\bar{e} in Essex, an accessible and populous area, where there is no reason to expect the raising to \bar{e} not to have occurred if this was a British phenomenon rather than a continental one. This makes it more likely that the raising to \bar{e} 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 nonfinite 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.

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

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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. 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.

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inventory of functional categories) with a new proposal for a different type of universal: a class of functional elements that are themselves devoid of substantive content (such as definiteness, number, tense, or aspect) but that provide the basis for constructing functional categories in individual languages. The claims are thoughtfully developed and are illustrated with data from a variety of languages. The centerpiece of the discussion is in-depth analyses of Halkomelem and Blackfoot, languages that have been studied extensively by W and collaborators (Ritter 2014, Ritter & Rosen 2010, Ritter & Wiltschko 2009, 2014, among others), and supporting evidence is drawn from comparisons with a number of other languages.

W begins by stating the principal issues for a theory of functional categories: whether or not they are universal, and if they are not, in what ways they differ across languages. Walso raises a methodological issue: since syntactic categories need to be motivated on distributional grounds, the fact that most category diagnostics are language-specific poses a methodological problem: that is, how is it possible to ensure that crosslinguistic comparisons are in fact comparisons of the same category? W's proposals are introduced in Chs. 1–3. Ch. 1 argues that there are two languageindependent tests for grammatical categories. One test is the existence of 'multi-functionality', such as the occurrence of perfect have in English alongside possessive have. W notes that, although these phenomena are usually analyzed either as accidental homophony or are attributed to grammaticalization paths, their similarity across languages implies that they reflect a universal process of RECATEGORIZATION. W incorporates this generalization into her approach, claiming that all functional categories are formed in particular grammars by processes of (re)categorization. The outcome of this process is that a category label mediates between the item (have, for example) and an interpretation. The nature of this process is discussed in Chs. 2 and 3, to which I return below. The second language-independent diagnostic is based on patterns of contrast in the value of features. In English, the morphological alternation between plural -s and its absence corresponds to a semantic alternation. In Halkomelem, the plural/\(\text{\empty}\) morphological alternation does not correspond to a semantic alternation. A zero-marked nominal may be either singular or plural in interpretation. W argues that the difference is based on whether plural marking is realized as a functional category. If it is, then the category will have semantic values regardless of the absence of morphological marking. If the language does not have the category Number, then the absence of overt marking is not fixed. These diagnostics play a crucial role in subsequent arguments as to whether functional categories vary across languages.

W then addresses the issue of whether grammatical categories are universal, arguing that they are not; a central argument is that certain categories are either unmarked in some languages, or, if marked, do not meet the criteria for category status discussed above. This is illustrated for Tense in Blackfoot (Algonquian), where zero marking is compatible with present and past meaning. Additional examples include the absence of number marking in Mandarin, the absence of complementizers in Blackfoot, and the absence of determiners in Polish. A further problem that W points to for the universalist position is that some languages have 'unusual' morphology, such as inverse marking in Blackfoot and 'control' marking in Squamish (Salish). W concludes that the strong universalist position cannot be maintained. A question remains, however: how to resolve conflicts between the proposed language-independent diagnostics for categories and the standard language-internal evidence. For example, Polish is cited as lacking a category of determiners, yet language-internal evidence for DP has been argued on distributional grounds, such as its availability as a landing site for head movement (Rutkowski 2002) and its behavior in multidominance structures (Citko 2013). Similar considerations have been discussed for Serbo-Croatian DP (Progovac 1998). There is also work that gives convincing empirical arguments for unmarked functional categories based on parallels between languages with and without overt marking, such as Travis's (2010) discussion of zero-marked aspectual operators.

W argues that a strictly variationist ('no universals') position is also inadequate, in that every language has at least some functional elements. Furthermore, she proposes that there is a significant generalization as to what broad types of functional elements occur in every language, that is, elements that define domains within which particular roles are established, including thematic roles, grammatical roles (subject and object), and discourse roles (topic and focus). This general-

ization forms the basis for W's approach, the UNIVERSAL SPINE HYPOTHESIS (USH). According to the USH, the language faculty contains a small inventory of nonsubstantive elements ' κ ' from which functional categories are constructed on a language-specific basis by 'recategorizing' processes. The κ elements are not categories, strictly speaking, but are what W refers to as 'categorizers': they have structural and functional content, but lack inherent substantive content. They acquire substantive content by combining with language-particular elements (recategorization). They encode functions of four sorts: (a) linking-to-discourse, (b) anchoring, (c) point-of-view, and (d) classification.

```
(1) a. κ:linking
                                 (clausal: CP
                                                     nominal:
                                                                KP)
    b. κ:anchoring
                                 (clausal:
                                           IΡ
                                                     nominal:
                                                               DP)
    c. κ:point-of-view(PoV)
                                 (clausal:
                                           AspP
                                                     nominal:
                                                                PhiP)
    d. κ:classification
                                 (clausal:
                                           \nu P
                                                     nominal:
                                                               nP)
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These functional elements are analyzed as relational, argument-taking functions. The function κ : linking in 1a establishes a relation between the proposition or referent and the ongoing discourse; the function κ : anchoring is responsible for anchoring the event or individual to the utterance; the function κ : point-of-view introduces a viewpoint relative to which the event or individual is presented; and the function κ : classification is responsible for the classification of events or individuals. It follows from this model that TenseP, AspectP, DetP, and NumberP are not universal; they are language-particular instantiations of the categorizers in 1 together with language-particular substantive features such as number or tense. Although these four domains are universal, W does not explicitly argue that every language must have precisely four functional categories (along with an arbitrary array of inflectional items that do not behave like categories). Questions about whether each of these domains is obligatory in every DP and every CP, and whether each of them is unique or potentially recursive, raise a number of possible issues for future research.

Chs. 4 and 5 discuss categories that instantiate the anchoring function. W argues that κ :anchoring can be associated with temporal content in some languages, deriving TenseP. In other languages, it is associated with different substantive content. In Blackfoot, following Ritter and Wiltschko (2014), W argues that so-called order markers, consisting of person features associated with particular clause types, serve a function that is parallel to that of present and past tense. While present tense indicates that the event time coincides with the utterance time, local person marking indicates that the event participant is identical to the utterance participant; nonlocal order signals that the event participant is distinct from the utterance participant. In Halkomelem, location distinctions are analyzed as anchoring the event in parallel ways (126; example adapted from Ritter & Wiltschko 2009:155, exs. 3–4).

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(2) a. í qu'eyílex tú-tl'ò.
AUX.HERE dance DET-3PRN
'He was dancing (here).'

b. lí qw'eyílex tú-tl'ò.
AUX.THERE dance DET-3PRN
'He was dancing (there).'
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On W's analysis, Halkomelem locative auxiliaries have the two properties discussed in Ch. 1: obligatory contrast and multifunctionality; this provides language-independent support for the claim that they have been recategorized and constitute a functional category. Based on their distribution, it is proposed that the relevant category is κ : anchoring. The third example discussed is upper Austrian German, which is argued to use subjunctive marking to instantiate κ : anchoring. All of these language-particular categories have in common a feature [\pm coin] (coincidence); they differ in whether the substance that is associated with coincidence is time-based, location-based, or person-based. Ch. 5 explores evidence from embedded clauses that κ : anchoring is not inherently associated with substantive content. Even in languages with Tense, for example, tense can be unmarked, and even when it is present, it can be, in W's terms, semantically 'defective'. W develops a mechanism of feature valuation to account for the differences between independent and

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embedded clauses. It is based on the generalization that the embedded κ :anchoring category contains an anaphoric anchor, unlike the deictic anchor found in main clauses. The semantic values for anchoring derive from the embedding structure, not from the embedded clause itself. W motivates this generalization by examining subjunctives crosslinguistically. She shows that it is impossible to account for the semantics of subjunctives by analyzing them as contributing a fixed semantic value (such as irrealis). In these contexts, the semantic valuation that satisfies the anchoring function is contributed by the embedding context, not by the substantive material.

Nominal anchoring is the topic of Ch. 6. An argument is made for the existence of a nominal category k:anchoring, based on the generalization that nominals also are interpreted relative to an anchor, although there are some differences between this case and the clausal category: the anchor is inherently anaphoric in the case of nominals, and the anchoring relation is one of identity rather than [±coincidence]. Ch. 7 discusses the point-of-view functional category, which is instantiated as 'outer' AspectP (Travis 2010) in some languages. Outer aspect has been described as 'viewpoint' aspect (Smith 1997 [1992]) in that it establishes a perspective on an event rather than a description of the inherent properties of the event. Progressive, for example, focuses on the internal stages of an event, regardless of whether the event inherently contains a natural endpoint (a telos). W argues that aspect morphology does not have similar properties crosslinguistically, which suggests that it is not necessarily associated with a point-of-view functional category. She argues also that κ :point-of-view can be identified by substantive distinctions other than temporal ones. These include the inverse marking of Blackfoot and Squamish control transitivizers. Ch. 8 revisits some broader issues, such as the use of morphological structure as a basis for typological generalizations; W compares this approach with the USH, where the only properties that are observable are those of the language-particular items that undergo recategorization with a κ element. The volume ends with an overview and discussion of open questions.

The study is impressive both for its scope and for its systematic comparisons between widely studied languages like English and German, and relatively less well-known languages like Halkomelem, Squamish, and Blackfoot. The monograph provides an explicit (negative) answer to the question of whether functional categories are universal. Perhaps the most important question that remains unanswered in the study is what the range of possible variation is. As noted above, it is not clear whether this approach implies that every grammar has exactly four functional categories. It is also not clear what the crosslinguistic range could be for language-particular categories corresponding to each functional κ . The key to limiting the range of functional categories for a given κ is to limit the language-particular items that could combine with κ elements crosslinguistically. This topic remains an open question.

Several questions might be posed with respect to the nature of the κ elements as components of UG. It is perhaps unexpected that κ elements that lack substantive content have the intrinsic property of taking arguments, since there is then no source for semantic roles for the arguments. The 'temporal argument structure' approach that W refers to as a starting point for the analysis of κ : anchoring is based on the assumption that Tense and Aspect are predicates of (temporal) location. W's approach does not attribute this type of inherent substance to the anchoring category, however. One possible solution is that the language-specific units that combine with κ elements to form functional categories could be the source of predicate argument relations. The mechanism remains unclear, however, both because the roles are different (as in the example of possessive have and perfect have) and because the approach seems to say the reverse: that the languageparticular units acquire their interpretation by association with κ elements. A further question that remains open is whether the 'functionality' of these elements is interpretable. W's intention seems to be that these elements do make a systematic contribution to interpretation beyond a formal, feature-checking one, although it is not clear whether the contribution is intended to be more than the relation of [±coincidence]. This seems to turn on whether the terms anchoring, linking, point-of-view, and classification that differentiate ks are to be understood as operations in the grammar or as distinct semantic relations.

In summary, W's proposals provide an interesting alternative to the assumption that UG provides a universal set of functional categories. This approach focuses on the empirical claim that

there are universal domains of semantic/grammatical relations that derive from functional predicate-argument structure, free of substantive content such as tense or aspect, and that are parallel in clauses and nominals. These proposed generalizations will provide fertile ground for future debate on the nature of functional categories.

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