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REVIEWS

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Douglas Biber, Stig Johansson, Geoffrey Leech, Susan Conrad and Edward Finegan, Longman grammar of spoken and written English. London: Longman, 1999. Hardback £69. Pp. xii + 1,204. ISBN 0 582 23725 4.

Reviewed by Manfred Krug, University of Freiburg

The Longman grammar of spoken and written English (LGSWE) is the result of a six-year transatlantic collaboration of five distinguished corpus linguists. The bulk of the book was written by two contributors: Douglas Biber wrote half of the fourteen chapters, Stig Johansson another four; the remaining three co-authors contributed roughly equal parts. Relatively close consistency and compatibility as regards terminology with its predecessor as major English grammar, Quirk et al.'s (1985) Comprehensive grammar of the English language (CGEL, published by the same house), was ensured by the fact that Geoffrey Leech, one of the writers of the 1985 reference grammar, took on the role of joint lead editor (with Douglas Biber) of this new book.¹

The adoption of a similar framework in the two grammars is beneficial for several reasons. For one thing, the new grammar complements rather than replaces its predecessor, so that advanced students and scholars alike will need to consult both works at the same time. The main difference between the two is that while Quirk et al. (1985) provide a comprehensive descriptive (and sometimes mildly prescriptive) coverage of English grammar, Biber et al.'s rigorously descriptive work has its main focus on frequency information. Put antithetically: Quirk et al. discuss what may and may not occur, and often provide constructed examples; Biber et al. discuss what actually does occur, and how often in a certain register, using authentic data for illustration throughout. One consequence of this approach is that asterisks and quotation marks before examples enjoy markedly low frequencies, considering the fact that the work under review here is a grammar. It is slightly confusing, however, that – apart from indicating grammaticality judgments – asterisks sometimes also indicate frequency thresholds (e.g. pp. 1031f.).

Given Biber's (1988; 1995) seminal work on register differentiation, it is not surprising that quantitative detail is not given in a naive way for some idealized monolithic language or 'standard English'. On the contrary, the focus on varietal differences is perhaps the most important innovation of the *LGSWE*. Four 'core registers' are identified (pp. 24f.): conversation, fiction, newspaper language, and academic prose. In other words, there exists no simplistic binary distinction between

¹ There are some exceptions to this general rule, most notably perhaps the (re-)introduction of the more traditional term *predicative* in the description of syntactic functions instead of Quirk et al.'s term *complement*.

a 'spoken' and a 'written' mode but a tripartite differentiation of the latter. Post-hoc this strategy is also proven to be plausible since the distinctions between the registers selected manifest themselves in enormous (and sometimes counter-intuitive) statistical differences for many if not most features and, even more important, these differences allow for qualitative register-specific generalizations. In fact, then, the *LGSWE* is not one grammar but contains four grammars. In addition, separate figures for conversational and non-conversational speech are occasionally given, thus adding a formality dimension within the description of spoken English. On the regional side, despite the scope of this grammar, it is only differences between British and American English that figure prominently (though perhaps not as prominently as some readers might have expected), thus leaving a great deal of potentially fruitful research to dialect grammarians.

Overall the 40-million-word corpus used for the grammar is balanced between the above-mentioned registers of conversation, fiction, newspaper language, and academic prose, with each subcorpus containing between about four and five and a half million words. Fiction and academic writing are not as systematically subjected to dialectal comparisons as conversation and news, on the grounds that the former two registers were found regionally to diverge much less than the latter two. Thus the 5-million-word fictional and academic subcorpora contain both British and American material, while the conversation and news components are British only. The sizes of the parallel American components are no less impressive: 4 million words of British conversation compare with 2.5 million words of American conversation; and the American news component with its 5.2 million words matches its British counterpart almost exactly in size. At 5.7 million words, finally, the supplementary corpus of formal British speech is even larger than the conversational component of either variety.

As the more detailed breakdown of the corpus (pp. 29-35) makes transparent, each individual subcorpus spreads fairly evenly across important parameters, such as age or sex of speakers (there are almost 500 speakers each in the British and American conversational components); and the written subcorpora include a large variety of topics, academic disciplines and newspaper sections as well. Given its enormous size and broad coverage, therefore, this corpus represents as close an approximation to a representative corpus of contemporary British and American English as a linguist can currently hope for.²

Quirk et al. (1985) too was a corpus-related project and functional in outlook. However, largely thanks to the work and inspiration of its contributors, corpora

² For comparison, the currently largest publicly available corpus, the British National Corpus, contains 100 million words. It could not serve as a basis for the present grammar since it is, as its very name indicates, British English only, and not yet amenable to comparable register studies and, regrettably, the representativeness (cl)aims were continuously watered down during that project. There are, however, some unexpected texts in the corpus used for the *LGSWE* too, such as a considerable proportion of fictional texts from the first half of the twentieth century, as well as a few texts from Australia, the Caribbean, and West Africa.

have grown considerably since the 1980s, when two corpora of 1 million written words and one spoken corpus of half a million words constituted the standard. And just as computational facilities have been improved greatly, so statistical procedures have become more mainstream and more sophisticated since then. Indeed, corpus linguistics became a more self-assertive linguistic branch (discipline or method, the debate still being open) during the 1990s, which saw the rise of corpus methods in many influential journals, the establishment of the *International Journal of Corpus Linguistics* and the publication of no fewer than four textbooks between 1996 and 1998 alone. (One of these, Biber et al. 1998, was incidentally co-written by two of the present authors.) Thus, with its heavy focus on frequency information, the *LGSWE* is on the one hand avantgardist and setting the trend in corpus linguistics, but on the other hand it is itself part of a more general trend in linguistics at the turn of the millennium.

The book's fourteen chapters fall into five sections. An Introduction (pp. 1–46) setting out the corpus-based approach is followed by a section on word, phrase, and clause grammar (pp. 47–226). The next section (pp. 227–570) contains the expected chapters on the major word classes: nouns and pronouns, verbs, adjectives, and adverbs. Then follows a section that is devoted to more complex structures (pp. 571–892): noun phrases, complement clauses, and adverbials.

The last section on 'grammar in a wider perspective' (pp. 893-1127) contains the most innovative chapters as far as subject-matter is concerned. It begins with a relatively conventional discussion of word order, passive, and clefting from a functional perspective. Chapter 12 offers a fresh approach to current issues connected with modality. While recent theoretical work has emphasized the interdependence of different markers of modality, this insight has not yet found its reflection in existing grammar books. In the LGSWE the functional approach is taken seriously: embracing an onomasiological approach to the grammatical marking of stance (that is, identifying a given semantic or discourse function in order to then look at how this function is expressed through different linguistic forms) enables the authors to compare such formally diverse but functionally similar structures as adverbials (e.g. surprisingly) and adjectives taking complement clauses (e.g. It's amazing that). Similarly, for expressing epistemic stance, modals (e.g. *might*) are compared with stance nouns followed by prepositional phrases (e.g. the possibility of) or intensifiers (e.g. really). The next chapter presents a radically empirical look at word combinations that sheds new light on phrasal and prepositional verbs, idiomatic expressions, discourse phrases, and collocations.

An illuminating chapter on the grammar of conversation, followed by an appendix on contractions, concludes the body of the book. Naturally, it is in this last chapter that spoken features are identified as highly current, and thus as part of a spoken standard which in earlier works had often been (erroneously) labelled 'non-standard'. Some readers might have expected more detailed discussion of such phenomena in the previous chapters, but this is essentially an organizational decision made by the authors. The book ends with a brief notes section, a bibliography, and two indexes.

For a grammar of 1,200 pages, this is a very accessible and user-friendly book. Both the lucid style and the transparent structure and, last but not least, layout devices help accomplish this overall quality. Sensibly for instance, a four-page contents summary is followed immediately by a detailed table of contents. Together with a lexical index (of items discussed) and a conceptual index (of linguistic terms), these help the readers find their way efficiently through the book. A major advantage over the 1,800-page CGEL is that the chapter-internal organization is a great deal more transparent. A structural parallelism was followed carefully in the design of the major chapters and their subsections, thus providing (a) comparable results on all relevant grammatical levels (morphology, syntax, discourse) as well as (b) a convenient overall picture of the four registers investigated: a qualitative description of the phenomenon under discussion is followed by authentic examples from different registers. Quantitative corpus data (presented in illustrative figures and tables) and brief discussions of the findings conclude each section. It is easy to see that the provision of normalized figures in bar and other diagrams makes it easier to compare the host of data presented in this grammar, just as the provision of frequency bands makes it easier to conceptually group and memorize the many findings. It is also true that a profusion of individual figures in each diagram or table would be more distracting than helpful for the general readership. Nevertheless, it is equally certain that professional linguists would have welcomed access to the actual figures of occurrence (perhaps in an appendix or a separate notes section), since this would enable them to compare their own findings more meticulously with those presented in this grammar and, just as important, work with the figures of the LGSWE. As it is, exact figures can often only be estimated and thus a good deal of the tremendous amount of work that went into the writing and compilation of this grammar cannot be fully exploited by the scientific community. This is particularly regrettable because the LGSWE will indubitably stimulate a wealth of pertinent studies.

With its stress on frequency information, deliberate omission of complex phrasestructure diagrams, its lack of the generativist technical apparatus, and neglect of universal principles, this will probably not become the mentalist's favourite grammar.³ Nevertheless, despite its language-specific aims (and probably precisely because of its functional, non-technical approach, which is unlikely to be outdated within a decade), the *LGSWE* will set a standard also for future non-English grammars – a standard which it will be difficult to match in the foreseeable future, though, given the lack of similarly sophisticated corpora for other languages. Furthermore, various competing psycholinguistic schools, in particular cognitivist NLP approaches which rely heavily on probabilistic models, can be expected to profit greatly from the wealth of quantitative information provided here.

The LGSWE provides not only basic research for theoretical linguists. It is in

³ It ought to be added that some basic phrase- and clause-structure diagrams do figure in the appropriate places of this work too (e.g. pp. 114, 123, 135f., 576f., 641). These follow the notational conventions of (systemic or traditional) functional grammar.

particular on the applied side where the future influence of the LGSWE can hardly be overestimated. Both first- and second-language teaching materials will need to be revised on the basis of this work. Again, the differentiation into registers will prove useful for materials developers. The field of teaching English for academic purposes (EAP), for instance, can be put on a more solid foundation now that academic English can be contrasted systematically with conversational English. Such materials are sorely needed since recent work has shown that a lack of stylistic sensitivity is prominent even among very advanced students. It should be kept in mind, however, that few EFL and EAP teachers will be able to devise a course on the basis of the findings of the LGSWE. Psychometricians and trained materials developers – whose favourite work this should certainly become - will need to collaborate to devise maximally efficient courses. Needless to say, these materials will have to be highly varied depending on such factors as participants, purposes, and period of exposure to formal teaching. A first step in this direction will be the shorter student grammar based on the present work (Biber et al. forthcoming), which is due to come out shortly together with a workbook.

What the present reviewer misses most are detailed qualitative analyses and theoretical discussions. But – and this was a surprise to the authors of the grammar too (Douglas Biber, personal communication) – it is surprising how few sophisticated studies involving complex arguments can be incorporated even in a large-scale grammar if the overall balance and a fourfold register differentiation is to be carried out consistently. Paradigmatic, more detailed discussions such as that on the constructional principles of spoken grammar (pp. 1,066-1,108) can therefore only occur sporadically. Different linguists consulting this grammar while expecting final, quantitatively 'verified' answers to individual aspects will thus often be (a) disappointed or irritated at the complexity of matters, (b) happy to see that their work has not been finished, and/or (c) realize that such answers will probably not exist for the time being. The authors are not unaware of this fact: nowhere do they pretend to have written a 'comprehensive' or even 'complete' grammar (just compare the title of this work and that of its predecessor) – despite 1,200-odd pages. Writing a truly comprehensive grammar would surely go even beyond Otto Jespersen's imagination. Given our current knowledge of variationist factors, it would need to combine quantitative information on register, dialectal and social variation with detailed qualitative analysis; and it should also provide at least superficial coverage of ongoing changes. While such a unified account of grammar and variation would certainly be a fascinating enterprise, it could probably only be realised in a tenvolume grammar project spanning twenty years and involving at least thirty researchers. Current sponsoring is unfortunately more short-term oriented; the six years allotted for the LGSWE already represent what is considered a 'long-term' linguistic project. There is hope, though. Most importantly, the lead author of the present grammar can boast expertise in all of the above fields. Secondly, Longman has proven to be happy to foster long-term collaborations. After all, it took over two decades for the CGEL (Quirk et al. 1985) to evolve after work had started on

the *Grammar of contemporary English* (Quirk et al., 1972) in the 1960s. Future revisions and extensions to the present work are therefore not inconceivable.

Amongst its many merits perhaps the highest distinction of this grammar lies not so much within the book itself but in the fresh methodological impetus that it gives to the disciplines of English linguistics and grammar writing more globally. Hence it is also quite appropriate to consider the LGSWE as the solid starting point of more fine-grained individual future studies. This is what makes a truly seminal work. The LGSWE is an excellent source for distinguishing central from marginal aspects of grammar; it is methodologically sound and very accessible given the wealth of information provided. Reference grammars by definition cover the central aspects first, and the LGSWE is no exception. Fortunately, we are occasionally offered gems on individual low-frequency phenomena, which reminds us of the important insight that both central and marginal aspects can be descriptively and theoretically rewarding in linguistics.

In conclusion, Biber et al. do not only provide answers to many burning issues, but raise perhaps even more interesting questions by revealing potentially fruitful areas of research. The full value and impact of the *LGSWE* will thus only become apparent in the quality of future linguistic work, pedagogical materials, and reference grammars for languages other than English. No doubt, then, due to its scope and novel approach, this will be one of the most often cited works in English linguistics in the first part of the twenty-first century. It is furthermore safe to predict that this grammar will be a first source for frequency-oriented corpus linguists, some of whom one can imagine using *Bibal* in their word-processors as shorthand for the long list of authors while implying the meaning of its homophone.

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April McMahon, *Lexical phonology and the history of English*. Cambridge: Cambridge University Press, 2000. Pp. xi + 309. Hardback £42.50. ISBN 0 521 47280 6.

Reviewed by Charles Jones, University of Edinburgh

This important book takes forward the claims of a Lexical Phonology (LP) model on a number of fronts. As one might by now expect, it proposes a set of more 'concrete lexicalist analyses' for phonological phenomena than those which are usually put forward by adherents of the Sound Pattern of English (SPE) framework. In particular, McMahon proposes a variety of additional constraints to the (already highly constrained versions of the) LP model, in the course of which she effectively criticizes the SPE model in particular for its over-riding reliance upon generality, economy, abstractness, and simplicity metrics to an extent which makes it unresponsive to criteria for learnability or psychological reality. As a counter to some of the almost grotesque derivational histories claimed by scholars like Monahan and Halle to underpin certain surface alternants, McMahon proposes a stratum-reduced level of LP, where Level 1 rules are limited to derived environments and lexical rules themselves constrained to apply to Level 1 (and then only once). Such additional constraints will, in their turn, lead to underlying representations for alternant forms which will be equivalent – or certainly closer – to the lexical representation of the underived member of the alternating pair. Important consequences will be a closer match with learnability criteria and the production of an optimal grammar in acquisitional terms.

The book sets out to explore the implications of this heavily constrained LP model as a tool for explaining mechanisms of phonological change on the one hand and, on the other, to assess the relevance of historical change for synchronic alternations in the phonology. There are two thrusts to her arguments. In the first instance, phonological alternants like the English Vowel Shift (EVS) are explained in LP terms as 'natural' phonological occurrences, without recourse to any inherent appeal to rule processes and sequences identical to the historical phonological events which produce them. McMahon convincingly shows that the EVS can be characterized as having a phonological life cycle of a type which can be attested elsewhere and which need not equate with the same rules and rule sequences which are traditionally claimed to underpin real-time historical events. By this means she is able to by-pass the problem, inherent in SPE frameworks, of how the modern language user is able to recover historical processes like EVS and Middle English Open Syllable Lengthening (MEOSL). Among other devices, she achieves this goal by postulating underlying diphthongs for the *divine* and *profound* types, the *divinity* and *profundity* forms being produced through monophthongization rules where lax vowels lose a timing slot. Likewise, *reduce/reduction* both share an underlying [ju] while *study/studious* show an underlying $[\Lambda]$. Their surface alternants are shown to be explainable without reliance upon purely historical rule events, but can be arrived at through synchronic rules such as laxing, raising, and lengthening, rules which, although typical of historic accounts of the EVS, are now applied in a way which does not have to correspond to their historical strict domain or sequencing. Indeed, McMahon claims that 'It seems that synchronic phonological rules need not, and indeed cannot be identical to their historical sources in a constrained lexical model' (p. 125). Above all, she successfully demonstrates how a major and positive consequence of the type of constrained LP model she advocates will be the prohibition of unjustifiably maximally simple phonologies of the SPE type; so that her Vowel Shift Rule (VSR) interpretation involves two rule processes against SPE's one, with all the lexical rules operating solely on Level 1, in consequence eliminating the need for free-ride solutions.

However, there is another side to the coin; the past should also be able to help us understand the present. To demonstrate this she concentrates upon two major phonological processes in the history of English - the Scots Vowel Length Rule (SVLR) and [r] loss, insertion, and deletion. In both instances she shows convincingly how there is a progression from what was a gradual sound change (in the case of the SVLR a Low-Level Lengthening Rule in voiced contexts; in the case of [r] a gradual weakening of the sonorant in coda positions) through Rule Inversion to lexical reassignment. This kind of phonological process - from phonological conditioning through phonological rule to grammaticalization - has, of course, often been noted before in the literature, but the positing of this phonological life cycle within a constrained LP model as a post-lexical to lexical process is perhaps novel. The SVLR, for instance, begins life as a low-level lengthening rule, which in turn produces a rule inversion whereby all vowels which were previously underlyingly short now become long by phonological rule, leading in turn to a reassignment of length to some of the diphthongal forms in the phonology. So too [r], where an initial low-level weakening and deletion in coda positions produces a rule inversion, in turn giving rise to [r] insertion. Such a process, she demonstrates, leads to the relexicalization of words like 'spar' and 'war' as having no underlying [r]. Importantly, though, both these processes, while active in the synchronic phonology, mirror historic rule sequencing.

Throughout, McMahon argues for the interconnection between the phonological past and phonological present: 'a constrained, rule-based, derivational model makes testible predictions on the course sound changes follow, as they develop from low-level variation into post-lexical and then lexical rules. This is not the same as the recapitulation of history found in SGP [Standard Generative Phonology], where sound changes and phonological rules were essentially identical; instead variant pathways into the grammar are determined by issues of learnability and by the constraints on the model . . . Apparently arbitrary present-day processes can equally be shown to be explicable in a diachronic perspective' (p. 283).

There are, needless to say, some concerns about McMahon's claims. While one might accept that for the *divine/divinity* alternation an underlying [ai] diphthong could be postulated, the monophthongization process which this has to undergo to

achieve the *divinity* output is not well motivated and looks somewhat process specific. One would need to be shown how it might equate with other 'smoothing' processes in the historical phonology (e.g. the [eo] to [oo] and [au] to [ɔɔ] types and others). And what does she mean by 'degree of prominence' in such cases – is it interdependency between the segments (and how would a LP handle this?) or has it to do with 'inherent' vowel prominence or relative vowel sonority (and how would an LP deal with this?). A particular worry in McMahon's account of the EVS, and one popular with LP adherents, is the suggestion that some surface alternants are a consequence of (or at least can be reinforced and maintained by) orthographic considerations. Such criteria McMahon proposes as possible motivators/sustainers for [r] insertion as well. In historical terms this kind of argument involves all kinds of assumptions about levels of literacy but, regardless of that, proposals of this type need considerably greater degrees of testing before they can be generally accepted.

If, as she rightly claims, the past can be used to explain the present, then we must be absolutely certain that the facts we have about the past are as complete as they possibly can be. McMahon claims, for example, that [j] insertion never occurs in the language post [r, w, d₃, \int], but Tuite (1726) records it in items such as *bruise*, *juice*, *cruise*, *fruit*, *rude* among many others, all he claims showing 'long u', i.e. [ju]. Likewise her discussions in this area might have looked at the Scottish dialectal areas where [j] insertion is much more pronounced than RP, showing the phenomenon in words like *book*, *hook*, etc.

The relative paucity of detailed historical data shows itself too in her discussion of [r]. In several places she argues that statements by several eighteenth-century observers that [r] is never lost doesn't reflect the facts on the ground but merely their prescriptive preference, which often limits their observations of ongoing change. This is surely too simple a view to take of the status of the late Modern evidence (not all of which is prescriptive). Even in that which is heavily so – for example H. W. Savage's *The Vulgarities and Improprieties of the English Language* (1833) – there is evidence to show how complex the situation is concerning [r]. Savage's careful evidence shows that [r] loss is far from universally stigmatized and also, like it, [r] intrusion is often a characteristic of 'the custom of good society', and 'the custom of educated society', citing examples of such as *hawkwud* 'awkward' (vulgarly, *hawkerd*); *subbeltun* 'subaltern' (vulgarly *subhaultern*); *blornemornje* 'blancmange', *fracar* 'fracas', *purtaytuz* 'potatoes', *orgust* 'august'. Interestingly, he appears to record only a single linking [r] instance: *I saw rim.*

It is most unfortunate that this (not inexpensive) book is marred by crass production errors, arising, it would appear, through major failures in font-reading software systems. That such blemishes should appear in a prestigious series like this says little for the standards of a Press which makes public claims for the excellence of its productions. One can only imagine the angst suffered by the author. Fortunately, the great strengths of McMahon's case are left unaffected, and this book will add considerably to the ongoing debate about the interrelation between phonological change and phonological modelling. Reviewer's address Department of English Language University of Edinburgh David Hume Tower George Square Edinburgh EH8 9JX elacjs@srv.artsø.ed.ac.uk

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Heinz J. Giegerich, *Lexical strata in English: morphological causes, phonological effects.* Cambridge: Cambridge University Press, 1999. Pp. ix + 329. Hardback £47.50, ISBN 0 521 55412 8.

Reviewed by Francis Katamba, Lancaster University

This is a book on Lexical Phonology (LP) which specialists in English language as well as theoretical linguists will find provocative, informative, and highly rewarding. Using data mostly taken from English and supplemented with examples drawn from German, Giegerich explores the interplay between morphology and phonology in regulating phonological alternations. At a time when Optimality Theory and other constraint-based approaches appear to have swept all before them, Giegerich offers us a derivationalist alternative in the shape of a coherent and highly constrained theory of 'base-driven' LP.

The opening chapter paints the background against which the book is to be read. It is a look back to Gussmann's review of Mohanan (1986), the first mainstream monograph on LP. That review lambasted Mohanan's book which, according to Gussmann, contained many bad analyses and suffered from major structural flaws that stemmed from LP's impoverished view of morphology. Gussmann contended that if his criticisms were accepted 'Mohanan's book would very likely come to stand as a requiem for Lexical Phonology' (Gussmann, 1988: 239).

Giegerich's book mounts a robust defence of LP and shows that any thoughts of a requiem for LP are premature. While recognizing the problems with Mohanan's analysis, Giegerich demonstrates that in fact they were not endemic in all versions of the theory that existed in the 1980s (e.g. Kiparsky, 1982). Moreover, those weaknesses that were present in the best versions of the 1980s model can be overcome without jettisoning its basic insight, namely the hypothesis that morphological and phonological rules apply in tandem in the lexicon, regulated by the principle of 'lexical stratification' (or 'level ordering').

Unfortunately, lexical stratification raises many problems for which so far there have been no satisfactory answers, such as: how many strata are needed? What morphological and phonological properties belong to a particular stratum? On what basis is this determined? Are stratification principles part of Universal Grammar?

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The lack of both clarity and unanimity in the answers given to such questions by practitioners of LP has thrown the whole enterprise into disarray. For instance, as seen in the table below, there is agreement neither on the number of strata required in the lexicon of English nor on the stratum at which particular phenomena should be placed.

	Kiparsky (1982)	Halle and Mohanan (1985) Mohanan (1986)
Stratum 1	'+'-affixation: - <i>ity</i> , - <i>ic</i>	'+'-affixation: - <i>ity</i> , - <i>ic</i>
	irregular inflexion: cacti, oxen	irregular inflexion: cacti, oxen
Stratum 2	'#'-affixation: - <i>ness</i> , - <i>less</i> , compounding	'#'-affixation: -ness, -less,
Stratum 3	regular inflexion	compounding
Stratum 4	_	regular inflexion

In order to handle the interaction between '#'-affixation and compounding, Mohanan proposed what was to become a highly questionable device, namely a 'loop' that enables morphology to look back from stratum 3, where compounding took place to form a word like the verb *aircondition*, to stratum 2 where regular '#'affixation takes place to derive *re-aircondition*. This loop totally undermines the insight of LP that morphological and phonological rules of the same stratum apply in tandem. Earlier, Kiparsky (1982) had also been forced to allow a retracing of steps from stratum 3 back to stratum 2 in order to handle cases where regular inflection appears inside compounds (e.g. *systems analyst*).

Another objection to Mohanan's model was that it allowed excessively abstract analyses. LP (Kiparsky, 1982) and its precursors (Kean, 1974; Mascaró, 1976) had striven to exclude excessively abstract analyses by using the Strict Cycle Condition (SCC) which always restricted structure-changing rules to applying in derived environments. Halle and Mohanan (1985) and Mohanan (1986) relaxed this requirement so that rules of Vowel Shift and Vowel Reduction could apply wherever it was expedient to allow them to apply. A major objective of Giegerich's book is to revert to a more constrained model where the Strict Cycle Condition is rigidly adhered to.

Chapter 2 puts the weaknesses of early LP under the microscope. According to Giegerich, LP got into trouble because it was based on a number of erroneous assumptions. Chief among these was 'affix-driven' stratification (cf. the table above). The strata are defined on the basis of affixes that are attached at a particular stratum. But affixes are a very poor diagnostic test for lexical strata. The diagnostic uselessness of affixes in determining lexical strata is shown to be due to the fact that many derivational affixes defy any attempt to pin them down to a single stratum. Dual membership suffixes include famous examples like *-ablel-ible* and *-antl-ent* as well as numerous less well-known ones such as agentive *-er* which is normally

stratum 2, and attaches to words as in *singer* and *worker*, but is stratum 1 in a few cases, e.g. *adulterer* and *presbyter*, and attaches to bound roots on stratum 1. The same is true of adjective forming -y. It is normally stratum 2 and attaches to words (e.g. *sunny*, *funny*) but can also occasionally be found on stratum 1 where it attaches to bound roots (e.g. *holy*, *dizzy*, *flimsy*). In all, the behaviour of well over a dozen dual membership derivational affixes is presented, enough to convince even the most determined defender of affix-driven stratification that a fundamental rethink is needed.

In chapter 3 Giegerich presents the theory of 'base-driven stratification' which maintains the insight of a stratified lexicon while at the same time avoiding the pitfalls of affix-driven stratification. The criteria used to define strata relate to the properties of affixation bases, rather than affixes. In English stratum 1 is root-based and stratum 2 word-based. This means that the input of stratum 2 must be a word; the input of stratum 1 is a root – which may or may not be a word. The number of strata required in the grammar of any language is an empirical issue determined on the basis of the behaviour of its bases. Thus, while two strata are sufficient for English, German requires three strata whose inputs are respectively the root, stem, and word.

The hallmarks of stratum 1 are noncompositionality and non-productivity (cf. *maternity, fraternity, fraternize*). Hence, Giegerich proposes, no general word-formation rules are available at stratum 1. The linguist must list all stratum 1 roots (both simple and complex) as well as affixes as lexical entries. Sceptics may retort that, true, there is a case for listing this at stratum 1, but the problem of nonproductivity and noncompositionality is a cline. A more nuanced solution would reflect, for example, that there is some degree of predictability in the result of stratum 1 suffixation of *-ity*.

In this theory nonaffix inputs to stratum 1 are all members of the category root, which has a novel definition. While the traditional view is that the root is the core that remains when all affixes are stripped away (Lyons, 1970: 325), Giegerich's root may be a morphologically simplex form (e.g. *lamp-*, *gorm-*, *moll-*) or a complex one, where the complexity is the result of stratum 1 morphology yielding a base (e.g. *sensation, nation, fraction*) which can be expanded to form a word (e.g. *sensational-ity, nation-al, fraction-al*).

Following Selkirk (1982), Giegerich assumes that unlike words, roots are not members of lexical categories. Rather than arbitrarily characterize *moll*- as an adjective and *gorm*- as a noun, Giegerich proposes that the grammar should be assumed to have a root-to-word conversion rule which assigns word status, and hence word class labels, to lexical category-free roots as they exit stratum 1 and enter stratum 2, thereby acquiring word status. The rule takes this form:

(1) []_r \rightarrow [[]_r]_L (L = N,V,A)

It is not possible to predict if a given root is subject to the root-to-word rule. A bound root like *matern*- is not, but a free root like *modern* is. So, each root must be

diacritically marked to indicate whether it can become a word at that point and what lexical category it will belong to. Unsatisfactory though it is from the point of view of capturing a generalization, Giegerich sees no way round the problem other than listing, since no mechanism exists for predicting why *modern* is free but *matern*-is bound. Derivational affixes also have diacritic marking to indicate the lexical category of words formed by attaching them. Thus, *-ity* is marked as forming nouns and *-ize* as yielding verbs.

Blocking plays the usual role in a stratified lexicon. While *lioness* is the female *lion*, *dogess* is not what we call a female dog. The stratum 2 form ending in *-ess* is blocked in the latter case by the prior existence of *bitch*.

The stratal affiliation of affixes is handled thus: basic roots as well as affixes are treated as lexical entries. For each root the grammar indicates the affixes that are allowed to attach to it as in (2a); for each affix the grammar lists the affixes it can have attached to it – or whether it yields a word as shown in (2b):

(2)	(a) matern	$\Big\{ \stackrel{\rightarrow}{\rightarrow} \stackrel{\text{-al}}{\rightarrow} \stackrel{\text{-ity}}{\rightarrow}$	(b) -al	$\begin{cases} \rightarrow -ize \\ \rightarrow -ity \\ \rightarrow Adj \text{ (rule (1))} \end{cases}$
	moll gorm		-ade -ity	\rightarrow Adj (rule (1)) \rightarrow Adj (rule (1))

This makes it unnecessary to mark each rule with a diacritic showing the level at which it applies, as was previously the case.

The two strata of English are characterized by a clustering of interrelated properties. For instance, stratum 1 morphology displays phonological properties which are not shared with stratum 2 such as stress alternations (*átom–atómic*), syllabicity alternations (*rhythm–rhythmic*), and phonological rules restricted to this stratum such as trisyllabic laxing (*define–definition*).

Base-driven LP does not completely succeed in banishing all overlap between strata. Giegerich subscribes to the 'Continuity of Strata Hypothesis' (Mohanan, 1986: 46) which envisages migration between two adjacent strata. For instance, the formation of abstract nouns using the suffix *-th* (as in *warmth*) is said to have moved from stratum 2 to stratum 1 when this mode of word formation ceased being productive.

Chapter 4 turns to the phonological side of Lexical Phonology and examines it in relation to a number of phenomena. The main focus is the role of Strict Cyclicity in excluding excessively abstract analyses. Structure-changing rules are allowed to apply in underived environments only on the final stratum. The Strict Cyclicity Effect is applicable at all earlier strata (stratum 1 in the case of English), but the final lexical stratum (for English stratum 2) is not subject to this requirement. There is a strong tendency (rooted in learnability) to require stratum 2 to be subject to the Alternation Condition (AC). Alternations resulting in violations of AC may be removed from stratum 2 by rule inversion. A case in point is the well-known *-n/zero* alternation in forms such as *autumn–autumnal, column–columnar*. This alternation is

handled at stratum 2 by Mohanan (1986: 22), Kaisse and Shaw (1985: 23), and Kiparsky (1985: 89):

(3) mn-simplification $/n/ \rightarrow ø/m_{]}$

Giegerich reanalyses *mn-simplification* as a highly restricted stratum 1 rule. Historically it was a stratum 2 deletion rule but he demonstrates how it has been the subject of rule inversion resulting in its reinterpretation as a sporadic stratum 1 insertion rule whose inputs are recognized with the help of clues from the orthography.

Continuing with the theme of the relevance of the orthography in positing underlying representations, chapter 5 deals with phonology and the literate speaker, focusing on schwa. Giegerich considers what at first sight appear to be nonproblematic word pairs which fall into two groups:

(4) (a) real-reality, atom-atomic, hostile-hostility, autumn-autumnal(b) deter-deterrent, myrrh-myrrhic, recur-recurrent

In (4a) all the simple morphological forms have unstressed [ə] as their final vowel while in (4b) (in RP) they have the stressed variant of schwa, namely [3:] as their final vowel. The corresponding complex morphological forms, however, have one of the lax vowels [a e i o u] in the same position.

Data of this kind illustrate a key problem that besets derivational approaches which has led many linguists to abandon them: frequently there is a lack of plausible underlying representations that can be matched systematically by rules with surface representations. Here Giegerich claims the problem can be solved if the correlation between the phonological and orthographic representations of, say, [ætəm] *atom* and [ætɒmɪk] *atomic* is taken into account. It is claimed that for literate speakers some underlying representations are based on orthographic representations. These words contain a schwa whose underlier is a blank syllable nucleus which is filled by one of the vowels [a e i o u] with the selection being determined on the basis of spelling. The proposal does work. But at a cost. It expands enormously the information that is drawn upon in formulating underlying representations.

Chapter 6 deals with syllabification. Giegerich defends the claim that [r]-sandhi (both intrusive [r], as in draw[r]ing and linking [r], as in draw[r]it) in RP is a single phenomenon analogous to the [j]-sandhi that occurs in *say it* and the [w]-sandhi in *show it*. And all three are instances of liaison: empty syllable onsets are filled with melodic elements belonging to the final segment of the preceding rhyme. The alternative account where linking [r]-sandhi is the result of the nonapplication of a rule deleting coda /r/ is rejected. Also dismissed is the treatment of any form of [r]-sandhi as a case of insertion. This is because an insertion analysis flounders when the motivation for the inserted sound being [r], rather than any other sound, is sought.

It is further argued that the pattern of complementary distribution shown in nonrhotic accents like RP suggests that in the rhyme [r] and schwa are surface

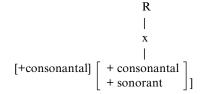
manifestations of the same underlier which is an 'empty' nuclear melody. Blankfilling rules predict the actual realization of the filler, which is schwa if it is syllabified as part of the rhyme and [r] if it is in onset position. The fact that linking [r] is used freely while intrusive [r] is not is accounted for by the social stigma attached to the latter.

This analysis of [r] is certainly ingenious. But it is also controversial. An alternative view which to me seems to be better grounded in phonetics is that proposed by Gimson who treats linking [r] as coda [r] and distinguishes it from onset [r]. This is because phonetically and historically linking [r] belongs to the rhyme of the first syllable and does not form the onset of the second. For example, 'the /r/ of *more ice* /mo:r 'ais/ is shorter than that of *more rice* /mo: 'rais/, the latter also being associated with accent onset and possible pitch change' (Gimson, 2001: 289). Giegerich's analysis is difficult to square with the phonetic facts.

Chapter 7 examines the underlying vowels of RP. Topics covered include input vowels to [r]-sandhi in RP and London English. The familiar assumption is made that English vowels fall into the two categories tense and lax. The former are associated with two skeletal positions and the latter with just one. The most interesting issue addressed is the representation of centring diphthongs. RP [ə] occurring as the second element of a diphthong is a surface realization of an underspecified (0) skeletal position associated only with the feature [+sonorant]. If that skeletal position is assigned to the rhyme, it surfaces as [ə]. Tenseness is only contrastive for nonlow vowels as low vowels cannot be tense. Furthermore, as seen above, it is claimed that [ə] and [r] have the same underlier represented as the empty melody [0].

The closing chapter deals with the interaction between syllabification principles and lexical strata. Giegerich demonstrates that syllabification has a number of stratum-specific characteristics though the general mechanisms that apply throughout a derivation are the same. Two of the important findings made are the following: first, stratum 1 automatically produces alternations where root-final consonants are nonsyllabic, unlike in the morphologically simple surface form (cf. *cylinder-cylindric, baptism-baptismal* in English, and in German *Zylinder-zylindrisch, Filter-filtrier(en)*). Second, on later strata such alternation is not automatic. In English the rhyme condition guarantees such alternations do not occur on stratum 2, as all relevant clusters are syllabified on this stratum. A sonorant consonant preceding the right-hand bracket of a syllable is incorporated in the rhyme:

(5) English Rhyme Condition (stratum 2)



The theory predicts that the disyllabic noun kindling belongs to stratum 1 but the

trisyllabic participle *kindling* belongs to stratum 2. The phonological analysis is corroborated morphologically by the semantic noncompositionality of the former and the semantic compositionality of the latter. This is neat.

In conclusion, the book contains many excellent analyses of central topics in English phonology and morphology. Base-driven LP breathes new life into derivationalist approaches. Will it stop linguists abandoning derivational models? Probably not. The crucial argument against derivations is that all too often, knowing what the underlying representation is does not help one predict how it is going to be mapped on the phonetic representation. In the case of schwa, mentioned above, the problem might be circumvented if we follow Giegerich and use orthographic information. But that will still leave many situations where such a solution is not viable. This is particularly true of stress phenomena. Pairs of words with similar segmental structures are often assigned very different stress patterns, as in the examples below cited by Burzio (1996: 125) when arguing for surface constraints on outputs instead of derivations:

(6) (a) hónest/*honést; robúst/*robúst(b) órchestra/*orchéstra; asbéstos/*ásbestos

The challenge is to see how base-driven LP deals with such problems.

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Olga Fischer, Anette Rosenbach and Dieter Stein (eds.), *Pathways of change: grammaticalization in English.* Amsterdam and Philadelphia: John Benjamins Publishing Company, 2000. Pp. x + 391. Hardback \$105, ISBN 90 272 3056 0 (Eur.), 1 55619 939 2 (US).

Reviewed by Juhani Rudanko, University of Tampere

This volume, on the broad topic of grammaticalization in the English language, consists mainly of papers that were originally presented at a conference on historical linguistics in Düsseldorf in 1997, with some additional papers solicited separately by the editors. It is apparent from the papers that authors were able to refer to post-1997 sources in their papers, which is of interest in a field as fast-moving as English historical linguistics. (One of the articles even takes account of work in the field from as late as 2000.)

Two of the editors, Olga Fischer and Anette Rosenbach, have provided a lengthy introduction to the volume (pp. 1–37). They note that one advantage that English offers in the study of grammaticalization is that the language has 'a well-attested written history' or 'at least *some* historical evidence is available' (p. 7). The second statement seems a little on the cautious side from a comparative point of view, for there are probably not many other languages whose history can be studied on the basis of authentic diachronic material to the extent that this is possible in the case of English. Using authentic historical material, with precise dates of occurrence given, to draw conclusions about the historical development of the language is certainly a feature of most of the papers in the present volume.

The editors have not sought to group the articles thematically. Instead, the articles are arranged alphabetically, on the basis of the author's last name. However, certain thematic preoccupations or similarities in approach do emerge in the book. For instance, there are some studies in the book that can be viewed in relation to Elizabeth Traugott's (1982: 247 ff.) seminal idea that in the study of linguistic change it is useful to identify a dimension of meaning, or of functional-semantic levels, that runs from the propositional to the textual and the expressive. One of these studies is Minoji Akimoto's article on the verb *pray* ('The grammaticalization of the verb "pray"'). The paper is exemplary in the way the author follows the use of the verb from the fifteenth to the nineteenth century, based on clearly identified

corpora drawn from the successive centuries. The author identifies the courtesy marker *pray* for analysis as part of the paper and includes comments on the intriguing question of how and why an expression may disappear.

Ursula Lenker ('Sothlice and witodlice: discourse markers in Old English') does not focus on the question of disappearance to the extent that Akimoto does, but shows how Elizabeth Traugott's (1995) cline 'clause-internal adverbial > sentence adverbial > discourse particle' (p. 229) is useful in the analysis of the two adverbs in Old English.

Sylvia Adamson ('A lovely little example: word order options and category shift in the premodifying string') examines how the meaning and the use of the word lovely has changed from Old English (luflic) to the present day and how such change is connected to word order patterns of premodifying adjectives in noun phrases. As she observes, the Old English adjective had the sense of 'loving', belonging to the semantic type 'HUMAN PROPENSITY'. Later in Middle English the adjective took on the sense of 'physically beautiful', a sense which 'became a dominant one' in the eighteenth century (p. 48). This sense Adamson views as being of the type 'PHYSICAL PROPERTY'. In the nineteenth century the adjective acquired the sense of a 'VALUE' adjective, 'expressing the speaker's approval' (p. 48). Adjectives of these three semantic types have different slots in sequences of prenominal adjectives in noun phrases, and the semantic changes that the adjective has undergone can be connected to shifts in the position of the adjective in such clusters. In the latter half of the nineteenth century the word acquired a use as an intensifier, as in lovely quiet engine, where it occurs in front of another adjective. From this there emerges a new cline for the analysis of grammaticalization: descriptive adjective > affective adjective > intensifier (p. 55). In present-day English the word also has a use as a pragmatic particle, as Adamson observes in a note ('I'll arrive at six thirty.' 'Lovely.') (p. 62).

The analysis of *lovely* is illuminating, even though the reader may wonder whether a strict semantic separation of the 'physical beauty' sense and of the 'approval' sense is always feasible or appropriate. Regarding the data for the study, Adamson, needing a large database, decided to rely largely on the quotation base of the *OED* (p. 51). This is a good database to use, but one or more of the Chadwyck-Healey databases from recent centuries might perhaps also have been worth consulting, at least for the sake of comparison. These databases have increasingly shown their value in work requiring large samples of authentic material from recent centuries.

Of the articles in the volume that bear even more directly on the syntax-semantics interface in the analysis of English, two may be mentioned here. David Denison's contribution ('Combining English auxiliaries') is closely argued and rich in data and analysis. One of the important points in the article concerns the dating of the introduction of the progressive in combinations with *be* Adj and *be* NP, of the type *He was being stupid/a fool.* A crucial piece of evidence turns on the analysis of

sentences of the type *but this is being wicked, for wickedness sake* (1761, from Johnston, *Chrysal*). Denison points out that the *be* in the sentence is the equative *be*, not the progressive *be*, which means that the example cannot be used as evidence for dating the progressive (pp. 132f.). The earliest modern example of the relevant type known so far is therefore Jespersen's *You will be glad to hear*... *how diligent I have been, and am being* (1819, from Keats, *Letters*) (p. 133). The point is also important from the point of view of the passive pattern of *The house was being built*, as Denison points out (p. 134).

Olga Fischer's contribution ('Grammaticalisation: unidirectional, non-reversable? The case of *to* before the infinitive in English') is an important one, both from the point of view of the history of English and from the point of view of the concept of grammaticalization more generally. A central objective of the paper is to show that while *to* in front of infinitives was undergoing grammaticalization in the period from Old English to early Middle English, as manifested for instance in the strengthening of *to* by *for* and in the loss of semantic integrity (pp. 155–7), the process came to a stop and indeed reversed itself later (p. 158). In support, she argues that there were new developments, including the appearance of split infinitives, from the fourteenth century onwards, and that '*to* went back to its original meaning, again strongly expressing goal or direction (there is some difference with Old English usage . . .)' (p. 158). She views the *to* in *to* infinitives 'as a kind of shift-of-tense element' (p. 162), as in *Alex saw Julia to have been in a hurry when she dressed* . . ., and suggests that the infinitival *to* has become 'more isomorphic again with the preposition *to*' (p. 163).

At the same time, in the introduction of the book the author and Anette Rosenbach note that the infinitival *to* 'does not change its grammatical status as an infinitival marker' (p. 22), and from the point of view of present-day English, the isomorphism that Fischer hypothesizes should not be exaggerated. It is worth adding here that the *to*-*ing* pattern, as in *John objected to paying the bill*, where the *to* is a preposition, needs to be kept separate from the *to* infinitival pattern (cf. Rudanko, 1996: 58ff.). Indeed the *to*-*ing* pattern has been something of a rival to the *to* infinitival pattern in recent centuries, with the former winning ground at the expense of the latter (cf. Denison, 1998: 266; Rudanko, 1998: 11ff.).

The comments offered here concern what the present reviewer views as some of the highlights of the book. Most of the other articles, including those by Guohua Chen ('The grammaticalization of concessive markers in Early Modern English'), Susan Fitzmaurice ('Remarks on the de-grammaticalisation of infinitival *to* in present-day American English'), and R. Molencki ('Parallelism vs. asymmetry: the case of English counterfactual conditionals'), likewise explore aspects of English and of grammaticalization on the basis of well-chosen authentic data in an illuminating way and are worth reading. Those working on grammaticalization, on the history of English, or even on the structure of present-day English, will certainly want to read this book. Reviewer's address: Department of English University of Tampere P.O. Box 607 SF33101 Tampere Finland f1juru@uta.fi

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Leslie K. Arnovick, *Diachronic pragmatics: seven case studies in English illocutionary development*. Pragmatics & Beyond New Series 68. Amsterdam and Philadelphia: John Benjamins Publishing Company, 1999. Pp. 191. ISBN 90 272 5083 9 (Europe), 1 55619 946 5 (US).

Reviewed by Minna Palander-Collin, University of Helsinki

The field of historical pragmatics is a relatively new one, but it is clearly growing in popularity. Therefore, it is interesting to see what kind of theoretical and methodological approaches will emerge. Leslie K. Arnovick's *Diachronic pragmatics* is one of the first book-length presentations on the topic and provides a particularly intriguing case, as it sets out to explore the relation of pragmatic change and cultural processes. The relation of linguistic change and social reality is one of the most fascinating areas of research in historical pragmatics and a big challenge from the methodological point of view. There are many questions with no simple answers that have also been raised in this book.

The purpose of the book is to 'show that pragmatic histories can be constructed for several speech acts and speech events in English' (p. 1) and to 'suggest the complicated nature of linguistic changes that realize themselves in pragmatic effect and to illustrate the insight into them provided by one application of historical

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pragmatics, namely diachronic pragmatic theory and practice' (pp. 1–2). The author wants to 'show the complex interactions of different kinds of linguistic change, and to show the interconnectedness of formal, semantic, and pragmatic processes over time' (p. 139).

The first chapter provides a brief methodological introduction in which Arnovick emphasizes the interdisciplinary nature of diachronic pragmatics and describes the history of the discipline mainly relying on Jacobs and Jucker (1995). Arnovick classifies her approach as a subtype of historical pragmatics, that is diachronic pragmatics focusing on the linguistic inventory and its communicative use in various stages of the same language. Following the distinction made by Jacobs and Jucker (1995), diachronic pragmatics may be practised either as a 'diachronic form-tofunction mapping' that takes the linguistic form as a starting point, or as a 'diachronic function-to-form mapping' that takes a speech function as a starting point and looks for its changing linguistic realizations in time. Arnovick points out the lack of studies attempting a diachronic function-to-form mapping and fills in this gap with her work, but she considers the two methodologies essentially complementary.

The diachronic pragmatic theory and practice are illustrated through the case studies dealing with speech acts such as promises, curses, blessings, and greetings and speech events such as flyting and sounding. The case studies mostly rely on existing literature that Arnovick reinterprets and reanalyses from the diachronic-pragmatic perspective. The first two case studies in chapters 2 and 3 discuss instances of pragmatic change in which events external to the language have an important role to play. Chapter 2 exemplifies the cultural nature of speech events, in this case flyting and sounding, that live and die with their speakers. Flyting refers to the Old English verbal duel, whereas sounding is the verbal contest or game usually played by adolescent African-American males. Here and elsewhere it is an essential part of Arnovick's methodology to analyse carefully the cultural and historical context of the linguistic phenomena she is studying. Finally, the author raises the question of the possible universality of what she calls 'agonistic orality', so that the independent cultural events of flyting and sounding can eventually be seen as manifestations of the same linguistic universal.

Chapter 3 discusses the seventeenth- and eighteenth-century prescriptivists' treatment of the auxiliaries *shall* and *will*. The chapter tells the story of the 'Wallis rules' that were first formulated by Bishop John Wallis in 1653 and subsequently repeated and elaborated in other handbooks. The Wallis rules said that *will* in the first person and *shall* in the second and third persons should be used in order to make a promise, whereas the forms for making a prediction are the opposite: *shall* in the first person and *will* in the third and second persons. Although these rules were artificial in the sense that they proscribed the normal use of the period, Arnovick argues that the grammarians did not write them arbitrarily, but they tried to maintain the basic distinctions between deontic and epistemic functions of *will* and *shall* at the time when these distinctions were collapsing in real use. Thus, normative regulation by the elite may actually constitute a purposeful response to linguistic change in progress, and it should consequently be considered as a factor in a pragmatic history.

In the rest of the case studies the same tendencies keep occurring as factors motivating linguistic change. For instance, Arnovick regards pragmatic strengthening as one of the central forces, arguing against the idea of bleaching that has traditionally been associated with the early stages of grammaticalization. Although some elements of the meaning of the items studied are lost during the change, other communicative and pragmatic functions are strengthened and the speaker perspective reinforced. Arnovick echoes Traugott's ideas of subjectification whereby 'meanings become increasingly based in the speaker's subjective belief state, or attitude toward what is said' (Traugott, 1989: 35; 1995).

Chapter 4 carries on with *will* and *shall* from a different perspective. The focus is on Present-day North American English in which *I will* alone does not seem to have enough promissory power left, as it is often complemented with various other conversational strategies such as *I promise*. Arnovick maintains that the grammaticalization of these auxiliaries from deontic modals to epistemic tense markers has resulted in the use of expanded promises. As *will* fails to indicate a promissory illocutionary force, extra discursive work is needed to clarify the speaker's promissory intention.

Chapter 5 traces the history of the common curse. Arnovick shows how Old and Middle English declarative curses used for a religious speech act gradually lost their deontic nature and developed an expressive function by which the speaker could convey his or her individual anger. This shift apparently took place during the Late Middle and Early Modern English periods. Arnovick identifies subjectification as the motivating force, but from the cultural perspective secularization cannot be ignored either: the institutional role of cursing gradually disappears with the weakening of religious authority and the late medieval rise of humanism and the birth of Renaissance ideals. Arnovick suggests that 'subjectification and secularization may work hand in the case of English cursing' (p. 93).

Secularization is also the real-world context for the development of the parting utterance discussed in chapter 6. Here Arnovick addresses the development of Present-day English good-bye from the parting blessing God be with you. In line with the history of the common curse, a loss of religious and institutional meaning of blessing is detected in the development of the parting utterance. To show how and when the original blessing force is lost, Arnovick uses evidence from the Chadwyck-Healey corpus and dates the shift to the end of the seventeenth and the beginning of the eighteenth century. In addition to secularization, pragmatic strengthening is observed in this change too, as the development of a polite closing formula serves a conversational goal. Arnovick introduces the term discursization to cover the development of God be with you into good-bye. According to her, discursization is a particular kind of pragmaticalization. This term, on the other hand, is used by Aijmer (1997) to refer to the diachronic derivation of pragmatic markers from

lexical (propositional) material. Arnovick finds the term pragmaticalization inappropriate in this case, as *God be with you* has a pragmatic rather than a lexical function to start with. I was not entirely convinced that the term discursization is really necessary, because in actual practice it may be difficult to draw clear lines between phenomena like pragmaticalization and discursization or even grammaticalization. Namely, diachronic analyses usually focus on a stretch of time with a clear beginning and ending, as if linguistic changes started and ended in a certain year and had a stable before and after the process state. This is hardly the case, as a linguistic item that has gone through one cycle of pragmaticalization/discursization/grammaticalization probably continues evolving in one way or another.

Chapter 7 focuses on *Bless you*, the polite phrase used when somebody sneezes. Although *Bless you* seems like a fairly marginal expression, Arnovick identifies similar pragmatic and cultural tendencies underlying its development as in the previous case studies; in other words discursization, subjectification, and secularization are among the processes involved. Moreover, the chapter discusses the methodological difficulty of analysing a distinctly oral formula like *Bless you* that does not really occur in the written corpus material. Still, Arnovick convincingly argues for the following continuum of functions associated with *Bless you*, showing how the expression still carries several functional layers: religious blessing – superstitious blessing – wish – polite formula.

Chapter 8 finally brings together the major findings and themes discussed in the individual case studies. The conclusion revisits the linguistic processes motivating pragmatic change and raises the theoretical and methodological question concerning the nature of the evidence we should require in order to establish connections between cultural and linguistic processes. The latter half of this chapter focuses on the cultural context of the pragmatic changes studied, considering the influence of literacy on the promissory expressions and the impact of secularization on religious curses and parting-greetings.

The objections I have to *Diachronic pragmatics* concern the organization of the book rather than anything else. The interesting insights into diachronic pragmatics would have been easier to appreciate if the argument of the book had more often been stated explicitly rather than implicitly (cf. p. 139). Particularly so, as the title of the book suggests a major theoretical contribution. The theory and methodology of diachronic pragmatics are admittedly presented in the book, but a more consistent and coherent discussion of the overall ideas would have been a bonus. I would have also liked to read more about the treatment of speech acts as compared to previous approaches and definitions of speech act terminology.

The case studies provide convincing reading, as Arnovick manages to show the workings of some major pragmatic processes including subjectification, pragmatic strengthening, and discursization hand in hand with cultural processes like secularization. Moreover, *Diachronic pragmatics* gives ideas for further research and the formulation of pragmatically oriented research questions. It is recommended reading for everyone interested in historical pragmatics.

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Manfred G. Krug, *Emerging English modals: a corpus-based study of grammaticalization.* Berlin and New York: Mouton de Gruyter, 2000. Pp. xv + 332. DM148, ISBN 3 11 016654 2.

Reviewed by Sali A. Tagliamonte, University of Toronto

If Krug is right, the English language is in the midst of a far-reaching change. There is a brand new class of verbs developing within the auxiliary system. The focal structures of this investigation are HAVE GOT TO, HAVE TO and WANT TO, with surface variants as in '*I haveta write this paper*. *I've gotta do it. But I don't wanna*.' Sometime in the early nineteenth century these forms began to increase and have risen exponentially in frequency since that time. Why? This book provides the detailed, well-argued story about this striking development and, in the process, a zestful new perspective for research on grammatical change in English which bridges 'the interface between synchronic and diachronic linguistics' (p. 34). A noteworthy feature of this study is that it mines the rich resources of some of the largest corpora of the English language in existence, which are now compiled and available on CD (Hoflund, Lendebjerg & Thunestvedt, 1999). They include the British National Corpus (BNC), the Helsinki Corpus, the ARCHER corpus (A Representative Corpus of Historical English Registers), as well as four 1-million-word corpora of written English, the Brown corpus and the Lancaster–Oslo–Bergen Corpus (LOB),

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which represent American and British English from the 1960s, and their counterparts Frown and FLOB which represent comparable data from the same varieties from the 1990s. Together, these corpora not only enable Krug to 'spot change, but also to determine and compare speeds of change in British and American English' (p. 34). Krug argues that in addition to the fact that HAVE GOT TO, HAVE TO, WANT TO and BE GOING TO are fast accelerating, they are also 'following rather similar paths under our very eyes' (p. 45). Perhaps the most ambitious aspect of this book is the aim to identify and explain these parallels (p. 28). After lengthy analyses of the individual forms as well as a composite analysis in which they, and a number of other similar constructions, are compared, Krug is led to the conclusion that these forms represent 'the rise of a new taxonomical layer: that of emerging modals' (p. 3).

The book begins with a preface, a table of contents, lists of figures, tables, and maps, followed by six chapters and ends with extensive notes, useful appendices (I-VI), a reference list, and detailed index. Of particular interest is the added information about frequencies, e.g. the 30 most frequent verbs in spontaneous speech in the BNC (figure 2.1, p. 26), Appendix I which lists the next top 100 verbs in spontaneous speech and Appendix V which lists the numbers and percentages of forms in the spoken BNC. Such information provides a useful reference for future work on frequency in these constructions.

Chapter 1 introduces the subject matter, the central claims of the book and organization of the individual chapters. Indeed, this chapter is a succinct (five-page) summary of the whole book.

Chapter 2 sets out the theoretical, empirical and methodological foundations of the work. It also provides an excellent synthetic perspective on research in grammaticalization and links it with contact-induced change and sociolinguistic dialectology. An invaluable section is the discussion of the corpora under investigation. For anyone who wants to sort out the computerized data available for studying English (American or British), I recommend consulting section 2.7.1 which provides a cogent description and summary of their scope and contents. All told this study is based on millions of words of spoken and written data (figure 2.2, p. 36), two major varieties and the last 1,000 years in the history of English - for this fact alone, an impressive accomplishment. Of course, no corpus-based study would be complete without methodological cautions (section 2.7.3). Despite the enormous scope of these data, it is important to keep in mind that this work is based on the distinction between wanna, gonna, and gotta as opposed to want to, going to, and got to. However, the findings which come from the 10-million-word spoken BNC are based on consultation of the computerized transcriptions, not the actual recordings. This means the data are reliable only in so far as the transcribers of the materials were consistent and faithful in their transcription of these variants. The problem is, even with caveats laid bare, as every researcher who has transcribed corpora will know, that such phonological variability could never have been accurately and consistently transcribed, particularly with a 'high number of transcribers and a limited number of cross-checks' (p. 38). This must be taken into account in assessing the evidence.

Chapter 2 ends with a discussion of modality and auxiliarihood and a review of previous research on the constructions under investigation.

Chapters 3 and 4 contain the empirical analyses of HAVE GOT TO, HAVE TO (chapter 3) and WANT TO (chapter 4). Each one provides a thorough consideration of the diachronic development of these forms, as well as a description of their synchronic characteristics. Each analysis emphasizes frequency effects and processing constraints by providing detailed quantitative results on the distribution of full and contracted forms from the corpora.

The first construction under investigation is HAVE TO/HAVE GOT TO. Krug begins with a survey of its evolution, highlighting the fact that the most important factor in the grammaticalization of HAVE TO is the tight bondedness between the verb and infinitival to, e.g. haftalhasta. An examination of adverb interpolation between have and to in the BNC reveals that adverbs do not occur between the verb form and to. This supports the idea that these constructions are tightly bound. He goes on to demonstrate long-term trends from the ARCHER corpus showing that HAVE TO and HAVE GOT TO increased dramatically in the nineteenth century. This leads to two main observations: (1) they are recent innovations and (2) they took a dramatic step forward on their grammaticalization paths during the nineteenth century (p. 77-8). A shorter-term perspective is provided by a comparison between Brown/ Frown, LOB/FLOB (British vs. American; 1960s vs. 1990s). However, the data show first that there is no statistically significant change in progress and second, that British and American fiction do not differ with respect to their proportions of HAVE TO and HAVE GOT TO. The BNC permits a more sociolinguistic perspective since it allows for correlations of age, sex, region, etc. First, a study in apparent time shows that there is 'a progressive modalization across all age groups' for gotta, i.e. the younger the speaker, the more often they use *gotta* as opposed to *got to* (p. 87), but have to has stabilized (p. 88). These results are corroborated by analyses of stylistic variation which show that gotta is used more frequently in spontaneous speech and more often in southern Britain than in the north. In fact, the consistent finding across all corpora in Krug's study show an increase in discourse frequency and boundedness of forms. This indicates long-standing grammaticalization of these forms. The corroborating trends from the synchronic data show regular effects according to the age of the speakers, the formality of the situation and locations on the vanguard of linguistic change (southern Britain, particularly London). These results suggest that grammaticalization is ongoing. My own recent study of taperecorded conversations from the 1.2-million-word York English corpus from northeast England corroborates some of these findings (Tagliamonte, 2001). For example, frequencies of HAVE TO and HAVE GOT TO remain stable across the current population of speakers (aged 17-92). However, in York there is no evidence of increasing use of GOT TO OR GOTTA. This may well be due to different rates of grammatical change in different locales in England (see Tagliamonte, to appear), or it may also be the result of the different types of data. Either way however, there seems to be something more going on with linguistic change in the system of deontic

modality than simply the changing status of *gotta* that is evident from Krug's data. Such questions remain for future research. Analysis of the variability amongst all the forms used for deontic modality (HAVE TO, HAVE GOT TO, GOT TO, and MUST), as well as their distributions, internal linguistic conditioning and external patterns of variability in these or other data, may contribute further evidence. Indeed, Krug's study highlights the need for an accountable view of regional and social differentiation in the progress of this linguistic change. For example, map 3.1 (p. 112) provides a view of the dramatic regional differentiation in England and Northern Ireland with respect to *gotta*. If this is any indication of differential linguistic change, then this is an excellent opportunity to catch it in action.

Turning to the analysis of WANT TO/WANNA in chapter 4, Krug notes that WANT TO is 'currently assuming some semantic and morphosyntactic features that are typical of modal auxiliaries' (p. 117). Beginning with the ARCHER corpus, Krug plots the distribution of forms from 1650 to 1990. Like the pattern for HAVE TO/ HAVE GOT TO, there is a marked increase in the use of nominal WANT in the late nineteenth century. More recent developments are visible in the Brown/Frown LOB/ FLOB comparison. These show that the rise of the new volitional modal originated in Britain, but caught on more rapidly in the US. For example, there is an increase of 150 per cent in adjacent WANT TO from 1961 to 1992 in the American English press (p. 135). Adverb interpolation counts from the BNC (p. 139) reveal that wanna is more resistant than *want to* to supporting a tighter bonding for this form just as was found for HAVE TO/HAVE GOT TO. Krug also considers social and stylistic variation in the BNC corpus. First, there is a steady decrease in the text frequency of wanna with increasing age (p. 161), as well as a correlation between coalescence and decreasing degrees of formality (p. 162). Second, there is a heavy concentration in London (p. 164). Like the results for *gotta* there are marked regional differences, although in this case the patterning seems a little strange – why should there be high frequency of wanna in London and the far northeast of England? Krug does not address this in this section, where it seems quite relevant. (Although in another section (p. 190) he makes a few remarks on overall regional distribution.) He concludes this part of the analysis by noting that the 'enormous' frequency gains, both long and short term, argue once again for the development of new grammatical meaning.

Trends towards increasing use of forms that can be construed to be more 'colloquial' have also been interpreted as the result of a general stylistic shift towards informality in English, i.e. colloquialization (Mair & Hundt, 1997). In contrast, Krug argues for a more functional-frequentative explanation, i.e. 'that spoken English is more receptive to changes than – and actually triggers changes in – the more rigidly codified written text types' (p. 137). Indeed, one of the stronger points Krug makes is that reduced forms like *wanna*, *hafta*, *gotta* actually exhibit different syntactic properties than the unreduced forms like *want to*, *have to*, *got to*. One wonders, however, whether such trends actually do have more to do with stylistic preference than grammatical reorganization per se. For example, what would

happen if the rapidly increasing use of wanna in The Guardian (newspaper) between 1993 and 1996 (figure 4.6, p. 154) was correlated with the difference between quoted speech as opposed to other types of discourse? In other words, an increasing use of wanna in this time period might simply be the result of increasing frequency of direct quotes in news stories which would, of course, present renditions of spoken and thus much less formal language. The same may be true of direct quotes in the other types of spoken discourse. Another question is where would any one of these constructions fit within its own system, i.e. its own functional domain? In the variationist paradigm, for example, these variants would have to be treated along with others used for the same function. Further, how can layering in one area of grammar be disentangled from the development of an entirely new function? For example, if older speakers (as well as those in earlier centuries) were not using nominal want to (e.g. table 4.10, p. 161) then what did they use for the same semantic value, if anything? Krug says it was mostly WILL (e.g. pp. 151, 242); however, other rival candidates are INTEND, WISH, and DESIRE. None of these seem to be contenders in any contemporary age group. Of course, the functional domain of these forms is extremely difficult to delineate. This highlights how difficult it is to operationalize these categories in a quantitative study and how vital to detail the decision-making process that has gone into extracting and coding the data, in particular in defining the range of contexts in which the forms actually vary.

Chapter 5 provides a synthesis of the analyses in chapters 3 and 4. At this point, an additional group of constructions are considered in the argumentation which are not actually analyzed in the text: GOING TO, NEED (TO), DARE (TO), and OUGHT (TO). Krug believes that along with HAVE TO/HAVE GOT TO and WANT TO/WANNA, these constructions also form part of the newly emerging category of neomodals or emerging modals. The evidence for this, he argues, is due to: 'their recency, for the transformation which they are currently subjected to and for their overall movement towards the central modals' (p. 167). While the recency of HAVE TO/(HAVE) GOT TO, WANT TO and (BE) GOING TO is sound (see figures 5.1-5.6), the modernity of DARE (TO) and OUGHT (TO) seems questionable. To me, they seem obsolescent rather than new and vibrant. Krug himself argues for this in an earlier part of the book (pp. 4–5). NEED (TO) on the other hand presents a more provocative picture. Is it receding or spreading? While there is some recent evidence that it is expanding in written English (see Facchinetti, Krug & Palmer, to appear), it bears investigation in the spoken language. In fact, all of these forms would profit from further investigation in spoken, unreflecting speech, both in standard and nonstandard dialects and across the major varieties of English.

Perhaps the most far-reaching aspect of this book is the claim for the rise of a new taxonomical layer in English grammar. Much of this part of the book is heavy going as Krug proceeds with a lengthy justification of this newly emerging category in the last sections of this chapter (5.6-5.8). He provides very detailed justification for positing 'functional and conceptual closeness' (p. 212) amongst the constructions. Included in his lines of evidence are various principles and theories: gravitational

theory, prototype theory, and various principles from the grammaticalization literature. When he attempts to operationalize the gravitational model by simulating the gravitation of the category (sections 5.75-5.8.4, and illustrated in Appendix VI) things get quite complicated. The main point here is that the constructions under investigation have a 'prototypical internal structure'. In other words, they are similar across a number of critical linguistic criteria: verbal complementation, *do* support, syllabic structure, and phonemic contrast (p. 233). Those forms that are frequent and which share syntactic, morphological and phonological attributes are ranked as more prototypical of the category of emerging modals. In this schema, *going to* and *got to* are the most prototypical members of the class, closely followed by *want to* and *have to* (p. 236). However, it is important to keep in mind that this domain is loose, not tight, and new members are both conceivable and expected. Krug suggests that promising new modals are TRY TO (*tryta* or *tryna*) and WISH TO (*wishta*). Given the gravitational pull of this emergent category, we might expect more, and if so, we should be on the lookout.

Chapter 6 offers a summation. Krug concludes that the results of the study present ample evidence for 'the primary hypothesis of functionalist or usage-based linguistics'. A further 'fully confirmed' general result is that 'grammatical change spreads gradually and takes centuries', but proceeds in stages of rapid development (pp. 249-50). All this is a welcome addition to research on grammaticalization in English, particularly when so rigorously grounded in extremely large and representative corpora. Yet, it seems strange that with all the embedding of this research in the fields of gravitation theory, grammaticalization theory, etc. Krug does not go to greater length to situate these findings with other prevailing hypotheses about grammatical change, in particular the constant rate hypothesis (Kroch, 1989). This hypothesis, now known as the Constant Rate Effect (due to converging support from numerous case studies, Kroch, 2001: 720), holds that 'when one grammatical option replaces another with which it is in competition across a set of linguistic contexts, the rate of replacement, properly measured, is the same in all of them' (Kroch, 1989: 200). The new class of emerging modals studied here, with their dramatic S-curves of change, present an ideal case for testing this hypothesis. Here, however, Krug focuses on the pervasive influence of text frequency, which he argues enables the linguist to actually diagnose grammaticalization. When charted diachronically, frequency pinpoints important stages within the pathway of an individual change; when plotted in apparent time, it facilitates charting the diffusion and spread of an emergent form. Further, Krug argues that text frequency is a fundamental parameter in the genesis of the new category as well as discerning the motivation behind its development. Krug also suggests a number of other possible motivations for the spread of these forms such as information processing and filling gaps in the defective paradigm of MUST and WILL. However, one wonders what multiplex of internal (grammatical) contexts might underlie the dramatic leaps in frequency for HAVE TO and WANT TO and whether and how external (social) constraints might also be involved. Such information would undoubtedly provide further explanations for their contemporary distribution. Now, with Krug's results at one's finger tips, further research can be spear-headed grounded in his rich findings.

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Paul Foulkes and Gerard Docherty (eds.), *Urban voices: accent studies in the British Isles*. London: Arnold, 1999. Pp. 313. Paperback £17.99, ISBN 0 340 70608 2. Published in the USA by Oxford University Press, New York.

Reviewed by Patrick Honeybone, Edge Hill College of Higher Education

One of the sadly few aspects of linguistics that the media have an interest in (in the UK, at least) is the study of accents. While they might not know or care what the difference is between 'accent' and 'dialect', journalists know that their audiences have a real interest in many of the issues connected with the social and regional varieties of English. As editors Foulkes and Docherty (henceforth F&D) mention in

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their introductory initial chapter to this welcome and important book,¹ many articles have recently appeared in the British press on the putative role that television soap operas play in causing the spread of certain accent features, such as glottalling $(t \rightarrow ?)$, fricative fronting $(\theta, \delta \rightarrow f, v)$, and high rising intonation. As F&D comment further, there has been little academic research on this question, and, despite the strongly sociolinguistic flavour of several of the chapters in *Urban voices* (henceforth *UV*), there is little comment on that issue here.

A substantial amount of research *has* been carried out on the accents of English spoken in the British Isles, however. What sets *UV* apart from these previous publications is neatly summarized in F&D's two immediate aims in producing the volume: '(i) to provide a collection of recent research based on empirical studies on accent variation; and (ii) to collect together descriptive data yielded by such studies to stand as a reference resource' (p. 1). Much of the recent work on accents of English is scattered in journal articles and PhD theses, and F&D are to be congratulated on bringing this work together in one volume. There are, naturally, flaws in the book, but many of these are unavoidable in an edited volume. There is some considerable variation in the individual chapters in terms of aims and achievements. The disparity in the chapters' aims, at least, is partly intentional, however, and is of potentially paradigm-creating importance.

As well as initial and final matter, the volume consists of fifteen chapters. In the first of these, 'Urban voices – overview', UV's editors set the subsequent chapters in context and make explicit the links between them. They also do much more than this. F&D run through a range of the key issues that are connected with any linguistic research on pronunciation and discuss the main important topics in the study of the development of accents and the relationships that can exist between accents of one language, all in a remarkably short space. As F&D explain, previous and ongoing work on accents in the UK and the Republic of Ireland, as elsewhere, has been carried out in several distinct frameworks. Researchers who would characterize themselves as phonologists, phoneticians, dialectologists, and sociolinguists² have all conducted work on these varieties, often to investigate a particular theoretical debate in their own discipline. Work in all these fields is featured in the chapters of UV. All too often, researchers from different disciplines do not speak to each other, although it is clear that such communication could be advantageous for all. F&D propose that work from all these disciplines, when it takes accents of a particular language as its empirical base, should also be seen as part of a broad discipline which they name 'accent studies'. It is profoundly to be hoped that this compromise discipline takes off, so that, while phonologists, for example, will still speak to phonologists about the debates which are relevant in their discipline, and sociolinguists will speak to sociolinguists, each might also speak to the other, and

¹ Thanks are due to Paul Foulkes for bringing Kallen (2001) to my attention, for other helpful comments and for telling me to be as brutal as I needed to be in this review. Luckily, there's little to be brutal about.

² We might also add historical phonologists to the list.

the description of 'accent variation can be seen as a pursuit in its own right, rather than being an issue towards the periphery of numerous separate academic traditions' (p. 6).³ Such description is indeed a valid aim in its own right, and will, needless to say, connect with the media interest in the topic mentioned at the beginning of this review.

The dual aims of UV shape most of the remaining fourteen chapters of the volume. Apart from two, each of these presents (i) 'descriptive material' for one or more accents of English which involves, in varying degrees of detail, phonetic and phonological description of the accents, and (ii) a discussion of an issue of theoretical or methodological importance for (at least) one of the disciplines which F&D include in accent studies, using accent material from the chapter as its empirical base. The details of these chapters are:

- Chapter 2: 'Patterns of variation and change in three Newcastle vowels: is this dialect levelling?' by Dominic Watt & Lesley Milroy
- Chapter 3: 'Derby and Newcastle: instrumental phonetics and variationist studies' by Gerard J. Docherty & Paul Foulkes
- Chapter 4: 'Sheffield dialect in the 1990s: revisiting the concept of NORMs' by Jana Stoddart, Clive Upton & J. D. A. Widdowson
- Chapter 5: 'West Wirral: norms, self-reports and usage' by Mark Newbrook
- Chapter 6: 'Sandwell, West Midlands: ambiguous perspectives on gender patterns and models of change' by Anne Grethe Mathisen
- Chapter 7: 'Norwich: endogenous and exogenous linguistic change' by Peter Trudgill
- Chapter 8: 'Dialect levelling: change and continuity in Milton Keynes, Reading and Hull' by Ann Williams & Paul Kerswill
- Chapter 9: 'South East London English: discrete versus continuous modelling of consonantal reduction' by Laura Tollfree
- Chapter 10: 'Cardiff: a real-time study of glottalization' by Inger M. Mees & Beverley Collins
- Chapter 11: 'Glasgow: accent and voice quality' by Jane Stuart-Smith
- Chapter 12: 'Edinburgh: descriptive material' by Deborah Chirrey
- Chapter 13: 'Standard English in Edinburgh and Glasgow: the Scottish Vowel Length Rule revealed' by James M. Scobbie, Nigel Hewlett & Alice E. Turk
- Chapter 14: '(London)Derry: between Ulster and local speech class, ethnicity and language change' by Kevin McCafferty
- Chapter 15: 'Dublin English: current changes and their motivation' by Raymond Hickey

³ A perhaps discouraging sign in this regard is the review of UV in Kallen (2001), where the notion of accent studies, as presented in the volume, is criticized for its lack of coherence. This is particularly discouraging as the key criticism of UV in that review seems to be that not all of the chapters are purely examples of sociolinguistics.

The accents discussed in the individual chapters are largely clear from the chapter titles, apart from the fact that Docherty & Foulkes's chapter 3 only presents descriptive material for Derby (because Watt & Milroy's chapter 2 presents material for Newcastle). The other slight anomalies are that Chirrey's chapter 12 only presents descriptive material, which is compensated for by Scobbie, Hewlett & Turk's chapter 13, which presents no descriptive material, but discusses important phonetic and phonological issues connected with data from chapters 11 and 12.

Several things will be clear from the list of contents: (i) F&D have succeeded in bringing together many of the best-known and respected figures in their fields to describe accents that they have worked on for years, and (ii) the accents covered in UV represent a fairly diverse and broadly based selection from a good range of English regions and with an example or two from Scotland, Wales, Northern Ireland, and the Republic of Ireland, but (iii) not all of the accents covered are strictly speaking urban – for example, West Wirral, which the author describes as 'mixed rural/suburban' (p. 90), and (iv) the accents of many key urban areas in the British Isles are not discussed – for example, Manchester, Leeds, Aberdeen, Dundee, Belfast, Cork, any accent of south-west England and north Wales, and Liverpool (although this is touched on in chapter 5). It would be difficult for one book to cover all accents, even all urban accents, and several of these lacunae are due to the fact that little or no research has been done on the varieties in question. A second volume would certainly be welcome, to rectify some of these omissions.

The volume's dual aims have further implications. On the positive side, they open up the prospect that it will appeal to more than one audience; on the negative side, they mean that the book could run the danger of trying to do too much, while failing to achieve either aim in enough detail. Luckily, most of the chapters avoid the possible negative implications and succeed in fulfilling their positive promise. It is likely that the descriptive aspect of the book will be of most use in teaching, while the discursive, theoretical aspect will be of most interest to academic researchers. This double appeal is a clever trick to pull off in a single volume.⁴ However, while the constraints that are put on the space available by this requirement to do two things at once do, in fact, mean that sometimes both sides suffer and the reader is left with the wish that the description could have been more detailed and the theoretical discussion more in depth, the overall impression is that the volume is a success. UV has already established itself on the reading lists of academic courses dealing with the accents of English, as a web search for 'Urban Voices' and 'reading' shows, and some of the theoretical discussions have important and novel implications for the disciplines that they connect with.

The descriptive material varies from around four pages (e.g. McCafferty on

⁴ UV is described as a 'textbook' in the blurb on its back cover, but this seems mistaken. It certainly could (and probably should) be prescribed for courses on accent variation in British and Irish English, and several of the theoretical discussions could usefully be set as readings on courses in phonetics, sociolinguistics, or historical phonology for example, but UV is more than just a textbook. Several of the theoretical discussions are important contributions to debate in their disciplines.

(London)Derry and Hickey on Dublin) to eleven pages (Tollfree on South East London). All descriptions make use of the notion of 'keywords', introduced by Wells (1982), as a means to describe, discuss, and compare the types of vocalic contrasts and realizations that exist in accents of English without having to artificially choose the phonemes of one accent as a basis for comparison and to avoid the imputation of a pandialectal phonological system. Thus, for example, GOAT stands for a set of words which all feature the same vowel (or set of vowel variants): in Northern English varieties this is most often a long monophthong (Stoddart, Upton & Widdowson show this to be most commonly [51] in Sheffield, and Watt & Milroy describe [01] as the most common realization in Newcastle) and Southern English normally has a diphthong (Tollfree describes [ΛU] as a common variant in South East London). Chapters extend the core set of keywords to allow the description of the phonological contrasts and segmental realizations in the variety in question.

The 'small capital' notation is also extended to the discussion of consonantal phenomena, thus the various realizations of /t/ are discussed under the heading T, and conventions such as STOPS and H-dropping are used. These are pragmatically useful conventions, but authors also use phonological conventions such as /t/ and sociolinguistic ones such as (t) (and even (T)) in their discussion, to differing degrees.

The aim of description and the use of keywords invites comparison with Wells's (1982) Accents of English, particularly volume 2, The British Isles. While sections of this book are probably the closest thing available to the descriptive portions of the UV chapters, the two books are quite different. The chapters of UV often provide detail not available in Wells (1982), but UV makes no claim at completeness of coverage and, as explained above, it contains substantial theoretical discussion of issues not addressed in Wells's books. The detail provided in many of the chapters of UV also sets it apart from the few other descriptive works on British accents, such as Hughes & Trudgill (1996).

The theoretical plurality, the range of accents covered, and constraints of space make it impossible to engage here with all the material in the book, but some comments are in order.

In terms of the descriptive material, several chapters are very detailed, for example, that by Chirrey on Edinburgh English. However, the discussion of segmental phonetics and phonology is in general far more detailed than the discussion of suprasegmental matters. Not only is intonation only very briefly discussed, if at all,⁵ very little reference is made to syllabic or other prosodic structure. While this may be the result of a conscious decision to save space, it can lead to descriptive inadequacies; for example, Newbrook's treatment of κ in Liverpool English as it is reflected in West Wirral English refers to '[a]ffricate/fricative/

⁵ Remarkably, Newbrook makes no mention of intonation at all, despite the fact that one of the main varieties that he deals with, Liverpool English, is well recognized as having distinctive intonational patterns which have been described in unusual detail in Knowles (1974). Mees & Collins's chapter on Cardiff English is an exception to the pattern here, as it deals with intonation in some detail.

heavily aspirated Liverpool /k/ (more usually fricative [x])' (p. 97), ignoring the fact that these realizations are conditioned by syllabic, other prosodic, and melodic constraints (see, for example, Honeybone, 2001). The description of the vocalic variants found in the varieties discussed is often very detailed (especially in Williams & Kerswill's and Tollfree's chapters) but this does somewhat serve to intrigue the reader as to which factors precisely govern the variation. There is little doubt, however, that the descriptive sections of the chapters will be of real use to those with an interest in the varieties concerned, or in accent studies generally.

As regards the theoretical and methodological discussions, different chapters will doubtless appeal to different readers because of the differing traditions that they connect with as the authors are allowed to grind their own theoretical axes.

Several of the authors explore aspects of their data from a broadly Labovian sociolinguistic perspective. Thus McCafferty investigates his (London)Derry data in terms of what it shows about, or how it is affected by, class and ethnic identity. Mees & Collins show how females are leading a change in Cardiff English which involves the adoption of glottalling and glottalization of T among ambitious working-class females in an attempt to sound as if they are speaking English English, and Mathisen finds that women are leading change in her Birmingham data as well, involving a move towards a clearly non-RP local variant. Also, Newbrook discusses self-perception of the use of an accent which arguably has low prestige.

Watt & Milroy's chapter is also sociolinguistic in nature. The chapter makes an important contribution to the study of 'dialect levelling' and argues against chain shift analyses of changes such as the one involving the FACE, GOAT, and NURSE vowels that they discuss in Newcastle English. They argue that this change involves a move not towards an institutionally imposed standard, such as RP, but towards a generalized identifiably Northern lect, brought about by loosening network ties. Williams & Kerswill also discuss the evidence for dialect levelling towards a hypothesized national 'non-standard' youth norm, which they show to be progressing at different rates in Milton Keynes, Reading, and Hull due to the different strengths of network ties among the speakers of the varieties, which is caused by differing rates of economic prosperity and in-migration. Stuart-Smith's chapter is an important contribution to the description of Voice Quality in Glasgow English and its sociolinguistic patterning. It is an impressive addition to the few existing pieces of such work.

The discussion in Stoddart, Upton & Widdowson's chapter is primarily dialectological, although it aims to connect with sociolinguists. The authors engage in a useful discussion addressing the question of how samples of 'local' speech can best be obtained by linguists, and defend the use of non-mobile older rural males (NORMs), or at least the basic principle behind the use of such informants, specifically in the collection of data for the *Survey of English Dialects*.

Two chapters focus on issues which are most closely identifiable as part of historical phonology. Hickey's discussion of a chain shift in his Dublin data is notable as he argues that it involves one single key change which is subject to both neogrammarian exceptionlessness *and* lexical diffusion among different groups of speakers. Two groups of speakers which differ in terms of their social motivation are claimed to differ in the implementation of the change such that in one 'motivated' group (who want to be associated with the change), it proceeds in a neogrammarian fashion, and in another group of 'detached participants', the change is slowly working through the lexicon. Trudgill's chapter on Norwich English also contains important contributions to debate in historical phonology, as he argues that, while some of the features of the accent can be accounted for by exogenous factors, such as contact with other communities, others must be the result of endogenous change, *contra* Milroy (1992).

Docherty & Foulkes's chapter, which compares Derby with Newcastle English, combines some aspects of sociolinguistics with the tools of instrumental phonetics and seeks to draw some conclusions for phonological theory. They show convincingly that the use of spectrograms can reveal new and fascinating sociolinguistically structured patterns of consonantal realization which have gone unnoticed in standard sociolinguistic methodology, which uses only auditory analysis. They conclude that these results are difficult to reconcile with certain models of phonology and with models of phonological change which allow for phonologically driven or 'system-based' innovation, but these conclusions do not seem to me necessarily to follow. In line with the comments above, hinting at co-operation and compatibility among different academic disciplines in accent studies, it seems to me that both phonological *and* sociophonetic theory are needed in order to fully understand accent variation.

Scobbie, Hewlett & Turk also show how instrumental phonetics can interact with phonological theory by reinterpreting acoustic studies of varieties of Scottish English to show that certain previous descriptions of the Scottish Vowel Length Rule (SVLR) seem to have misrepresented the set of input vowels. They show how their important results imply that only the vowels /i, u, ai/ are involved in the length alternations involved in the SVLR environments, and that previous descriptions of the process, which have included at least /e, ɔ, o, au/, may be mistaken. As the authors conclude themselves, further research on the issue is needed, but it need not be that only instrumental research is considered. Native-speaker intuition data can be important in the description of phonological systems, as Trudgill shows in his chapter in this volume. One important upshot of their results is that they confirm that the complex phonological SVLR process exists, with its intriguing set of triggering phonological environments.

Tollfree also attempts to use the results of her study of accent variation in South London to engage with models of theoretical phonology, but the attempt is not convincing. Her description of the variety in question is detailed and impressive, but, perhaps due to lack of space, her discussion of Government Phonology in particular is garbled and does not succeed in showing that the model is incompatible with her data because her argumentation cannot be followed. In discussing L-velarization, she uses a segmental representation for /l/ which, oddly, features an underlying

labiality element, unlike any Government Phonologist, and claims that the process must be analysed as a case of lenition, which would not be the description of the process as she presents it. In the end she stipulates that the 'clear/dark /l/ alternation is phonetic' and does not recognize that a model of phonology can allow for gradient phonetic implementation.

UV concludes with a one-page appendix, references, and indices. The appendix ties in with a collection of recordings of twenty-four speakers which is available on cassette and CD to accompany UV. A short passage of unscripted speech is followed by the reading of a word list. While in principle it is clearly a good idea to make recordings available with such a book, the material included on the UV tape and CD is rather disappointing as it is not integrated with the main chapters of the book and not all of the recordings are of good quality.

The references and indices, by contrast, are very well done. F&D have done an excellent job in making them user-friendly. The references are gathered together at the end of the book but each title is annotated to indicate which chapters refer to it. This is a useful tool for backwards reference. The indices are also sizeable and useful.

As noted above, UV has its flaws. Any attempt to collate so much information *and* to spur on theoretical debate with contributions from a range of disparate authors could not avoid having some. The book's positive points easily outweigh any shortcomings however, and a volume such as this is welcome and important. Work in 'accent studies' is continuing on several varieties of English (see, for example, Watson, 2002, Watt, 2002) and is also being carried out on accents of other languages (see, for example, Durand, 2002 for French and van Oostendorp, 2001 for Dutch). Only time will tell if the term 'accent studies' embeds itself into academic discourse to describe work of the sort contained in this book. Whether it does or not, it is to be hoped that UV serves as a stimulus for further work of this type.

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