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grammatical status than suffixes do in Chichewa is presented not only in chapter 7 but also at the beginning of chapter 5 and is alluded to elsewhere. But this is a minor quibble about the art of book writing. The important issue is whether the reader can readily find all the relevant information on a given topic. Given that the book is relatively short and has a detailed table of contents as well as an index, its slightly quirky organization should present little or no practical problem.

I compared this book to a 'greatest hits' album, which gathers in one place the highlights of a series of articles on Chichewa. Reading it through, I was struck again by how great these 'hits' really are, and how together they cover, at least to some extent, most of the known syntactic features of the Bantu languages. For people who are unfamiliar with this valuable body of work, this volume should make an excellent introduction to it. It is also interesting and useful for those who have followed it all along, because each specific research thrust is put into the context of the language as a whole, so one can see more clearly how the parts fit together. *The syntax of Chichewa* will be a useful reference book for anyone interested in Bantu languages or in more general comparative/typological research into morphosyntax.

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Donka Minkova, *Alliteration and sound change in Early English* (Cambridge Studies in Linguistics 101). Cambridge: Cambridge University Press, 2003. Pp. xix + 400.

Reviewed by Kristin Hanson, University of California, Berkeley

Donka Minkova's Alliteration and sound change in Early English is a book to restore faith in academic publishing. Its 400 pages on a subject so

fusty that it could be a detail of characterization in an early twentieth-century Oxbridge murder mystery are so thoroughly and passionately argued, and so carefully and thoughtfully presented, that even for someone like myself who is not trained in the philological tradition to which it belongs, it becomes a page-turner of a different kind as it seeks to unravel the interlocking mysteries which form its title. In brief, it uses the patterns of alliteration found in English poetry from the mid-seventh century through the end of the fourteenth century to argue for a revised portrait of English syllable onsets and the changes that they undergo in that period. While I have no idea whether the analysis is correct, and even some predisposition to suspect that in some respects it is not the last word on the matter, I also believe that this book is where anyone who wishes to investigate further any part of its subject would be well-advised to begin for many years to come.

The book opens in chapter 1, 'Social and linguistic setting of alliterative verse in Anglo-Saxon and Medieval England', with an interesting overview of the sociolinguistic context of the poetry featured in the study. Minkova's main concern here is to defend the cultural plausibility of her core assumption, subsequently also supported by linguistic argument, that in spite of the etymology of alliteration from Latin ad 'to'+littera 'letter', the poetic practice of alliteration is fundamentally based on phonology and not orthography throughout the entire period under study. She argues that, however much the preservation of poetic records depended on literate scribes in the Old English period, depictions of the poets themselves as receiving comfort and prestige in exchange for conferring fame and pleasure depended on their art's use of linguistic resources which were shared with and recognizable to a wide audience, including the non-literate. In the early Middle English period, too, the simple fact that alliterative poetry was in English rather than French or Latin indicates a popular and hence not necessarily literate audience for it. Important to Minkova's argument is also the claim that the alliterative tradition is in fact continuous across both periods. The appearance of discontinuity immediately after the Norman Conquest arises more from limitations on English access to scribal resources, as argued by Pearsall (1977), than from a temporary cessation of alliterative composition. Minkova claims that continuity in the alliterative tradition (by which she seems to mean the presence and constitution of alliteration rather than its distribution in a line or other unit, since she concurs with claims that prose forms contribute to that continuity) strengthens the possibility that changes in alliterative practice were due to changes in the language, rather than to failures in a reconstructive understanding of the forms themselves. My only complaint about this enjoyable chapter is that in using the term 'oral' as shorthand for 'internalized phonological patterns common to all speakers of Old English' (5), Minkova unduly fosters the prejudice that such primacy of phonology is special to oral poetry, rather than common to almost all poetry, including much that is composed as written.

Chapter 2, 'Linguistic structures in English alliterative verse', lays out the assumptions about linguistic stress and alliterative metrical structure in both Old and Middle English that underlie Minkova's claims about which onset pairings count as fulfilling structural alliterative requirements. The chapter is reasonable and necessary, but somewhat heavy-going: various arguments are given their due, choices are made among them, and unsettled areas are identified. It lacks some of the power and satisfaction of a consistent theoretical vision, but that seems to be primarily because Minkova has worked out her views on metrical structure elsewhere, and only refers to them here. The chapter also could have benefited from the same kind of excellent summary with which she concludes all the succeeding chapters. The most important points for interpreting her alliterative data can, I think, be summarized as follows. In the Old English line, which has two metrically strong syllables in each of its two half-lines, S1 S2 | S3 S4, all of which are stressed in some degree, S1 must alliterate with S3, except where S1 is less stressed than S2, in which case S2 may alliterate with S3 instead. Moreover, S2 is always free to alliterate with S3 even when S1 also does, but S4 may never do so; S4 is, however, free to participate in other non-structural patterns of alliteration within the line. In the Middle English line, two syllables in the first half-line must alliterate with each other and also with one syllable in the second halfline. While these syllables are mostly stressed, there are a few cases where they seem not to be.

The subsequent five chapters are the core of the book. Each chapter stands alone as an argument about a particular issue in English alliteration, and collectively they provide an exhaustive and coherent vision of the relationship of the poetic form to the changing language. Three are new treatments of old issues: chapter 3, 'Segmental histories: Velar palatalization', deals with the alliteration of velar and palatal sounds; chapter 4, 'Syllable structure', addresses alliteration of vowels; and chapter 5 addresses 'Onset and cluster alliteration in Old English: The case of sp-, st-, sk-'. The other two chapters treat new issues, or, to put it perhaps more accurately, newly treat their subjects as issues. Chapter 6, 'Onset and cluster alliteration in Middle English', sets the analysis of /s/+voiceless stop clusters in the context of general preferences regarding alliteration of clusters; and chapter 7, 'Verse evidence for cluster simplification in Middle English', considers the specific case of obsolescent clusters. What binds all five chapters together is not just the descriptive completeness afforded by assembling all these pieces of the English alliterative puzzle in one place, nor even the historical contextualization that forces revisions of the old ways of putting some of the pieces together, but a relentless insistence on phonetically perceptible surface similarities as the theoretical key to the entire puzzle. That insistence is undeniably productive. Yet, it is also what I ultimately find to be a limitation of the book, restricting the phonological and poetic possibilities it entertains.

To illustrate, let us turn to a brief summary of each chapter. Chapter 3, on the alliteration patterns of the Old English velars and palatals, brings welcome relief from the attribution of confusion to one's own ignorance, which is the constant anxiety of the non-specialist assigned to teach courses on the history of the English language. The standard textbook account – which is not precisely Minkova's starting point, but a useful one for me – is that in Old English the Proto-Germanic voiceless velar developed into two different sounds spelled with <c>: a voiceless velar stop [k] before back vowels and consonants, as in *corn* 'corn' or *clæne* 'clean', and a palatal [tʃ] before front vowels, as in *cild* 'child', except where that front vowel derived from *i*-umlaut, as in *cyrnel* 'kernel' (Millward 1996). The sounds in all these contexts alliterate structurally with each other throughout the period, as illustrated in (1), where the vowels of *cynna* 'customs' in (1a) and *cyning* 'king' in (1c) derive from umlaut.

- (I) (a) cwen Hroðgares, cynna gemyndig (Beowulf 613) Hrothgar's queen, mindful of courtesies (Donaldson 2002: 12)
 - (b) ond ba cear-wylmas colran wyrðaþ (*Beowulf* 282) and how his surging cares may be made to cool (Donaldson 2002: 8)
 - (c) to geceosenne cyning ænigne (Beowulf 1851) to choose king any other (Minkova, p. 73)

Because toleration of allophonic variation is the norm in alliteration, phonemic identity is generally assumed to be the basic requirement that alliteration imposes; but, as Minkova neatly points out, standard accounts of the development of the voiceless velar also hold that the [tʃ] that it gave rise to became its own phoneme in Old English, which is inconsistent with the assumption that alliterations like (1b) and (1c) are licensed by phonemic identity. Minkova demolishes attempts to gloss over the discrepancy by appeals to orthography or poetic convention, and instead uses the contradiction as an invitation to rethink the nature and timing of these developments, drawing on, among other ideas, Hogg's (1979, 1992) separation of the dating of the fronting and unrounding involved in *i*-umlaut, Keating & Lahiri's (1993) description of the possible phonetic range of velars and palatals, and the role of paradigm uniformity in limiting phonologically conditioned change, to conclude that [tʃ] was not, in fact, its own phoneme until after the tenth century.

This conclusion permits phonemic identity to be retained as the basic requirement of alliteration as far as the pattern in (1) goes. However, as mentioned above, the great satisfaction of this book lies in its insistence on a coherent treatment of the alliterative tradition as a whole, and that principle runs afoul in the standard account of the pattern for sounds deriving from the Proto-Germanic voiced velar, which are spelled with a yogh <3> in Old English but represented as <g> in modern texts. Simplifying somewhat, the voiced velar became the stop [g] before back vowels and consonants, as

in *gold* 'gold' or *Grendel*, but a palatal glide [j] before front vowels, as in *gellan* 'yell', except where that front vowel derived from umlaut as in *gyltig* 'guilty' (Millward 1996: 83). Again, sounds in all three contexts structurally alliterate with one another. But there is an additional complication in that Old English also had a palatal glide that derived from an entirely different source, Proto-Germanic /j/, and was also spelled by yogh, later $\langle g \rangle$, as in *geong* 'young'. Up to the middle of the tenth century, but not after that time, the full range of sounds deriving historically from /g/ also alliterate with those deriving historically from this /j/, as seen in (2).

(2) geong in geardum, bone God sende (Beowulf 13) a young boy in his house whom God sent (Donaldson 2002: 3)

Here, while *geong* derives from Germanic *yuwen-, geardum and God go back to Germanic *gardoz (cf. garden) and *guthom, respectively.

The cessation of alliterations like that of (2) is standardly used to date the phonemic reinterpretation of [i] that is derived from /g/ as underlying /j/, but, as Minkova points out, that begs the question of why [j] derived from /g/ was allowed to alliterate with underlying /j/ in the first place. This time Minkova's answer is in two parts. Not only was the development of the sounds somewhat different from the standard account summarized above, but the principle of phonemic identity is not the only determinant of alliteration, with phonetic similarity of a precise kind playing an even more important role. Minkova first rejects the assumption that the voiced velar was already a stop in Old English in favor of an alternative suggestion by, amongst others, Hogg (1979). On this account, the voiced velar was originally a fricative [x], which hardened into [g] only around the middle of the tenth century. Together with the additional assumption that the palatal approximant /j/ was not purely coronal, but included a dorsal element in its articulation, this permits her to claim that the unique phonemic difference allowed in the alliterative system illustrated in (2) also involved a unique phonetic similarity: all participants in the alliteration were continuants, and all involved some dorsal articulation. Using Optimality Theory, Minkova integrates all these considerations into a single alliterative grammar, ranking inviolable constraints on surface matches of alliterating segments' continuancy, voice and marked place features of [labial] and [dorsal] above violable constraints on surface matches of the unmarked [coronal] place feature, and, crucially, above constraints on matches of underlying forms. The cessation of alliterations like that in (2) is thus claimed to have followed not from any phonemic realignment, but from the hardening of the voiced velar fricative to [g], which created a difference in continuancy.

As with many poetic grammars that invoke Optimality Theory, it is not clear that any real work is done by the theory's special claims about resolution of constraint conflicts. There is no case showing that when the

underlying forms are the same, but the surface outputs differ in features whose identities are mandated by high-ranked constraints, those alliterations are excluded. Nevertheless, Minkova's account of the phonetic changes in the consonants themselves is clear and convincing. My only hesitation is that the data seem equally compatible with Lasnik's (1990) phonological interpretation, which in turn allows the simple account of alliteration as based on phonemic identity to stand. Lasnik argues for i-umlaut being a synchronic rule throughout the early period, and treats the palatals that derived historically from Proto-Germanic /j/ as synchronically derived from /g/ in just the same way as those derived historically from Proto-Germanic /g/. When i-umlaut later becomes opaque, the underlying forms are reanalyzed, resulting in the exclusion of the alliteration in (2) because the underlying identity required for alliteration is no longer met. Minkova herself briefly considers this possibility, but dismisses it on the grounds that it would assert 'a temporary merger, followed by its reversal along the lines of the etymological categories, at least for the gold-type words' (116). This is true, but it is not clear to me why that is necessarily a problem, given that the phonetic details of the development of the velars which Minkova proposes seem to keep the etymological sources distinct in the necessary ways. I therefore hope that her book will spur some expert discussion of whether there is evidence to choose between Lasnik's phonological and her phonetic view of the alliteration itself.

In chapter 4, Minkova brings the same aims that characterized her treatment of the velars – a unified description of the Old and Middle English traditions, and a phonetic explanation – to the old question of why in Old English a vowel was allowed to alliterate with any vowel (cf. (3)), when a consonant could (in most cases) alliterate only with the same consonant.

(3) hu þa æþelingas / ellen fremedon (Beowulf 3) how the leaders accomplished courage (Minkova, p. 136)

Minkova reviews how early claims that the alliteration was based on the shared presence of an initial 'glottal catch' not represented in the orthography (Rapp 1836) gave way to claims that it was based on the shared absence of any segment in the syllable onset (Kiparsky 1978), just as in reduplication. The shift reflected arguments that the 'glottal catch' hypothesis was circular, posited only to account for the alliteration, and unsupported by any Indo-European antecedent (Liberman 2000). However, Minkova points out that Middle English practice with respect to vowel alliteration is known to have changed in at least two significant ways. First, vowel alliteration became far less common, dropping, for example, from approximately 16% of lines in *Beowulf* to just 4% in *Piers Plowman*; and secondly, there arose a practice called *Stab der Liaison*, in which a final consonant before a vowel-initial word supplied the alliteration, as illustrated in (4).

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(4) 'bat schal I telle be trwly,' /quob bat ober benne
(Sir Gawain and the Green Knight 2444)
(Minkova, p. 169)

Since Middle English had at least as many vowel-initial words as Old English, the empty-onset hypothesis cannot account for the change in Middle English poetic practice. Minkova therefore returns to Rapp's hypothesis, and modernizes it convincingly as a claim that Old English required onsets of stressed syllables to be filled, and supplied an epenthetic glottal stop where no consonant was underlyingly present. In Middle English, she argues, the requirement that onsets be filled remained, but other changes in the language, most notably changes in the structure of clitics, permitted it to be satisfied in other ways, such as by rightward resyllabification of final consonants, as in (4) above. Minkova supports this claim with arguments from meter and orthography, thereby avoiding the original charge of circularity as well as that of ahistoricity. Her linguistic argument here seems impeccable, but I must admit to finding it hard to get over a prejudice against her poetic argument that an epenthetic segment can play so fundamental a role in a tradition, when in modern English at least dependency on surface forms for poetic identity is a hallmark of comic verse. Still, it must be granted that she has lobbed the ball fairly into her opponent's court, and raised new research questions about the role of epenthetic segments in other poetic traditions, as well as their parallels in reduplication.

The final three chapters address the issue of cluster alliteration, with chapter 6 the high point of the entire book. Chapter 5, which leads into it, addresses another old question of what was special about the clusters /sp-, st-, sk-/ (spelled as <sp>, <st> and <sc>, respectively), such that both segments were required to be matched in alliteration while for all other consonant clusters only the initial segment needed to be matched, as seen in (5).

(5) (a) on stefn stigon; / streamas wundon
on prow went up streams eddied
(b) ðurh slipne nip / sawle bescufan
through searing fear soul shove
(Minkova, p. 207)
(Minkova, p. 207)

(c) Beowulf was breme / blæd wide sprang (Beowulf 18)
Beow was famous the glory ... spread widely (Donaldson 2002: 3)

Once more, Minkova comprehensively reviews and critiques a full range of past hypotheses. She maintains that the standard analysis of /s/ in /s/ +voiceless stop clusters as extrasyllabic merely restates the problem, providing a representation but not an explanation. She then draws on contemporary work in phonetics to propose that what makes the clusters special in the phonology is different from what makes them special in Old English poetic practice. Their violation of sonority sequencing, she suggests, derives

from a certain threshold of sonority being desirable for reasons of perceptibility even in an onset. The voiceless stops do not meet that threshold, but the addition of the /s/ creates a cluster that does. The special treatment of these clusters in alliteration follows not from their resulting anomalousness with respect to the sonority sequencing principle, but rather from what Minkova, following Fleischhacker (2000), calls their 'cohesiveness'. Cohesiveness consists in there being no perceptual break or, more precisely, no onset of a vowel-like formant structure within the cluster, unlike the situation in the more common kinds of onset clusters in which an obstruent is released into a following sonorant. Old English alliteration, she suggests, required identity of all segments in stressed syllables preceding the first perceptual break.

Whether this is correct or not, what it leads to in chapter 6 is quite fascinating. It is well known that Middle English cluster alliteration departed from Old English practice on the one hand by allowing /s/ alone to alliterate with /s/+voiceless stop clusters (cf. (6a)), and on the other by seeking to maximize rather than minimize alliteration of entire clusters (cf. (6b)).

(6) (a) Heo speken per to sæhte; to sibbe and to some

(*Layman's Brut* 2045) (Minkova, p. 244)

(b) Breken braden speren; brustleden sceldes

(*Layman's Brut* 10052) (Minkova, p. 252)

Minkova examines the frequency of alliteration in three quite different texts – Lagamon's Brut, The Wars of Alexander, and Piers Plowman – and finds that in all three, frequency of alliteration of entire clusters correlates with a scale of cohesiveness, in which 'the clusters /st-, sp-, sk-/ are at the top of the scale, followed by /s/+ sonorant clusters, followed by stop + sonorant and fricative + sonorant clusters' (308). The argument is a model of sensitive attention to the implications of themes, lexical context, and circumstances of production, but Minkova does not rest there. She finds further support for her analysis in practices of scribal epenthesis, where we find spellings like borohte 'brought' but never ones like sotone 'stone'; and she spells out the implications of her analysis for grammars of reduplication, suggesting that whether or not a segment may be skipped in copying a cluster cannot be modeled as a general constraint, but instead depends on the particular relationships between the segments in the cluster.

Finally, chapter 7 stands as a nice coda to this analysis, combining it with alliterative evidence to re-evaluate the particular histories of obsolete clusters like /gn-/ and /hw-/, thereby completing the portrait of English stressed onsets across the book's entire period.

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Driven by a strikingly original determination to achieve a unified and modern understanding of Old and Middle English poetics and linguistics, Minkova's *Alliteration and sound change in Early English* is in many ways a tour de force of showing how new questions about old material emerge once changes in poetic forms are construed as innovations to be understood on their own terms rather than as mere deteriorations of older forms. At the same time, however, the book remains curiously conservative. It is consistently biased toward phonetic rather than phonological explanations, toward a stable and collective view of poetic forms rather than one which acknowledges individual innovation and the possibility that multiple forms may be equally well grounded in a common language, and toward mappings from poetic to linguistic form based on full identities rather than the partial ones relished by poets of modern English, such as Seamus Heaney in his own translation of *Beowulf*:

(7) they shouldered him out to the sea's flood (Heaney 2000: 30)

Minkova justifies these biases explicitly as appropriate to the oral nature of her material, and implicitly through the convincingness of her analysis. The question for future researchers building on her work, it seems to me, will not be whether they are correct, but whether they are sufficient.

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Paola Monachesi, The verbal complex in Romance: A case study in grammatical interfaces (Oxford Studies in Theoretical Linguistics 9). Oxford: Oxford University Press, 2005. Pp. x + 285.

Reviewed by Lluïsa Astruc, The Open University

The verbal complex in Romance by Paola Monachesi presents an analysis of the properties of the verbal complex in Romance, including the properties of complex predicates (that is, auxiliary, modal, aspectual and motion verbs), and of phenomena such as cliticisation. Clitisation has proved to be particularly problematic since it seems to span the domains of phonology, morphology, and syntax. The first goal of the book is to provide a unified account of word order phenomena in the Romance verbal complex from the perspective of Head-driven Phrase Structure Grammar (HPSG), which is a framework that allows integration of syntactic, semantic, and prosodic information.

The book is divided into five chapters, which are preceded by a short 'Introduction'. Chapter 2, 'The framework', lays out the basic tenets of HPSG. Chapter 3, 'Morphology and its interfaces: The case of Romance clitics', analyses Romance clitics with a brief comparison to Germanic and Slavic clitics. Chapter 4, 'Syntax and its interfaces: The case of Romance auxiliary verbs', deals with auxiliary verbs and pronominal clitics in the Romance languages, also taking into consideration the Balkan clitic cluster. Finally, chapter 5, 'Phonology and its interfaces: The case of Italian restructuring verbs', analyses restructuring verbs in Italian within the HPSG framework and deals in detail with the syntax–phonology interface by proposing a formal account of the observed non-isomorphism between syntactic and phonological structure.

In her introduction, Monachesi presents the book's goals and its methodology, and offers a brief overview of the other chapters. Her focus on the properties of the verbal complex in several Romance languages, especially Italian, French, and Spanish (although other languages and language varieties, such as Bulgarian, Macedonian, Portuguese, Romanian, Slovenian, and the varieties of Napoletano, Torinese, and Trentino, are also covered), is motivated by her conviction that the phenomena exhibited present 'ideal test