guistics (subsense units, hyponymy and meronymy, antonymy), whereas Dąbrowska 2004 sees cognitive linguistics mostly from the perspective of acquisition and gives a general orientation to the field only in Ch. 10. By contrast, Evans & Green 2006 is relatively comprehensive and specifically designed as a textbook, but intimidating in its bulk (over 800 pages). Given these alternatives, if one needs an introduction to cognitive linguistics in general or L's work in particular, this book is an attractive candidate.

REFERENCES

CROFT, WILLIAM, and D. ALAN CRUSE. 2004. *Cognitive linguistics*. Cambridge: Cambridge University Press.

DĄBROWSKA, EWA. 2004. *Language, mind and brain*. Washington, DC: Georgetown University Press.

EVANS, VYVYAN, and MELANIE GREEN. 2006. *Cognitive linguistics: An introduction*. Edinburgh: Edinburgh University Press.

LANGACKER, RONALD W. 1987. *Foundations of cognitive grammar, vol. 1: Theoretical prerequisites*. Stanford, CA: Stanford University Press.

LANGACKER, RONALD W. 1991a. *Foundations of cognitive grammar, vol. 2: Descriptive application*. Stanford, CA: Stanford University Press.

LANGACKER, RONALD W. 1991b. *Concept, image, and symbol*. Berlin: Mouton de Gruyter.

LANGACKER, RONALD W. 2000. *Grammar and conceptualization.* Berlin: Mouton de Gruyter.

LANGACKER, RONALD W. 2008. *Cognitive grammar: A basic introduction*. Oxford: Oxford University Press.

TAYLOR, JOHN R. 2002. *Cognitive grammar*. Oxford: Oxford University Press.

UNGERER, FRIEDRICH, and HANS-JORG SCHMID. 1996. *An introduction to cognitive linguistics*. London: Longman.

HSL fakultet, UiT
9037 Tromsø, Norway
[laura.janda@uit.no]

The development of Old English: A linguistic history of English, vol. 2. By DON RINGE and ANN TAYLOR. Oxford: Oxford University Press, 2014. Pp. ix, 614. ISBN 9780199207848. $135 (Hb).

Reviewed by BETTELOU LOS, *University of Edinburgh*

This is the second volume of Don Ringe's series *A linguistic history of English*. Both authors are responsible for the introduction; Ringe is the author of Chs. 2–7, and Ann Taylor is the author of Ch. 8 on syntax. As the authors remark in their introduction, piecing together the prehistory of Old English is a very different task compared to the work that was done for the first volume (*From Proto-Indo-European to Proto-Germanic*): we are getting closer to the present time and there is a wealth of surviving texts available, not just of Old English but also of its Germanic siblings; the availability of more factual information is also reflected in the availability of more scholarship.

After a short introduction setting out the aims and coverage of the volume, the second chapter, 'The development and diversification of Northwest Germanic', tries to determine which developments are narrowly datable to Proto-Northwest Germanic, the ancestor of North and West Germanic, and arrives at this list: (i) Proto-Germanic (PGmc) *ē changed to *ā, a change that persists in many of the daughter languages to this day, though not in English (cf. Dutch/Present-day English (PDE) cognate pairs like *slapen*/*sleep*, *wapen*/*weapon*, *maan*/*moon*); (ii) word-final *-ō became *-ū; (iii) word-final long high vowels were shortened in unstressed syllables, which accounted for the shortening of both *-ū and *-ī; (iv) unstressed *-am- changed to *-um-. Change (ii) has to be ordered chronologically before change (iii) in this scenario, as it fed that change. The identification of a sequence of changes, a relative chronology, validates Northwest Germanic (NWGmc) as a clade (16). The morphological changes in NWGmc are primarily characterized by

inflectional losses and remodeling of strong adjectival endings and second-person plural pro-
nouns. The chapter ends with other early changes that are widely shared in NWGmc but belong
to the period of diversification, and are hence the result of contact rather than inheritance; one of
these is *u to *o, where the conditioning environment differs for each dialect (27ff.). The mor-
phological changes of this period are, again, mostly losses and paradigm leveling. Innovations
are the spread of -um to and within strong adjective inflection, and the class II strong verbs that
have *ū in the root syllable (rather than *eu); Old High German (OHG) did not take part in these
innovations, which could mean that Proto-West Germanic (PWGmc) was already dialectally di-
verse at a very early date (40).

Ch. 3, 'The development and diversification of West Germanic', discusses the innovations that
are shared by the West Germanic languages. The sound changes are primarily losses of various
kinds in unstressed or lesser-stressed syllables at the ends of words, like the loss of word-final
*-z after all unstressed vowels, followed by loss of word-final *-a and its nasalized counterpart
*-ą (the arguments for and against this particular ordering of the changes are given on p. 46); the
loss of word-final short high vowels; bimoric long ō-vowels in word-final position or before
word-final *r becoming *ā and trimoric long ō-vowels becoming *ō; shortening of vowels before
word-final *r in unstressed syllables; and also gemination. The major morphological innovations
are various remodelings of verb inflections, including the participles of the preterite present
verbs, originally weak. Some of them survived as adjectives, like Old English (OE) ġewiss 'cer-
tain' (77), but remodeled as strong (OE ġewiten 'known'). The third-person pronouns were
largely replaced by forms based on *hi-/*he- 'this' (80). The nominative masculine *siz (OE sē)
and fem. *si(j)u replaced inherited *sa and *sū, respectively (81).

Ch. 4, 'A grammatical sketch of Proto-West Germanic', presents the paradigms that result from
the developments discussed in Ch. 3. Sound changes famously mess up paradigms, but it is less
well known that paradigms in turn affect phonology: the grammatical reanalysis that ultimately
gave rise to new class VII strong past stems is one of the factors that promoted the phonemiciza-
tion of the long vowel ē, which at first must have been the unstressed allophone of either *ā or,
more likely, *ai (106). The many classes of weak verbs of Proto-Germanic were reduced to three,
and the various losses of word-final sounds described in the previous chapter led to endingless
nominative singular forms in many noun classes (114). The origin of the innovative -as in the
nominative/accusative plural—ultimately the source of the -s plural of PDE—remains unclear.
The chapter ends with a section on lexical innovations, including criteria for accepting a loan
from Latin as having been borrowed into PWGmc; shifts in gender in these loans possibly point
to masculine having become a default in PWGmc (137).

Ch. 5, 'The northern West Germanic dialects', outlines the set of changes that are usually re-
garded as Ingvaeonic developments, including the loss of -n- plus compensatory lengthening that
accounts for the difference in PDE/German pairs like other/ander, five/fünf, mouth/Mund, and so
forth, and the rounding of nasalized vowels that is responsible for PDE/Dutch pairs like thought/
dacht, moon/maan, broom/braam, long/lang. The evidence suggests that this rounding was once
much more extensive in continental West Germanic, and that unrounded low vowels spread from
OHG; this accounts for the fact that the rounded vowels are only found in Old Saxon words that
do not have OHG counterparts (146).

Ch. 6, 'The separate history of Old English: Sound changes', discusses the complex chronol-
ogy of PGmc *ā to ē (West Saxon (WS) $\bar{æ}_1$), PGmc *ai to ā, *au to ēa, and *ą before nasals to ō.
The reflex of *ą may already have been weakly rounded, since the new ā can have been expected
to have been nasalized to ǭ by a following nasal consonant, yet the two vowels did not merge
(170–72). R takes issue with Campbell's (1962) view that the tensing of the first element of the
PGmc diphthongs *ai and *au represents a unified development connected to the raising of short
*a (and long *ā to ē (WS $\bar{æ}_1$)), because modern work in sociolinguistics shows that diphthongs
'can and do change as phonemic units' (155), so there is no reason to assume that changes in
diphthongs are connected to any changes affecting the same vowels as monophthongs. Other
changes discussed are retraction, breaking, palatalization, i-umlaut, and palatal diphthongization,
which R argues to have been a genuine sound change, not just a change in spelling, since these

diphthongs subsequently developed exactly like the other diphthongs (217); Mercian Second Fronting followed, and thus counterfed, palatalization (220). There are very extensive sections on syncope (257–84) and on apocope (284–304).

Ch. 7, 'The separate prehistory of Old English: Morphological changes', is again mostly a story of loss and leveling of inflections across the board—verbs, nouns, and adjectives—although there are also innovations, such as the -*st* ending for the second singular present indicative, which R traces back to a number of strong pasts of verbs whose stems ended in -*s*. The spread can be charted by the -*s*/-*st* competition in non-WS texts (355). An 'unusual transfer' of endings after the widespread loss of final -*n* gave rise to a new inflectional class of nouns where the *-īn > *-ī > *-i of the nominative singular was replaced by *-u, with the resulting variation *-i ~ *-u spreading through the rest of the paradigm: *hǣlu* 'health, salvation', *birhtu* 'brightness', *strengu* 'strength', and so forth (380). The -*u* ending for all cases of the singular then spread to the feminine abstract nouns in -*þ* from PGmc *-iþō (381). A third innovation is a class of *nd*-stems created from substantivized present participles, like *frēond* 'friend' and *fēond* 'enemy', which became productive in OE: *hettend* 'enemy', *ēhtend* 'persecutor', *hǣlend* 'savior', and *scieppend* 'creator' (386). The sound changes outlined in the previous chapter, as well as leveling, have led to an extremely high level of fragmentation of the seven strong verb classes. R identifies 292 OE strong verbs whose forms are robustly attested in extant texts (excluding 'marginal' forms that are only attested in glosses, once or twice in verse, only in the present tense or as past participles; 346) and shows that they are inflected according to no fewer than fifty-one different patterns, a level of fragmentation that would make it very difficult to acquire these as a system of rules rather than as individual stems that simply have to be memorized (349).

The above summaries of Chs. 1–7 might suggest that this is a work in the philological tradition with a focus on explaining the forms, but this impression is deceptive. R's argumentation for the developments he describes go well beyond this tradition in their theoretical underpinning, taking into account internal and external linguistic contexts.

R informs his analysis of language-internal pressures by conjectures about how native speakers may make errors. The leveling ('redistribution') of paradigms after retraction in OE, for instance, is described as a process in which 'native learners in the early stages of acquisition are almost certain to accept a segment which occurs in all forms of a lexeme as underlying, even if it can actually be derived by phonological rule' (196). Redistribution will occur if a critical mass of such learners, 'reinforcing each other's errors at play while they were still learning' (197), fail to work out the phonological rules behind the distribution of allophones across lexemes in their input.

Another area in which R's account clearly supersedes earlier surveys is his use of arguments from prosody in terms of metrical feet, to account for the loss of some -*u*s after heavy syllables but not others (301) or for the fact that the high front vowels triggering umlaut occurred in unstressed syllables only—so that *i*-umlaut can be reformulated as occurring only within the metrical foot, which explains why second members of compounds with a high front vowel in the root do not normally trigger *i*-umlaut (255).

R validates changes by citing similar changes in other languages, showing that the change in question is 'a natural and repeatable change': for example, the raising of *-ō to *-ū in Proto-Northwest Germanic, which has an analogue in pre-Proto-Tocharian (16); or, on the contrary, an unusual change, like 'the dismantling of geminates', which hence should be hypothesized to have occurred only once in Germanic, at the PWGmc stage (66).

There are nine OE sound changes whose relative chronology can be established, and R concludes on the basis of modern work in sociolinguistics (283) that for this number of changes to have taken place within about 150–200 years is not impossible. The ingredients of his discussion of whether the divergence between *ǣ* in WS as the reflex of PGmc *-ā (i.e. the phoneme traditionally known as '*ǣ*$_1$') as opposed to *ē* in Kentish, Mercian, and Northumbrian took place when the settlers still lived on the continent or later, after they arrived in Britain, is similarly informed by Labovian sociolinguistic insights about the effects of inheritance versus diffusion. R offers an answer to the question based on Middle English evidence that the reflex of OE (WS) *ǣ*$_1$ was also

ǣ in Essex, an accessible and populous area, where there is no reason to expect the raising to ē̄ not to have occurred if this was a British phenomenon rather than a continental one. This makes it more likely that the raising to ē̄ took place on the continent and makes sense of its absence in the two major Saxon settlements in Britain (168–69).

Ch. 8, 'Old English syntax', is a long chapter (392–509) by T that provides a survey of the syntax of OE, informed by the most recent literature. It is mostly synchronic, although it also presents attested differences between early and late OE in, for example, pronoun position (476ff.), with the text of *Beowulf* taken as representative of early OE. The approach is 'loosely generative' (392) but with the emphasis on description rather than on presenting a cutting-edge theoretical account; as such, this is the most appropriate approach to take, and one that has yielded the best results in recent decades for the various word-order phenomena. The problem is that the model is not immediately accessible to the uninitiated, even though the basic principles are clearly set out; although it is logical to start with the basic architecture of the clause, it might have been a better idea for the purposes of accessibility to have the chapter start with aspects of OE syntax that do not require more machinery than a knowledge of traditional grammatical concepts, and to leave the major word-order phenomena until the end. That said, this chapter is exemplary for its clarity and scope, discussing clausal architecture, rightward and leftward movement, verbal periphrasis, impersonal constructions, the internal structure of the noun phrase, and finite and non-finite subclauses.

This short review cannot hope to do justice to the book. It is not only meticulously researched but also well written and well argued, and should be required reading for anyone with an interest in Old English and its place in the history of the Germanic languages.

[b.los@ed.ac.uk]

The universal structure of categories: Towards a formal typology. By MARTINA WILTSCHKO. Cambridge: Cambridge University Press, 2014. Pp. 356. ISBN 9781107038516. $99 (Hb).

Reviewed by KAREN ZAGONA, *University of Washington*

The nature of functional categories has been a topic of long-standing interest for descriptive, typological, and theoretical linguistics. Essentially three approaches have been assumed, which differ with respect to whether the language faculty (universal grammar, or UG) provides a universal set of functional categories, and if so, whether every grammar has all of them or only a subset. The 'variationist' approach posits that languages may vary arbitrarily in their grammatical categories (Comrie 1976, Jespersen 1932); this is assumed to be possible without limiting the expressive power of the language because there are alternative ways of communicating the information that is carried by functional elements. The (strong) 'universalist' position assumes as a working hypothesis that grammars are essentially invariant, which implies that all functional categories that are available in UG are present in every grammar. This is the approach adopted in Cinque 1999 and in an extensive body of research in the 'cartographic' research program.[1] A weaker universalist position claims that only a subset of the functional categories that are available in UG are present in any individual grammar. There has been lively debate in the literature over the past decade or more, both about the universality of individual functional categories and about the nature of crosslinguistic variation. Martina Wiltschko's monograph presents a new approach to these questions, combining elements of the variationist approach (there is no universal

---

[1] Giorgi and Pianesi (1997) develop an approach that adopts many assumptions of the cartographic approach, but propose that there are crosslinguistic differences in how functional categories are syntactically mapped.