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Language change. By Joan Bybee. (Cambridge textbooks in linguistics.) Cambridge: Cambridge University Press, 2015. Pp. xviii, 292. ISBN 9781107655829. \$29.99.

Reviewed by Betty S. Phillips, *Indiana State University*

In *Language change*, Bybee has created a book differing from earlier books on historical linguistics in its focus on how all languages at all stages are susceptible to change, following cognitive mechanisms operating in the process of language use. In a clear, direct style aimed at a student audience with a basic but solid background in linguistics, she takes particular interest in topics such as causes of change, directionality, grammaticalization, lexical diffusion, morphosyntactic constructions, and change in progress. Most examples are drawn from Germanic or Romance languages (often English and Spanish), but many are also provided from less familiar languages.

Following a brief introductory chapter, Chs. 2-4 are devoted to sound change, presented at a depth that requires students to have a firm command of phonological terms and concepts. In line with B's usage-based approach, assimilations and reductions are attributed to the 'highly practiced neuromotor activity' of sequences of articulatory gestures, constrained by communication goals, including social identification (38). One hallmark of B's presentation is that she does not avoid points still under debate. For example, she defines sound change as 'a change in the pronunciation of a segment within a word ... conditioned by the phonetic environment', adding that it is 'typically regular', explaining later that 'regular' does not mean that all words are affected simultaneously nor that sound changes are abrupt either phonetically or in their spread through the community (15–16). B then devotes a section to the topic of lexical diffusion, taking the view that 'all sound changes have to diffuse through the lexicon in some way or another, gradually or abruptly, reaching completion or not' (39), carefully distinguishing her stance from Labov's (1981) distinction between 'regular' sound changes and lexically diffused ones. She provides examples of the most frequent words undergoing a sound change first, adding that combinations with other words might also serve as a conditioning environment and noting that the frequency of a word in such an environment might be the determining factor in how quickly a word undergoes a change. She ends that section with an acknowledgment that sometimes certain word classes change before others, and, in changes not based on automation of production, the least frequent words can change first (41). The chapter ends with discussions of fortition, insertion, and causes of sound change, including why children are unlikely to be the source of sound change.

In Ch. 3, B expands the scope of sound change to include not only consequences of regular sound changes, such as splits and mergers, but also chain shifts and tone and prosodic changes, as well as dissimilation, metathesis, and changes in phonotactic patterns. Again, articulatory and usage motivations are emphasized. For example, phonologization of nasal vowels is said to begin with phonetic tendencies to overextend articulatory effects (49). The mental reanalysis becomes secondary, with a distinction being drawn between phonologization and phonemicization. Similarly, the exaggerated vowel lengthening that occurs in English before voiced consonants is described as phonologized, even though it is not phonemic (50). A section on 'Changes in phoneme inventories' is followed by one on 'Vowel shifts', which includes discussions of the Great Vowel Shift and the Northern Cities Vowel Shift, with attention to the role of perceptual distance in pull chains and drag chains, as well as studies in real and apparent time, ending with general principles of vowel shifts, including lexical effects. A discussion of the origin and evolution of stress accent and of tonal systems is followed by a section on dissimilation, metathesis, and phonotactically motivated change. A final section emphasizes the shared characteristics of causes of sound change.

Ch. 4 discusses the interaction of sound change with morphology, based on the unidirectional tendency for phonetically motivated differences in sounds to become associated with meaning, leading to morphologization (76). Examples range from Maori passives to German umlaut plurals to French liaison. Rule inversion and rule telescoping are also discussed before B returns to a

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discussion of the Neogrammarian hypothesis and whether sound change can be grammatically conditioned. She interprets the Neogrammarian hypothesis as requiring 'that sound change is always regular, applying to all lexical items that have the phonetic conditioning regardless of grammatical or lexical factors' (85), but it is useful to remember her definition of regular sound change, which allows sound changes to be gradual and lexically diffused. She argues, however, that although 'differences in the distribution of words may allow for some differences in outcome ... it is not the grammatical or lexical category of the word that matters; it is rather the contexts of use in discourse' (91). Her examples include the deletion of /t,d/ signaling past tense, finding that 'words that tend to occur more before vowels [in running text] had lower rates of deletion overall, even before a consonant, and words that tended to occur more before consonants had higher rates of deletion overall, even before a vowel' (86-87). An example of a change at a supposed word boundary is the reduction of /s/ to /h/ in Spanish, for which B presents evidence indicating that the conditioning environment is, rather, the consonant beginning the next word (88). These findings lead her to conclude that 'the Neogrammarians were right: changes occur within a phonetic context' (91), which in itself is not at odds with current understandings of lexical diffusion as a method of implementation of sound change primarily governed by phonetic context, but it is at odds with other findings about the influence of word class within this overarching influence. For example, Toon (1992:439) found that the development of West Germanic */a/ to /o/ before a nasal affected all words except the preterite singular of class III strong verbs, which he calls an example of 'constrained lexical diffusion'. One might compare the 'gang effect' in the productivity of the modern sing-sang-sung strong verb pattern (Bybee 2001:121-25), differing only in that the West Germanic example disallows innovation rather than fosters it. Still, examples in Phillips 2006:96–123 of word-frequency effects occurring most clearly inside word classes, function words behaving differently from content words, homophones such as two/too and know/no behaving according to their combined frequency, and cases such as the unrounding of Middle English /ö(:)/, where the least frequent words changed first, suggest that deeper cognitive structures are involved in the actuation and implementation of some sound changes.

Ch. 5, on analogical change, concentrates on morphological analogy, emphasizing its tendency to be lexically irregular, unlike sound change. B shows that analogy also applies to a 'higher cognitive level' than sound change in that it applies to generalizations over morphologically complex words and usually affects one paradigm at a time, with the frequency of a form in a paradigm argued to be a better predictor of productivity than semantic markedness or a 'basic' form. Evidence is then presented of analogy being governed by semantic factors, phonetic similarity, and type frequency, with competing tendencies making it difficult to predict the direction of change.

Chs. 6 and 7 are devoted to grammaticalization. The first focuses on the development of *will* in English and futures in French, followed by general mechanisms such as chunking, specialization, category expansion, decategorialization (as in the case of *can* and *while*), bleaching, and adding meaning via inference or metaphor. The second chapter covers common paths of grammaticalization, similar to paths of semantic change. Topics include inflectional categories of verbs (tense, aspect, mood, modality), nominal categories (pronouns, articles), and adpositions. Emphasized is that all languages are continuously undergoing grammaticalization, a gradual, continuing social and cognitive process characterized by variation, unidirectionality, and cycles of change and replacement.

Syntactic change, the topic of Ch. 8, is treated as changes in form-meaning constructions via many of the same processes that drive grammaticalization. Mostly non-English examples illustrate the transition from discourse to syntax in the development of subjects from topics, serial verbs from separate clauses, and ergatives from passives (among other sources). A more general discussion of word combinations developing into constructions follows, as in *wending one's way* expanding to *fumbled/sang one's way*. Examples of synchronic layering and competition between structures are followed by a discussion of how constructions such as the impersonal in English are lost. After an introduction to VO vs. OV languages, including the difficulties of mapping changes from one to the other, B shows how correlates such as pre- vs. postpositions with noungenitive order vs. genitive-noun order are explicable through diachronic change. A section on the

shift of Indo-European languages from OV to VO introduces Sapir's notion of DRIFT and subsequent theories by Vennemann (1975) and Petré and Cuykens (2009) that identify pragmatic reasons for the shift. This chapter concludes by noting, in addition to grammaticalization, two sources for new constructions: 'the fixing or syntacticization of discourse patterns ... and the schematization of conventionalized word sequences' (186).

Ch. 9, on lexical change, reviews the common types of word formation and semantic change, often from a theoretical perspective, noting similarities to semantic change in grammaticalization and competition among forms, as well as the importance of frequency in establishing the relationship between word and meaning. As in previous chapters, the role of context is emphasized in its influence on the use and meaning of lexemes. Ch. 10 introduces the comparative method, noting its basis in the stability of words in a language and the regularity of most sound changes, with examples drawn from Indo-European languages. Short sections deal with problems such as determining cognate sets, difficulties with glottochronology, situations where sound change is not regular, and the determination of proto-phonemes and their phonetic content, with varying interpretations of Grimm's law used to exemplify difficulties therein. A section on internal reconstruction that starts with examples from Modern English, Latin, and Maori leads to a discussion of the laryngeal theory for Indo-European. Closing the chapter is a discussion of proposals for determining genealogical relations, including issues in determining Proto-Nostratic and problems with the multilateral comparison method introduced by Joseph Greenberg.

The final chapter reviews theories of change, including naturalness theory, generative theories, and the influence of child language on change, for all of which B finds difficulties, arguing instead for a usage-based approach treating language as a complex adaptive system, a conclusion she also reaches for studies of language contact, including pidgins and creoles. First, she summarizes the separate domain-general mechanisms she sees at work in language change: 'automation of production ... tendency to associate meaning directly with form ... replacement of minor patterns with major ones ... resistance to change by items with high token frequency ... chunking ... semantic generalization ... semantic change by inference' (238-39). Naturalness theory she characterizes as teleological, omitting the mechanism by which change occurs, and suggests that domain-general mechanisms provide more satisfying explanations. Generativist theories' emphasis on change as constructed by children and driven by innate universal parameters is exemplified using Lightfoot's (1979) and Roberts and Roussou's (2003) accounts of the development of English modal auxiliaries, accounts that treat syntactic change as abrupt, with one change causing another, whereas B notes that surviving documents reveal the changes to be gradual, exhibiting a lot of variation, reflecting how 'usage patterns interact with cognitive representations (grammar) to expand contexts of use' (246). Again, she finds fault with the theory that children initiate language change, citing four reasons: that 'neither the order of acquisition nor the nature of children's productions reflects diachronic changes', that 'whatever early simplifications they might make are replaced by patterns found in the surrounding language', that 'children are not in a social position to impose their grammar on the adults around them', and that if 'a whole generation of children reanalyzed their grammar, we would expect to find cases of abrupt change, but all our evidence shows clearly that language change is gradual' (247-48). Turning to external causes, B first discusses borrowing and substratum influence from language contact and the considerations that must be entertained before appealing to either as an explanation for change. For phonological change, she gives examples from French, Indian English, and languages of northern Europe, which lead her to conclude with the caveat that proximity does not mean that language contact is necessarily the source of shared features. The pages on grammatical change rely heavily on Silva-Corvalán's (2008) study of bilingual Spanish-English contact in Los Angeles, which argued that the languages are not converging, and Heine and Kuteva's (2005) study of 'grammatical replication', whose results B finds inconclusive. B concludes that much more research is needed in these areas, there being much less evidence of convergence than one might expect (253-55). A section on pidgins distinguishes between early, stable, and expanded pidgins, using mostly examples

¹ This chapter also included the only formatting error, where example lines do not pair properly (259).

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from the historical development of Tok Pisin. However, B finds fault with the theory that creole languages might shed light on universal, innate characteristics of language, including common grammaticalizations. She finds especially problematic the fact that grammaticalization markers arise gradually, appearing first in pidgins. Since grammaticalization is very similar across languages, it seems unremarkable that it appears in creoles, which brings her again to her view of 'language as a dynamic system, variable and changing, with grammar emerging rather than fixed' (262).

Overall, this is a very welcome addition to books on linguistic change, whether used in the classroom or independently. Each chapter is well organized and well argued, proceeding from basic to more involved issues, including ones that are still unsettled.

REFERENCES

Bybee, Joan. 2001. Phonology and language use. Cambridge: Cambridge University Press.

Heine, Bernd, and Tania Kuteva. 2005. *Language contact and grammatical change*. Cambridge University Press.

LABOV, WILLIAM. 1981. Resolving the Neogrammarian controversy. *Language* 57.267–308. DOI: 10.2307/413692.

LIGHTFOOT, DAVID. 1979. Principles of diachronic syntax. Cambridge: Cambridge University Press.

Petré, Peter, and Herbert Cuykens. 2009. Constructional change in Old and Middle English copular constructions and its impact on the lexicon. *Folia Linguistica Historica* 30.311–65. DOI: 10.1515/FLIH .2009.005.

PHILLIPS, BETTY. 2006. Word frequency and lexical diffusion. New York: Palgrave Macmillan.

ROBERTS, IAN, and Anna Roussou. 2003. Syntactic change: A minimalist approach to grammaticalization. Cambridge: Cambridge University Press.

SILVA-CORVALÁN, CARMEN. 2008. The limits of convergence in language contact. *Journal of Language Contact* 2.1.213–24. DOI: 10.1163/00000008792525246.

Toon, Thomas. 1992. Old English dialects. *The Cambridge history of the English language, vol. 1: The beginnings to 1066*, ed. by Richard M. Hogg, 409–51. Cambridge: Cambridge University Press.

VENNEMANN, THEO. 1975. An explanation of drift. Word order and word order change, ed. by Charles N. Li, 269–305. Austin: University of Texas Press.

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The diachrony of grammar. By T. GIVÓN. (2 vols.) Amsterdam: John Benjamins, 2015. Pp. xi, 818. ISBN 9789027212207. \$225 (Hb).

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The text cover describes this publication as containing case studies spanning a lifetime of research into the diachrony of grammar. This characterization strikes me as being largely, though not entirely, appropriate: the main focus of the publication, as I see it, is less on the diachrony of grammar and more on how to use diachronic linguistics in order to understand language structure.

The publication consists of two volumes with thirty-two chapters, and the chapters are grouped into six parts. Part I ('Perspective') relates mainly to Givón's early contributions dating back to the 1970s. In Part II ('Out of Africa'), an analysis of data mostly taken from Bantu and other languages of the Niger-Congo family, as well as from Biblical Hebrew, is provided. Part III ('Voices') presents diachronic accounts of passive constructions in a range of different languages, proposing a general typology of passives in the final Ch. 17.

Part IV ('High up in the mountain') introduces the second volume with a reconstruction of various grammatical patterns in the Uto-Aztecan language Ute—a language and a society that has accompanied the author throughout his personal and academic career. A topic that became a