness of *be necessary* as an epistemic predicate (cf. discussion of (48) in ' 2.3). The other was (3)a (but not (3)b!). One respondent rejected all but (37). Another rejected *may* only in negatives (cf. ' 3.2 on an asymmetry between positives and negatives). For one speaker only the (6) type was rejected, the only sentence among her examples which satisfied two conditions: dynamic (event) verb and obvious counterfactuality. Another rejected none and queried only (13). Other respondents accepted all the sentences offered and even rejected *might have* in some instances: in one case in (3)a and (35), in another in (3)a,b and (13), in another in (4), (35) and (37). One respondent accepted all the sentences on the questionnaire except (36), which he queried, and allowed the substitution of *might* in all of them, but queried the substitution in (35), where *may* was “better”. Several called *may* “old-fashioned” or “formal” or “written, not spoken”. There is scope for more systematic informant testing here.

¹⁴ Of course, this argument only works if the formal-but-tentative variant of (81),

c. Might I have a chocolate?

is less salient than (81)a, as it probably is for most speakers (Quirk *et al.* 1985: 224 call it “rare and apparently obsolescent”).

Partridge & Clark (1951: 259) assert that counterfactual *may have* is a hypercorrection, though they give a different source. They claim that speakers have been taught that “historical English idiom” prefers *may have* to *might have* in ordinary epistemic usage – i.e. that (42)a is preferable to (42)b – and that this preference is erroneously transferred to counterfactual examples.

¹⁵ The questionnaire contained examples (3-6, 13-14, 35-37).

A student in my department, Imelda Cahill, included the following test sentence in a questionnaire that formed part of her 1987 undergraduate dissertation on attitudes to correctness:

(82) If John Lennon had not been shot, 'The Beatles' may have reformed [*sic*].

She records the acceptability judgements of 20 schoolteachers and 30 students over four contexts: informal spoken, informal written, formal spoken, and formal written. Overall it scored 57% acceptable, though the students recorded 70% acceptable responses, so that the teachers presumably found it rather less acceptable. The only detailed figure she gives is that the teachers found it only 20% acceptable in the formal contexts, which is primitive evidence of an age differential. These results bear out my own impressions.

9. Prescriptive grammar

It has been suggested that the much-decried absence (or near-absence) of formal English grammar teaching in schools has contributed to the growth of what are seen as solecisms like counterfactual *may have*. Although this factor cannot be ruled out entirely, my hunch is that it has little relevance. I doubt that much prescriptive teaching has ever been devoted to this particular distinction between *may* and *might*, especially given the elaborate background specification needed to make the distinction, unless in the context of explaining the **Latin** (or Greek) tense-mood system. It is noticeable that Quirk *et al.* (1985) do not treat counterfactual *may have* in the same way as the better-known shibboleths. For example, they point out that *less* (as opposed to *fewer*) + plural noun is "often condemned" (1985: 263), though without themselves endorsing the condemnation. But counterfactual *may have* does not (yet) have the tradition of proscription which might challenge descriptive grammarians to flaunt their objectivity, and their comment on it – as "occasionally occurring" in "contexts in which only *might* would normally be considered appropriate" (1985: 234) – comes quite close to condemnation.

10. Dialect differences and borrowing

10.1. Some anecdotal evidence

Comments of informants responding to my earlier questionnaire suggested a possible dialectal difference: southern British English speakers tended to reject (1) and examples like (3-41), whereas some northern British speakers¹⁶ and a South African informant had found

¹⁶ The only evidence I have found of scholarly attention to this matter as a dialect phenomenon turns out to be unhelpful. Melchers (1979: 114) quotes question 4.14 in Book 9 of the Survey of English Dialects:

'Smith said to you: It didn't rain yesterday, though you thought it would. You said: True, but it very easily ... might have done.'

(The key answer is underlined.) In other words, 4.14 might have elicited counterfactual *may have*. Melchers says (1979: 122) that in Northern material *might* and *mud* occur; she makes no mention of *may*. She points out, though, that 4.14 was a phonological question and that speakers were under a certain amount of pressure to produce *might*. As she says: 'Responses to 4.14 certainly make a somewhat artificial impression.' So we are

nothing wrong with most or all of them. (Bruce Mitchell, the writer of example (40), is of Australian origin.) A second questionnaire produced contradictory results as far as British north-south differentiation was concerned, with greater acceptance of counterfactual *may have* from respondents from London and the southeast. In cases where informants find some but not all of the questionnaire examples acceptable, I have been unable to detect much system in their responses.¹⁷ I use these informal results mainly to confirm my impression (from sheer frequency of occurrence and from discussion with my students) that the usage in question is fully grammatical for some present-day speakers, not to make specific claims about provenance or current localisation.

10.2. Textbook evidence

As far as I know, the first scholars to comment on the phenomenon of counterfactual *may have* are Partridge and Clark, already mentioned above. What Visser does not mention is that Clark describes this “half-educated” usage in a section of their book dealing specifically with American English speech. It is not specifically mentioned in Wood (1955), an article for foreign learners on *may/might* differences which mentions several “mistaken” [British] uses of *may*. There are one or two examples in the Brown Corpus of written American English of 1961 against none in the comparable Lancaster-Oslo-Bergen Corpus of British English: small numbers, but consistent with Partridge and Clark’s localisation. Strang independently noted what she regarded as a new development in (presumably British) English (1962: 150; 1968: 170), and Palmer (1974: 147) describes it in a brief aside as “surprising” and “irregular”, commenting that *might have* would be “more ‘correct’”. In his later book (Palmer 1979) the phenomenon is not mentioned, nor is it in Coates (1983) – both use the Survey of [educated southern British] English Usage as main corpus. It is noted in Quirk *et al.* (1985: 234) but is not in previous grammars by Quirk and his team. Visser adds another couple of examples (1963-73: ' 1670), mixed indiscriminately with examples of the open possibility type (as in (2) or (42)). A survey of recent discussions and opinion is given by Wekker (1987: 458-460), and Bolinger adds an early example and some interesting speculations (1988).

It is possible to explain the frequent omission of counterfactual *may have* from descriptions of English as due to its absence from the dialect of those writing the description. Sporadic occurrences are not noticed – perhaps because taken for open possibility rather than counterfactual *may have* – or are assumed to be errors, given “the tendency of listeners

none the wiser, except that the compilers of the questionnaire thought that they had a cast-iron method for eliciting *might* rather than *may*. Jenny Cheshire informs me (p.c., 24 Jan 89) that the Survey of British Dialect Grammar does not cover counterfactual *may have/might have* variation either.

¹⁷ I have not undertaken the sort of survey on which statistical results could be based. For one thing, the sample was far too small. For another, the overt concentration on the *may have/might have* distinction is bound to have distorted respondents’ perceptions.

to filter out linguistic signals that do not conform to their own idiolects" (Youmans 1986: 71). Charles Li (this volume) offers an example of linguists inadvertently imposing the categories of their own language on data from other languages. That the standard English of many scholars is indeed syntactically different from other varieties is implicit in Jim Miller's assertion that "standard written English differs greatly from all varieties of non-standard English with respect to all major areas of grammar" (1988: 113).

10.3. Class dialects

The only information I have on social as opposed to geographical dispersion is unsatisfactory: Perkins reports some research in which middle-class five-year-olds were far more likely than working-class children to take over *might* from a question put to them into their answer (1983: 132). But from this alone we cannot be sure whether we are dealing purely with sociolinguistic variation or with differential rates of language learning.

11. Internal and external factors

Counterfactual *may have* provides a perfect opportunity to witness the very earliest stages of a possible syntactic/semantic change. Without the benefit of hindsight we cannot discriminate with certainty between an incipient change and a collection of errors, though my hunch is that this **is** an incipient change: the apparent absence of examples until recently, followed by an increasing volume of attestations, strongly suggests a genuine innovation with the potential, at least, to move into the steeper phase of the S-curve of change. Whether it will be carried through in any or all dialect(s) of English is impossible to say. But even taking the most negative view – that this is merely a set of mistaken usages – we should try to explain the frequency and consistency of that particular "mistake".

What then is the explanation for the appearance of counterfactual *may have*? Several possibilities have been discussed, and it seems probable, as so often, that the explanation lies in the interaction of factors. No single internal factor can be seen as causal, though at least one seems to be a crucial mediating factor: the frequent interchangeability of *may* and *might* in other contexts. I would cite too the adequacy of the *have*-perfect as an alternative marker of non-realisation, and the support offered by the blending of present epistemic *may* or adverbial *maybe* with a *would have* clause. The relevance of such factors could be verified, if with some effort, by corpus work, elicitation testing, and/or psycholinguistic testing, as appropriate.

It is less clear to me how to assess the relevance of the long-term trends identified above. To enumerate them again, they are:

- (i) the possible loss of *may* in favour of *might*, within which counterfactual *may have* is a reverse, "death-throe" phenomenon;

- (ii) disruption associated with the probable gradual obsolescence of the whole *may/might* paradigm;
- (iii) the generally-recognised development of present- and past-tense modals towards separate, perhaps tenseless, auxiliaries;
- (iv) a possible weakening of the sequence-of-tense rules (if true, and if separable from the previous).

In all four we enter on the possibility of drifts lasting many generations, almost imperceptible in real time, and none of them anywhere near completion. Whether, if genuine, they could be regarded as **causal** is highly dubious, but they provide some sort of historical framework for understanding what is going on.

The most important external factors are a growing association between *may* (more so than *might*) and formality, and the decreasing dominance of southern educated British English as a standard. The first of these would suggest an element of hypercorrection, a (false) movement towards a prestige variety, and it is the only purely causal factor I have identified. The second factor involves a change independent of the prestige standard and probably retarded by it, with a possible future influence on the prestige variety from lower-status varieties. Here again verification is difficult but not impossible. Given sufficient data one might hope to find stylistic differentiation in the innovating regional or class dialects, with counterfactual *may have* associated with more formal styles, as against discourse/pragmatic/syntactic differentiation in the prestige dialect, where counterfactual *may have* should be most acceptable in **non**-salient contexts. Eliciting conditionals is not easy, especially when one needs enough stylistic and contextual differentiation to base statistics on. Anyone with the time for such a task should get moving soon. All of this assumes, of course, that *may have* and *might have* are functionally equivalent and are operating within a single grammatical system; see especially Harris (1984) on the risks of making such assumptions, also Ebert, Gerritsen and others (this volume).

The provisional conclusion, then, is that we are seeing an incipient change which is facilitated by a complex of internal and external factors but driven initially by a single external factor.

References

ALLC Bltn = *Bulletin of the Association for Literary and*

Linguistic Computing

Gdn. = *The Guardian*;

Ind. = *The Independent*

MEN = *Manchester Evening News*;

Old.Ad. = *The Oldham Advertiser*;

RT = *The Radio Times*;

THES = *The Times Higher Education Supplement*

Adamson, Sylvia *et al.* (eds.)

1990 *Papers from the 5th International Conference on English Historical Linguistics: Cambridge, 6-9 April 1987.* (Current Issues in Linguistic Theory 65) Amsterdam – Philadelphia: Benjamins.

Bailey, Charles-James N. – Roger W. Shuy (eds.)

1973 *New ways of analyzing variation in English.* Washington: Georgetown U.P.

Bolinger, Dwight

1988 "May day", *English Today* 13: 5.

Butters, Ronald R.

1973 "Acceptability judgments for double modals in southern dialects", in: Charles-James N. Bailey – Roger W. Shuy (eds.), 276-286.

Chalker, Sylvia

1989 "Jottings of a grammaholic", *English Today* 19: 62-63.

Coates, J.

1983 *The semantics of the modal auxiliaries.* London: Croom Helm.

Collins, Peter

1988 "The semantics of some modals in contemporary Australian English", *Australian Journal of Linguistics* 8: 261-86

Harris, John

1984 "Syntactic variation and dialect divergence", *Journal of Linguistics* 20: 303-27.

Howard, Philip

1984 *The state of the language: English observed.* London: Hamish Hamilton.

Huddleston, R.

1977 "Past tense transportation in English", *Journal of Linguistics* 13: 43-52.

Jacobson, Sven (ed.)

1979 *Papers from the Scandinavian Symposium on Syntactic Variation: Stockholm, May 18-19, 1979*. (Stockholm Studies in English 52) Stockholm: Almqvist & Wiksell International.

Jacobsson, Bengt

1979 "Modality and the modals of necessity *must* and *have to*". *English Studies* 60: 296-312.

Joyce, P. W.

1910 *English as we speak it in Ireland*. London: Longman, Green & Co. – Dublin: M. H. Gill & Son

Jørgensen, Erik

1984 "'Ought'. Present or past tense?" *English Studies* 65: 550-554.

Kytö, Merja

1987 "*CAN (COULD)* vs. *MAY (MIGHT)* in Old and Middle English: Testing a diachronic corpus". *Neophilologica Fennica* 45: 205-240.

Lakoff, George

1987 *Women, fire, and dangerous things: what categories reveal about the mind*. Chicago – London: University of Chicago Press

Lightfoot, David W.

1979 *Principles of diachronic syntax*. (Cambridge Studies in Linguistics 23) Cambridge: CUP.

Melchers, Gunnel

1979 "Modal auxiliaries in regional dialects", in: Sven Jacobson (ed.), 113-123.

Miller, Jim

1988 "*That*: A relative pronoun? Sociolinguistics and syntactic analysis". *Edinburgh Studies in the English Language* 1: 113-119.

Palmer, F. R.

1974 *The English verb*. London: Longman.

1979 *Modality and the English modals*. London: Longman.

Partridge, Eric – John W. Clark

1951 *British and American English since 1900*. London: Andrew Dakers.

Perkins, M. R.

1983 *Modal expressions in English*. London: Frances Pinter.

Poutsma, H.

1928 *A grammar of late Modern English, I, The sentence, i, The elements of the sentence*. (2nd edition). Groningen: Noordhoff.

Quirk, Randolph *et al.*

1985 *A comprehensive grammar of the English language*. London – New York: Longman.

Rydén, Mats – Sverker Brorström

1987 *The “be/have” variation with intransitives in English: With special reference to the Late Modern period*. (Stockholm Studies in English 70) Stockholm: Almqvist & Wiksell International.

Simon-Vandenberg, A. M.

1983 “On the decline of dynamic MAY”. *Studia Neophilologica* 55: 143-5.

1984 “Deontic possibility: A diachronic view”. *English Studies* 65: 362-365.

Strang, B. M. H.

1962 *Modern English structure*. London: Edward Arnold.

1968 (2nd edition).

1970 *A history of English*. London: Methuen.

Traugott, Elizabeth Closs

1990 “From less to more situated in language: The unidirectionality of semantic change”. In Sylvia Adamson *et al.* (eds.), 497-517.

Visser, F. Th.

1963-73 *An historical syntax of the English language*. 4 vols. Leiden: Brill.

Wekker, H. Chr.

1987 “Points of Modern English syntax LXIX”. *English Studies* 5: 456-463.

Wood, Frederick T.

1955 “*May* and *might* in Modern English”. *Moderna Språk* 49: 247-253.

Youmans, Gilbert

1986 “Any more on *anymore*?: Evidence from a Missouri dialect survey”. *American Speech* 61: 61-75.