BOOK REVIEWS


Reviewed by TORSTEN LEUSCHNER, Ghent University

Following its modest beginnings during the 1970s and gradual expansion from the 1980s onwards, research into grammaticalization finally exploded into a veritable industry around the turn of the century – witness a mounting stream of work published in monographs, edited volumes, journal articles etc., the dedicated triannual conference series New Reflections on Grammaticalization (culminating in NRG3 at Santiago de Compostela in July 2005), and numerous independent workshops. It is at one such workshop, held at the University of Constance in February 2001, that the volume under review originated.

As two of the editors, Björn Wiemer and Walter Bisang, point out in their introductory contribution (p. 13), the workshop by far exceeded its original thematic focus on “Grammatikalisierung vs. Lexikalisierung”, effectively becoming a forum for alternative conceptions of grammaticalization that sought to define the phenomenon more broadly than usual or to widen its scope so as to overcome apparent limitations regarding the kinds of change and language types referred to in the grammaticalization literature so far. Though several contributions were eventually published elsewhere, the resulting volume, now entitled What makes grammaticalization?, continues to reflect the original unity-in-diversity through its eleven papers, organized into three parts. The book starts with Part I, “General issues”, consisting of the introductory article by Wiemer & Bisang (“What makes grammaticalization? An appraisal of its components and its fringes”) and of a separate contribution by the third editor, Nikolaus P. Himmelmann...

In their introductory contribution, Wiemer & Bisang unfold the overall approach to grammaticalization that underpins the book, describing grammaticalization broadly as a “general perspective from which to analyse changes in the expression formats of grammatical structure or the distribution of certain morphological or syntactic units in the languages of the world” (p. 4). On this view, grammaticalization consists of three core “components”, viz. morphosyntactic change, semantic or functional change, and constructional change, which interact with pragmatics, phonology and the lexicon to create the “fringes” (or interfaces) that are said to be of particular interest for our understanding of “what makes grammaticalization” (p. 4). Since this approach is partly intended to overcome the traditional focus of grammaticalization research on “clines”, “paths”, “channels” and the like (ibid.), it is hardly surprising that typical functional-typological concerns such as cross-linguistic variation patterns and the explanation of form-function relations play a relatively marginal role in the book (except to some extent in the papers by Gaeta and König & Vezzosi). In the remainder of their paper, Wiemer & Bisang discuss previous
grammaticalization research in relation to their broad notion, covering successively morphosyntactic change (including semantic change and the distinction between grammaticalization and lexicalization), the role of constructions, the interface of grammaticalization with pragmatics and with phonology, and briefly also the role of language contact in grammaticalization. Their overview ends with a summary of the content of the contributions, not in sequential order but covering the papers on Slavonic first and then the rest.

As Wiemer & Bisang point out, the relatively prominent role of Slavonic in the volume is the result of a conscious decision, designed to finally give the Slavonic languages their due share of attention in the field of grammaticalization studies (pp. 13–14). The underrepresentation of Slavonic in grammaticalization studies hitherto may, they suggest, be due at least in part to the very peculiarities of grammaticalization in this language family. Thus, several contributions demonstrate the conservative character of Slavonic with respect to morphosyntactic change, as shown by the development of modals (Hansen) and by the development of indefinite articles under Sprachbund conditions (Weiss). Furthermore, despite the usual evidence of semantic bleaching, functional change and distributional expansion, these changes are rarely, if ever, accompanied by phonological erosion (V. Lehmann, Böttger, Wiemer); this may well have inhibited the development of a grammaticalization-like theory for Slavonic given that it makes formal mutations much less salient as a diagnostic of change, requiring distribution-based criteria instead. On the other hand, Slavonic is unique among Indo-European languages precisely because it has grammaticalized the distinction between perfective and imperfective aspect more thoroughly than any other group thanks to its system of derivational affixation on the verb stem. As Böttger makes clear in her detailed examination of za-, po- and or-, these aspectual prefixes present a challenge to grammaticalization theory in their own right: although they must be regarded as part of grammar synchronically (belonging to a category called “grammatical derivation” (p. 178), following V. Lehmann), their diachronic development does not fit easily into the classic definition of grammaticalization as based on changes from lexical to grammatical (pp. 186, 203).

Among the papers not specifically concerned with data from Slavonic, the contribution by Himmelmann stands out, not only because of its prominent position early in the volume and its fundamental concern with issues
concerning grammaticalization and lexicalization, but also because of its swift impact on the study of lexicalization (see e.g. Brinton & Traugott 2005). Starting from a critique of the “box approach”, which conceptualizes the lexicon and the grammar as distinct linguistic domains and tends to see grammaticalization and lexicalization as going in opposite directions, Himmelmann instead defines the relationship of these processes as “orthogonal”: both start out from the same type of source, viz. “the spontaneous and productive combination of lexical items in discourse”, followed by a different kind of “conventionalization” in each case, with systematic “context expansion” being considered diagnostic of grammaticalization (p. 38). The same conceptualization of lexicalization and grammaticalization as orthogonal appears in recent work by Lehmann (2002), which Himmelmann does not cite (see also Lehmann 2005); the two proposals are also similar in their focus on the constructional context of grammaticalization, an important issue for Himmelmann, who criticizes “element-based” approaches for overlooking the syntagmatic and semantic-pragmatic contexts in which individual linguistic elements undergo grammaticalization or lexicalization. Lehmann goes further than Himmelmann, however, by emphasizing that processes of grammaticalization and lexicalization are disjoint only in abstraction; in the historical development of actual linguistic constructions, they tend rather to go hand-in-hand, with lexicalization often preceding grammaticalization. Among the various case-studies which confirm this observation is a recent paper by Haas (2005) on English each other, written with explicit reference to Himmelmann’s framework, which Haas prefers to Lehmann’s because of the emphasis on context expansion (see his footnote 4).

Another thought-provoking metaphor that is explored in What makes grammaticalization? besides orthogonality is the idea that grammaticalization may create morphosyntax either from above or from below. The perspective “from above”, i.e. from the interface with pragmatics, informs the contribution by Bisang, who starts from a description of two basic typological properties of East and mainland Southeast Asian languages, viz. indeterminateness (or lack of obligatory grammatical categories) and a relatively weak correlation between lexicon and morphosyntax, with the adequate assignment of functional role to a given marker being very much dependent on context and pragmatic inference. As Bisang points out, these properties not only cast doubt on the universality of clear-cut “gram-types” (Bybee & Dahl 1989), they also tend to encourage grammaticalization
without the expected concomitant formation of morphological paradigms and thus “preclude the coevolution of form and meaning” in these languages (p. 134). Gaeta’s paper on grammaticalization “from below” draws attention to the re-interpretation of phonological oppositions as morphological ones (German *umlaut* being a well-known instance), a change which the author suggests is much more common than generally supposed. Though such changes contradict Givón’s well-known grammaticalization cycle (1979: 209), which presents phonology as an onward development from morphology rather than vice versa, they do not necessarily contradict the unidirectionality of grammaticalization, provided directionality is properly interpreted as “centripetal directionality” and as an epiphenomenon of the “morphocentricity” of change (p. 66). A potential instance of the reverse, “centrifugal” directionality appears in the paper by Günthner & Mutz, who investigate the development in spoken German of the concessive subordinating conjunctions *obwohl* and *wobei* into discourse markers (including a comparison with their Italian equivalents). Their assertion that such “pragmaticalization” must be regarded as a separate kind of change from grammaticalization in the traditional, narrow sense (pp. 97–99) is well in line with Gaeta’s ideas on morphocentricity and with Wiemer & Bisang’s broader notion of grammaticalization. Somewhat ironically, however, it also makes one wonder how helpful it really is to associate the term *grammaticalization* with Wiemer & Bisang’s “general perspective” on changes in the format and distribution of grammatical units. If morphocentric grammaticalization remains viable as a reasonably well-defined empirical and theoretical notion after all, then perhaps the book should simply have been called *What makes grammar change?*

A more traditional understanding of grammaticalization also seems to underlie the paper by König & Vezzosi, which focuses on the role of predicate meaning (more specifically, the distinction between “other-directed” and “non-other-directed” activities) in the historical development of self-reflexives in English. In a wide-ranging concluding section (pp. 237–239), the authors carefully review their findings in the light of the issues raised by Wiemer & Bisang, from the discourse-functional motivations of change (sharply contradicting the more traditional, syntax-internal accounts of reflexivitiy) through correlations between different types of change in grammaticalization (the English *self*-reflexives being yet another instance where phonological attrition is lacking – for clear functional reasons) to the role of language contact (with Celtic influence proposed as a necessary factor
in the actuation of the change that led to the characteristic self-compounds of English). König & Vezzosi are also the only contributors except Wiemer & Bisang (and briefly Gaeta, p. 50) who mention the issue of reanalysis (pp. 238–239), a much-discussed component of syntactic change whose relationship with grammaticalization remains largely unexplored throughout the book. This lacuna is implicitly acknowledged by Wiemer & Bisang (p. 5), who point out the “semasiologic(al)” orientation of most papers and express regret that room could not be found for other, more “onomasiological” approaches, specifically singling out the important work on reanalysis by Detges & Waltereit (2002).

Overall, the volume is well-produced and sturdy, with impeccable layout, consistent referencing and only a handful of insignificant typos. A minor editorial criticism could be brought against the fact that most references seem to stop in 2001, i.e. the year of the original workshop – though there are in fact a handful of more recent entries up to 2004. One major new reference which probably came just too late to be incorporated is the substantially revised version of Hopper & Traugott’s *Grammaticalization* (2003). In the event, all references to their book in *What makes grammaticalization?* are to the older, 1993 edition.

**References**


Reviewer’s address
Ghent University – Vakgroep Duits
Blandijnberg 2
9000 Ghent, Belgium
e-mail: Torsten.Leuschner@UGent.be

Received: 12 February 2006
Much has been written and discussed on grammaticalization as a mechanism of language change and about its relationship to lexicalization. While there is more or less general agreement about what constitutes a process of grammaticalization, lexicalization has been far less systematically studied. The concept has remained rather vague and is perceived in various, sometimes even contradictory, ways. Thus the book under discussion fills a gap by providing a thorough and extensive compilation and discussion of the prevailing views on lexicalization. Furthermore, reconciling these various approaches, the authors present their own unified approach to lexicalization and grammaticalization from a historical, functionalist perspective.

The book is very clearly structured. The first three chapters present reviews of the literature on lexicalization and its relation to grammaticalization. In the second half the authors develop their own integrated approach and apply it to various case studies, mainly of English linguistic phenomena. The volume concludes with an extensive list of references (pp. 161–184) and three indexes listing authors, subjects, and words and forms.

Chapter 1, “Theoretical contexts for the study of lexicalization and grammaticalization”, explores some preliminaries to the study of lexicalization and grammaticalization, focusing on approaches to grammar, lexicon, language change, lexicalization, and grammaticalization. A clear understanding of the notions of GRAMMAR and LEXICON is essential in any attempt to study the processes of lexicalization or grammaticalization. And here the controversy among linguists begins. Brinton & Traugott illustrate these opposing views by briefly summarizing the two extreme positions of generative and functional grammar.

Lexicalization can be seen as the result of a linguistic change within a synchronic perspective or as the change itself, i.e. as a diachronic process. In the book it is primarily conceptualized as a historical process (cf. the title: “Lexicalization and language change”). Therefore the authors also provide
some essential background knowledge about various approaches to language change, giving a short chronological survey and then acquainting the reader with some types of change that are especially relevant for the topic of the book, such as reanalysis, analogy, and the relation between innovation and spread.

Other theoretical issues addressed in the first chapter are the questions of what are to be considered constituents of a lexicon, or how to distinguish between lexical and grammatical word classes, e.g. whether prepositions are lexical (as claimed in Government and Binding Theory) or grammatical (as maintained in Grammaticalization Theory) or comprise both lexical and grammatical subsets (Lehmann 2002). This leads the authors to the conception of gradience within and also between categories supported by most functional theorists, but rejected by generative linguists. In Brinton & Traugott’s view this notion of a continuum is also to be applied to the concept of productivity, which, especially with regard to affixation, is considered a central factor in the distinction between lexicalization and grammaticalization.

Finally, a number of definitions and interpretations of lexicalization and grammaticalization are presented from which the authors derive particular problematic issues that will be discussed in the following chapters: for example the relationship between lexicalization and processes of word formation; the role of idiomatization, demotivation, routinization, and institutionalization in lexicalization; the obvious contradiction between decreased compositionality and increased autonomy in lexicalization; lexicalization as a gradual or abrupt change; the distinctions and similarities between lexicalization and grammaticalization; the relationship between lexicalization and DEGRAMMATICALIZATION.

In Chapter 2, “Lexicalization: definitions and viewpoints”, the authors explore various definitions and viewpoints on lexicalization in the literature of the last 50 years. The conceptions range from very broad characterizations, making little or no distinction between lexicalization and regular word formation, to rather restrictive viewpoints, some of them even contradicting each other. Though ordinary processes of word formation such as compounding or derivation are only occasionally associated with lexicalization, it is particularly the conversion of minor to major word classes (e.g. Adv off > V (to) off ) that has been widely understood as lexicalization because it involves an upgrading from less to more lexical status.
The other word formation processes are usually not equated with lexicalization, but, as Brinton & Traugott maintain, most scholars consider them as being accompanied by some process of lexicalization. This can manifest itself as institutionalization, fusion, and/or loss of autonomy. As the authors show, such processes are sometimes regarded as precursors of lexicalization, sometimes identified with it. One of the commonest conceptions of lexicalization is that of univerbation of a syntactic phrase into a single word, as in It. *adesso* ‘now’ < Lat. *ad ipsum* ‘to itself-ACC’. Another widespread view is the association of lexicalization with darkened compounds or derivations due to phonetic reduction and/or idiomaticization and demotivation. Other changes discussed in the literature as extreme cases of lexicalization are demorphologization and phonogenesis. For all these approaches Brinton & Traugott refer to the relevant literature and cite representative examples.

One interesting aspect discussed controversially in the literature is the autonomy of a linguistic item in the process of lexicalization. It is argued that while fusion typically entails loss of autonomy, some of the examples discussed in the lexicalization literature involve an increase in autonomy. These are examples of clitics or affixes that have acquired an autonomous lexical status. However, the data provide sufficient evidence that such changes are not only rare in number but also often problematic and highly controversial as to their genesis.

Summarizing, in Chapter 2 it becomes obvious that the concept of lexicalization is so complex and diverse and encompasses a wide variety of – sometimes even opposing – processes because the result of a lexicalization process, an autonomous lexical unit, may have variable sources: it may originate as a structure in syntax, as a more complex word in the lexicon, or as a bound morph in morphology.

Chapter 3, “Views on the relation of lexicalization to grammaticalization”, explores recent – often contradictory – arguments concerning the relationship between lexicalization and grammaticalization. The two processes have often been construed as opposite in direction, even as mirror-images, while on the other hand it has been observed that both of them share certain essential constitutive processes like coalescence, loss of compositionality, or idiomaticization. Therefore it can happen that the same forms are interpreted as the result of grammaticalization by some researchers and as lexicalization by others. Some of the examples discussed in this chapter are Gm. *heute* ‘today’ < hiu tagu ‘this day-DAT’; derivational affix <
root in a compound (e.g. MHG –heit ‘abstract’ < OHG haidus ‘Gestalt’); development of fixed phrases, like you know; complex prepositions (ahead of, in case of); multi-word verbs (turn up, defer to); phonologization, like causative lay.

The concept of lexicalization becomes a most prominent issue in connection with the unidirectionality hypothesis of grammaticalization. Therefore Brinton & Traugott devote part of this chapter to the discussion of whether there is unidirectionality in language change and how this could be accounted for. One particular issue related to this problem is the process of RENEWAL or REVIVAL, which, as the authors demonstrate, is uncontroversial in the lexicon but raises disputes with regard to grammaticalization processes. In order to illustrate the controversy about the conception of lexicalization as degrammaticalization the authors present arguments that have been made in favor of this view as well as arguments that have been raised against it. Finally they come to the conclusion that the notion of degrammaticalization itself as well as the relation between the two concepts is ill-defined.

One particularly problematic area in the debate about lexicalization and grammaticalization at least from a diachronic point of view is the position of derivational affixes in relation to inflections. As Brinton & Traugott point out, derivational affixes are sometimes included in the diachronic grammaticalization cline preceding the stage of inflections, so that the creation of derivations from free roots constitutes a process of grammaticalization, while shifts in the opposite direction, i.e. from inflectional to derivational status, are cases of degrammaticalization or lexicalization. Others restrict derivational affixes to the synchronic cline of grammaticality or consider their evolution generally as lexicalization processes.

In Chapter 4, “Toward an integrated approach to lexicalization and grammaticalization”, Brinton & Traugott present one possible integrated approach towards lexicalization and grammaticalization based centrally on the assumption of a dynamic model of grammar that allows for gradience and degrees of productivity. First of all the authors point out that lexicalization and grammaticalization are not conceived as unique and separate from “normal” processes of language change. Instead, they propose that they constitute particular subtypes, and as such they are subject to general constraints on language use and acquisition like any other type of language change.
Diachronically, both lexicalization and grammaticalization are understood as the institutionalized adoption of both lexical and grammatical units into the inventory of forms in a language. The authors claim that a distinction between lexicalization and grammaticalization is only possible if the function of the adopted item is considered. Synchronically, linguistic units are arranged in two clines, a CLINE OF GRAMMATICALITY and a CLINE OF LEXICALITY, which partly overlap in the area of semiproductive elements. Within the structure of the inventory of forms grammatical elements can move to higher grammaticality, which is expressed primarily by increased productivity and a higher degree of fusion with EXTERNAL elements:

\[
\begin{array}{c|c|c}
G1 & \text{periphrases } \{ \text{be going to}\} & G2 \\
& > \text{function words and } & > \text{class-changing} \\
& \text{clitics } \{\text{must, 'll}\} & \text{derivational affixes} \\
& \text{[adverbial -wise] and} & \text{[inflections, including zero-} \\
& \text{inflections, including zero-} & \text{morphs}\n\end{array}
\]

Lexical elements can move to higher lexicality, which is expressed primarily by decreased productivity and a higher degree of fusion in INTERNAL structure:

\[
\begin{array}{c|c|c}
L1 & \text{partially fixed phrases } \{\text{lose sight of}\} & L2 \\
& > \text{complex semi-} & > \text{simplexes and} \\
& \text{idiosyncratic forms} & \text{maximally unanalyzable} \\
& \{\text{unhappy, desktop}\} & \text{idiosyncratic forms } \{\text{desk, over-the-hill}\}\n\end{array}
\]

Based on these crucial assumptions Brinton & Traugott arrive at the following definition of lexicalization:

Lexicalization is the change whereby in certain linguistic contexts speakers use a syntactic construction or word formation as a new contentful form with formal and semantic properties that are not completely derivable or predictable from the constituents of the construction or the word formation pattern. Over time there may be further loss of internal constituency and the item may become more lexical. (p. 96)
Note that the result of the lexicalization process is labelled “a new CONTENTFUL form”, allowing for lexical as well as grammatical items to become incorporated into the inventory, which is construed as a lexical-grammatical continuum. Once institutionalized, the items may undergo further change toward the lexical or the grammatical pole. One consequence of this approach is that lexicalization and word formation should be treated separately. Word formations can be the input to lexicalization. So far this is convincing. However, since the authors claim that “the input to lexicalization may be anything stored in the inventory” (p. 96), the question is: how did it get into the inventory if not by lexicalization? Consequently, there must also be input outside the inventory. But what then is the relation between word formation and lexicalization?

Lexicalization in a narrow sense concerns modifications within the inventory down the cline of lexicality, comprising processes such as fusion, idiomaticization, and decrease in productivity. So the authors argue that a reversal of this process, though rarely attested, is not a shift from lexical to grammatical, but an increase in formal and semantic compositionality, as found in examples of folk etymology, whereby a lexical item which has become opaque to speakers is reanalyzed and given a morphological structure that it did not have before and that appears to be at least partially more transparent (cf. Lehmann 2002: 14). Similarly, a reversal of grammaticalization cannot be regarded as lexicalization since it exclusively encompasses changes on the continuum of grammaticality resulting in increased autonomy, such as shifts from inflection to clitic, or from clitic to function word. “Attested” examples of such changes are highly disputed, though.

An important conclusion the authors reach is that although lexicalization and grammaticalization are complementary processes, they have relatively strong parallels: both of them demonstrate gradualness, unidirectionality, fusion, coalescence, demotivation, metaphorization and metonymization. However, due to their different targets, stronger lexicality versus stronger grammaticality, the two processes differ in a number of features: (1) lexicalization is not, like grammaticalization, characterized by decategorialization; (2) while grammaticalization often involves bleaching, lexicalization most often involves concretion; (3) many instances of grammaticalization contain subjectification, which is not characteristic of lexicalization; (4) grammaticalization leads to higher productivity and token frequency, while lexicalization reduces productivity and does not increase
token frequency; (5) grammaticalization patterns tend to be cross-linguistically replicated, while lexicalization tends to be idiosyncratic and less constrained by various types of linguistic processes.

In Chapter 5, “Case studies”, the authors discuss some case studies in the history of English from the perspective of the integrated approach developed in the previous chapter: the development of present participles, multi-word verbs, adverbs formed with –ly, and discourse markers.

Participles raise questions with regard to lexicalization and grammaticalization because of their ambiguous status between inflected forms of verbs (grammatical) and adjectival derivations (lexical?). There are even “conversions” into prepositions (during), conjunctions (concerning) or degree adverbs (“piping hot”). There seems to be no doubt that the development of be + V-ing into the progressive is an instance of grammaticalization. Brinton & Traugott further argue that the development of present participle prepositions, conjunctions and degree adverbs is also a case of grammaticalization, while on the other hand the development of present participle adjectives (“a knowing look”) is a case of lexicalization. This is on first view convincing, given their criteria for grammaticalization and lexicalization in Chapter 4. Yet there still remains a problem: on p. 93 the authors list as grammatical items “affixes such as derivational morphology that changes the grammatical class of the stem”. Is it then possible that a process like stem + word class-changing GRAMMATICAL element is an instance of lexicalization? The authors’ postulation (p. 115) of an original hybrid form with verbal and adjectival properties at an L2-degree of lexicalization is not fully compelling. It might rather be argued that [V + ing > A] is a word formation process by derivation, which by itself is neither grammaticalization nor lexicalization. This would chime with the authors’ argument that word formation is not lexicalization. The newly derived word was then subsequently lexicalized.

With regard to multi-word verbs Brinton & Traugott argue that particles of phrasal verbs (e.g. off in cut/take off) are grammaticalized whereas prepositional verbs (e.g. look after) are lexicalized. The evidence put forward in favor of the lexical status of prepositional verbs does hardly admit of any doubt. With phrasal verbs, however, the situation seems to be more complex. When the authors point out that “in ModE the particles are widely … recognized as denoting aspectual meaning, both telic aktionsart … and iterative/durative aspect” (p. 125), they do not distinguish between aspect and Aktionsart. Yet this is the crucial point with regard to lexicalization and
grammaticalization. There is a general consensus that, whereas aspect is grammatical, Aktionsart is encoded in the lexical meaning. Vandeweghe & Kortmann (1991: 22) see a continuum between both. The analysis of particles as aspect markers, however convincing the arguments might ever be, is further complicated by the fact that the authors obviously consider phrasal verbs in PDE as idiomaticized expressions (cf. p. 123: “in OE, verbs with adverbial particles … are well established, though the collocations are not as fullyidiomaticized as in PDE.”). A similarly controversial issue is the interpretation of composite predicates in English. Here the authors offer a compelling suggestion: they distinguish between two types of composite predicates, namely, (1) grammaticalized light verb constructions (such as have a bath), which are highly productive in forming new composite predicates and convey an aspectual meaning; and (2) lexicalized verbal constructions (such as lose sight of), which are not productive patterns and are often highly idiomaticized and fossilized.

The English adverbial suffix –ly has always been considered problematic in terms of its status as derivational or inflectional. Brinton & Traugott cite the most relevant opposing viewpoints and come to the conclusion that it is moving toward inflectional status and therefore undergoing a grammaticalization process –note that this change would turn a derivative into a grammatical word form. And interestingly, the authors can also observe an increase in grammatical function with certain individual adverbs in –ly (e.g. truly, frankly, etc). The latter is closely related to the origin of discourse markers, which is another controversial issue in language change, sometimes treated as grammaticalization, sometimes as lexicalization, or even as PRAGMATICALIZATION (cf. Erman & Kotsinas 1993). Within this integrated model of lexicalization and grammaticalization it can best be accounted for in terms of grammaticalization.

Finally, Chapter 6, “Conclusion and research questions”, summarizes the results and outlines a set of questions for further research. First of all, in view of the asymmetry between work on lexicalization and grammaticalization the authors stress the necessity of expanding the language base for studies of lexicalization, as not much work has been done up to now on languages with little recorded history, or on pidgins and creoles. Furthermore, the availability of language corpora, giving us more and more access to a variety of text types and genres, should be taken advantage of to study aspects of actuation and spread with regard to lexicalization. Apart from an expansion of the database, more attention should be paid to fundamental problems of
language change and their relevance for lexicalization processes, such as questions of constraints on possible changes, typological aspects, or language contact.

To conclude, Brinton & Traugott’s book represents a major contribution to our knowledge and understanding of the relationship between grammaticalization and lexicalization, and their role in language change. It not only provides a complete survey of previous approaches in a systematic way but also offers a new integrated model that is applied to some of the most controversial instances of linguistic change in the history of English, with a perspective on comparable changes cross-linguistically. The extensive list of references is an invaluable source of information about the wide variety of studies within this field of language change. The book is marked by an admirable clarity and vividness and will thus be extremely useful not only for experts in the field, but also for students trying to find an orientation in matters of language change.

References


Reviewer’s address
Institut für Anglistik und Amerikanistik
Universität Potsdam
Postfach 601553
D-14415 Potsdam, Germany
e-mail: wischer@rz.uni-potsdam.de

Received: 8 March 2006

Reviewed by Francisco González-García, University of Almería

The aim of this book is to provide a typological taxonomy of subordination systems from a cross-linguistic perspective, with special focus on the existing correspondences between morphosyntactic devices and the notions and/or conceptual situations that these serve to encode (p. 1). In Chapter 1, “Theoretical Premises”, Cristofaro draws a sharp contrast between the traditional definition of subordination, based on morphosyntactic criteria such as clausal embedding, and a functional definition which revolves around how the cognitive relation between events is construed. Specifically, by “functional” Cristofaro means an integration of “notional, cognitive, semantic/pragmatic” facets of subordination (p. 2). To this end, she builds on the functional-typological tradition developed by Givón (1980, 1990), Noonan (1985), Hengeveld (1998), or Croft (2000), while also making crucial use of key notions in Langacker’s Cognitive Grammar (Langacker 1987, 1991) (CG henceforth), such as that of PROFILE (Langacker 1991: 435–437).

According to Cristofaro, a comprehensive and adequate cross-linguistic account of subordination should exclusively rest upon functional-cognitive principles, not structural (or formal) ones. This theoretical stance is grounded on the working assumption that “at least certain aspects of language structure depend on, and can be explained in terms of language function” (p. 7). While in general the author admirably succeeds in arguing for the integration of functional and cognitive perspectives on subordination, there is at least one theoretical aspect that could have perhaps been further elaborated and/or justified, viz. the stance taken on the degree of semantic(o-pragmatic) motivation of (morpho-)syntax, especially in the light of the empirical results arising from the extensive data examined. From a theoretical viewpoint, this aspect points to an often overlooked yet substantial difference between, for instance, Langacker’s CG, which takes syntax to be WHOLLY semantically-motivated (Langacker 1996: 52), and the relatively more moderate stand taken by e.g. Croft (2000, 2001), who
recognises that “the form-function (syntax-semantics) mapping is arbitrary to at least some degree, and thus form must be represented independently of function to at least some degree” (Croft 2001: 9, emphasis in original), to cite only two representative cases. From a descriptive and methodological perspective, this aspect is also crucial for the discussion of the functional motivations underlying the coding of subordination relations in general and the functional notion of iconicity in particular addressed in detail in Chapter 9. Moreover, it also has a direct bearing on the asymmetry between the priority given to semantic factors in the discussion of complement and adverbial relations presented in Chapters 5 and 6, on the one hand, and the syntactic motivation of relative relations detailed in Chapter 7, on the other.

Chapter 2, “The notion of subordination”, provides a fine-grained picture of the strictly functional definition of the term advocated in this study. Building on Langacker’s (1991: 436) proposal that a subordinate clause is describable as one whose profile is overridden by that of the main clause, Cristofaro puts forward the Asymmetry Assumption, according to which subordination is understood as “a situation whereby a cognitive asymmetry is established between linked SoAs [states of affairs], such that the profile of one of the two (henceforth, the main SoA) overrides that of the other (henceforth, the dependent SoA)” (p. 33, material in brackets mine). However, the descriptive and explanatory adequacy of Langacker’s notion of subordination has been wholly or partly challenged in recent work by Diessel & Tomasello (2001), Thompson (2002), Bybee (2002), Diessel (2004) and Verhagen (2005). Specifically, drawing on grammatical, pragmatic, prosodic and phonological evidence from naturally-occurring conversational data, Thompson (2002) demonstrates that some finite complement clauses profile the situations they encode with the same degree of prominence as the preceding matrix clauses, a view which has also been recently endorsed within CG (Langacker 2005). Regardless of whether Thompson’s findings may be considered to be a product of “performance factors” in spoken language (Verhagen 2005: 93–94) and/or whether the adoption of this interactionally-sensitive reappraisal of subordination may lead to substantial differences in the cross-linguistic findings presented by Cristofaro, at least two important observations emerging from the above-mentioned (usage-based) functional-cognitive investigations are worth mentioning here – both of which are applicable not only to Cristofaro’s arguments but also to Cognitive Grammar: (i) claims about what is profiled or prominent can only
be validated on empirical grounds, as rightly noted by Thompson (2002: 131); (ii) a truly functional-cognitive account of subordination can only be attained by taking into account the interaction of grammatical, semantico-pragmatic and phonological factors in actually-occurring data in a discourse context rather than by e.g. resorting to invented examples usually deprived of any context. In addition, I concur with Lichtenberk (2004) and Słodowicz (2004) that Cristofaro’s treatment of the notion of subordination is somewhat problematic in two further respects: (i) a heavy reliance on (mostly English) translations as a questionable heuristic to determine subordination, and (ii) Cristofaro’s adherence to the dubious premise that all languages can express the same “cognitive situations” involving subordination.

Chapter 3, “The coding of subordination: Parameters for cross-linguistic research”, proposes to replace the distinction between finite and non-finite clauses with a cross-linguistically valid one, viz. that between independent and dependent declarative clauses. Dependent clauses are then compared to independent declarative clauses taken in isolation with respect to both the form of the verb and the coding of participants. Specifically, the range of formal variation in the verb is accounted for in terms of the notions of balancing and deranking, which relate, respectively, to whether the dependent clause is encoded analogously or differently from an independent clause, while also taking into consideration the coding of tense, aspect, and mood (TAM henceforth) distinctions, person agreement and participant coding.

Chapter 4, “The cross-linguistic coding of subordination: Methodological premises”, as the title suggests, lays the methodological foundations on which the presentation and discussion of the cross-linguistic findings on subordination detailed in Chapters 5–8 are grounded. The methodological premises in question take the form of quantified implicational generalizations, which are established in a rigorous way; more exactly, an implication is considered to be valid in this book with the proviso that the number of counterexamples should not exceed more than one third of the relevant cases. The language sampling utilized is indeed impressive, reaching a total of 80 (still spoken and extinct) languages. However, an important observation can be made regarding the source and type of data employed throughout the book. As Cristofaro herself admits (p. 94), the sampling relies mainly “on reference grammars (as well as, when possible, consultation with native speakers or specialists on the individual languages: see Appendix 1)”. 
However, while examples from works written in Classical Greek are occasionally cited, no corpus data (in the technical sense of the term), whether written or spoken, is utilized throughout the book. The use of data of this kind is crucial to functional linguistics (see further e.g. Butler 2004) and appears to be gaining momentum in cognitive linguistics too (see further Ruiz de Mendoza Ibáñez & Díez Velasco 2005 and references therein). While it is true that corpus data may be hard or even impossible to obtain in the case of some of the languages under examination in Cristofaro’s book, especially those which are nowadays extinct, it is nonetheless my contention that a usage-based, hence more realistic, coverage of the English data on which the present book heavily draws would add, at least from a methodological viewpoint, a further functional twist to Cristofaro’s findings.

In Chapter 5, “Complement relations”, in keeping with the priority accorded to semantics in functional and cognitive linguistics, Cristofaro adopts the semantically-based classification of complement-taking predicates (CTPs henceforth) proposed by Noonan (1985). She then approaches the semantic relations holding between the CTP and the dependent SoA in complement (and adverbial) subordination in terms of three relevant parameters, viz. (i) the level of clause structure at which the relation in question is established, (ii) predetermination of the linked SoAs (i.e. the predetermined relation between the SoAs concerning time reference, TAM properties or the participants of these SoAs) and (iii) the degree of semantic integration between them. The main findings arising from the examination of verb forms in complement relations can be adequately captured, according to Cristofaro, under the Complement Deranking-Argument Hierarchy, as in (1) below:

(1) The Complement Deranking-Argument Hierarchy:
   Modals, Phasals > Manipulatives (‘make’, ‘order’), Desideratives >
   Perception > Knowledge, Propositional Attitude, Utterance

An important generalization ensuing from the Complement Deranking-Argument Hierarchy is that if a given deranked form is utilized at any point on the hierarchy, it must also be used at all points to the left. Extensive supporting evidence for the Complement Deranking-Argument Hierarchy as well as a number of further generalizations is effectively presented by means of tables at the end of the chapter.
Chapter 6, “Adverbial relations”, is concerned with the following subtypes: purpose, temporal relations (e.g. ‘before’, ‘after’, ‘when’), reality conditions, and reason relations. Regarding the functional literature on which this chapter draws, a future edition of the book would benefit from the inclusion of the semantic classification of adverbial clauses proposed in Pérez Quintero (2002). As with complement relations, Cristofaro invokes a number of semantically-oriented criteria such as predetermination, semantic integration, and will/interest, while emphasizing that the semantic properties of adverbial relations are different from complement relations. The application of the balancing/deranking distinction yields the Adverbial Deranking Hierarchy reproduced in (2) below:

(2) The Adverbial Deranking Hierarchy:
    Purpose > Before, After, When > Reality condition, Reason

An important additional parameter impinging on the alignment of adverbial relations is whether the dependent SoA can be encoded as an object (understood in a similar fashion to Langacker’s “thing”). Specifically, the general prediction is that those relations in which the dependent SoA can be encoded as an object are likely to display fewer verbal features (and, conversely, a higher degree of nominal properties such as case marking/adpositions on the dependent verb and the coding of arguments as possessors). As in the case of complementation relations, this chapter closes with extensive supporting evidence corroborating the implicational hierarchies posed in the preceding discussion.

Chapter 7, “Relative relations”, is in actual fact solely concerned with the restrictive subtype of relative clauses, given that non-restrictive ones do not comply with the defining criteria established for subordination in Chapter 2, as evidenced by e.g. the sentential negation test. An important asymmetry regarding the preceding discussion of complement and adverbial relations is that Cristofaro dismisses semantic criteria in favour of syntactic ones in the analysis of relative relations (pp. 199, 213), including gapping (i.e. relative relations lacking overtly expressed arguments; see p. 287). In this respect, a future revised edition of this book would perhaps do well to revisit this categorical claim by addressing in detail the cross-linguistic implications of e.g. Thompson & Fox (2002), who convincingly show that the choice between overt relativizer and zero relativizer for object relatives in English is strongly determined by discourse-pragmatic requirements. Specifically,
following Keenan & Comrie’s (1977) Accessibility Hierarchy, Cristofaro considers the major parameter to be the syntactic function of the relativized item. Specifically, she restricts her study to the following functions: A, S, O, Indirect Object and Oblique, leading her to posit the Relative Deranking-Argument Hierarchy, as in (3) below:

(3) The Relative Deranking-Argument Hierarchy:
    A, S > O > Indirect Object, Oblique

An important consequence of the Relative Deranking-Argument Hierarchy is that if a deranked form is used in the relativization of a role at a particular position, it will also be used for all the roles to the left of that position. Interestingly, Cristofaro further motivates the implications deriving from the Relative Deranking-Argument Hierarchy in terms of the degree of ease of processing and its impact on the recoverability of information, with roles to the right of the hierarchy being more difficult to process than roles to the left.

Chapter 8, “Comparison of complement, adverbial, and relative relations”, provides further supporting evidence for the hierarchies proposed in the preceding chapters under the rubric of the Subordination Deranking Hierarchy, which goes as follows:

(4) The Subordination Deranking Hierarchy:
    Phasals, Modals > Desideratives, Manipulatives, Purpose > Perception >
    Before, After, When, A relativization, S relativization > Reality condition,
    Reason, O relativization > Knowledge, Propositional attitude, Utterance,
    IO relativization, Oblique relativization

Moreover, Cristofaro proposes the Subordination Argument Hierarchy to capture the lack of overt participant coding, as in (5) below:

(5) The Subordination Argument Hierarchy (SAH):
    Modals, Phasals, A relativization, S relativization > Desideratives,
    Manipulatives, Purpose > Perception > Before, After, When, Reason,
    Reality condition, Utterance, Propositional attitude, Knowledge

The implicational hierarchies reproduced in (4) and (5) above underscore the priority of semantic considerations in the coding of subordinate relations. In particular, those relations showing a high degree of predetermination of the semantic features of the linked SoAs rank higher
than those featuring little or no predetermination. The same rationale applies to the criterion of semantic integration. Other additional factors taken into account are the feasibility of the linked SoA being construed as an object, the level of clause structure, the preference (i.e. the participant of the main SoA having a desire for or an interest in the occurrence of the dependent SoA) and mood value. In the case of relative relations, the relevant parameters are the syntactic function of the relativized element and the ability of the SoA to be construed as an object. However, the categorical nature of Cristofaro’s defense of semantic criteria in the coding of subordination is somewhat obscured by the inclusion of relative relations, which, as will be recalled, are acknowledged by the author to be dictated by syntactic considerations.

Chapter 9, “The coding of subordination relations: Functional motivations”, makes central use of key notions in the functional-cognitive literature (e.g. Givón 1980, 1990; Haiman 1983, inter alia), such as economy and iconicity, to explain the correlation between some morphosyntactic phenomena and factors such as semantic integration, preference, level of clause structure and determination. In particular, Cristofaro elaborates the connection between syntagmatic economy and the non-specification of predictable information regarding e.g. time reference, aspect, mood value of the dependent SoA or participant sharing between the main and dependent SoA in terms of the Principle of Information Recoverability (p. 249). On the other hand, building on Givón’s (1980) Binding Hierarchy of complement clauses, iconicity of independence (understood as a particular case of iconicity of distance) is adduced to explain the correlation between semantic integration and phenomena leading to syntactic integration such as lack of verbal inflection and lack of overtly expressed arguments. Moreover, in order to account for some further cases which do not lead to either a non-expression of information about the dependent SoA or a tighter syntactic integration between the linked clauses, Cristofaro invokes the cognitive status of the dependent SoAs, as defined by the Asymmetry Assumption (Chapter 2). Specifically, she draws on the distinction between processes and things outlined in Cognitive Grammar (Langacker 1987, 1991) and goes on to argue that main SoAs receive sequential scanning, in contrast to dependent ones. Thus, the suspension of scanning in dependent clauses is argued to motivate the absence of TAM features in clauses while also favouring a conceptualization of the SoA as a “thing” rather than as a process.
Chapter 10, “Correlations between individual morphosyntactic phenomena”, outlines a number of interesting systematic correlation patterns emerging from the comparison of the different morphosyntactic phenomena found in the cross-linguistic coding of subordination. In line with usage-based functional-cognitive approaches (see especially Bybee & Hopper 2001), Cristofaro makes crucial use of frequency and establishes the following frequency hierarchy for the morphosyntactic phenomena examined here:

(6) The Frequency Hierarchy for the morphosyntactic coding of subordination:
Lack of T/A/M distinctions (131 cases) >> Lack of person agreement distinctions (114 cases), lack of overtly expressed arguments (104 cases) >> Case marking/adpositions (53 cases), special T/A/M forms (56 cases) >> Special person agreement forms (24 cases), coding of arguments as possessors (16 cases)

Crucially, Cristofaro contends that the implications emerging from the Frequency Hierarchy provide additional empirical evidence for the correlations presented in the book in general and for the claim that the cognitive status of dependent SoAs leads to suspension of the sequential scanning of these SoAs in particular. In turn, this furnishes a ready explanation as to why a lack of the grammatical properties related to sequential scanning, namely TAM distinctions, is the hallmark of the coding of subordination.

The book ends with Chapter 11, in which Cristofaro provides some “Conclusions and prospects”, several appendices, and indexes by subject, author and language.

As Cristofaro explicitly vindicates (p. 1), one of the main strengths of this book is that it is the first systematic attempt to provide a comprehensive functional account of the connections among all subordination types in terms of overall implicational hierarchies. To my mind, Cristofaro accomplishes this task with flying colours. The cross-linguistic analysis of subordination presented in this book is, beyond any doubt, comprehensive, rigorous, carefully argued for and extensively documented. In addition, it is extremely well-written as well as user-friendly, avoiding unnecessary technicalities and presenting a priori complicated typological considerations in an accessible way. Last but not least, and doing full justice to the title of the series of which the present book forms part, Cristofaro shows how
typology and linguistic theory can be insightfully combined to broaden the
descriptive and explanatory perspectives on subordination expressed in the
extensive formal and functional-cognitive literature on the topic.

References

Butler, Christopher S. 2004. “Corpus studies and functional linguistic theories”.
  *Functions of Language* 11: 147–186.
Bybee, Joan. 2002. “Main clauses are innovative, subordinate clauses are
  conservative”. In: Joan Bybee, ed. *Complex sentences in grammar and discourse.*
  *Studies in honor of Sandra A. Thompson.* Amsterdam & Philadelphia: John
  Benjamins, 1–17.
Bybee, Joan & Paul J. Hopper, eds. 2001. *Frequency and the emergence of linguistic
  structure.* Amsterdam & Philadelphia: John Benjamins.
Croft, William. 2000. *Explaining language change: An evolutionary approach.* Harlow,
  Essex: Longman/Pearson.
  University Press.
  Amsterdam & Philadelphia: John Benjamins.
Hengeveld, Kees. 1998. “Adverbial clauses in the languages of Europe”. In: Johan van
der Auwera, ed. [in collab. with Dónall Ó Baoill], *Adverbial constructions in the
  languages of Europe.* Berlin & New York: Mouton de Gruyter, 335–419.
Langacker, Ronald W. 1996. “Cognitive Grammar”. In: Keith Brown & Jim Miller,
  presented at the Theme Session on “Asymmetric Events”, 9th International


Reviewer’s address
Department of English and German
Facultad de Humanidades y Ciencias de la Educación
Universidad de Almería
04120 Almería, Spain

e-mail: fgonza@ual.es

Received: 20 February 2006
Compared to her 1995 book (Goldberg 1995), the emphasis of this new book by Adele Goldberg is on learnability and on the broader cognitive context where constructions ought to be embedded. The book consists of three parts divided into ten chapters, as well as a “Conclusion” and two indexes listing authors and subjects. Part I, “Constructions”, starts with an “Overview” of the volume and of Construction Grammar at large. The second chapter, “Surface generalizations”, targets the generative habit of generating structures from other structures and argues that there are no grounds for positing underlying levels of representation when the surface generalizations can give us at least the same level of explanatory adequacy. The third and last chapter, “Item-specific knowledge and generalizations”, discusses exemplar-based categorization in the habitual cognitive fashion, aiming to prove that the inventory of constructions is much larger than rival theories of language would have one believe.

Part II, “Learning generalizations”, is all about acquisition and contains a wealth of references to corpus studies and psycholinguistic research. Chapter 4 discusses the POVERTY OF THE STIMULUS argument (Chomsky 1988, Pinker 1994) and strives to prove that the language input children receive provides “adequate means by which learners can induce the association of meaning with certain argument structure patterns” (p. 72) on the basis of general categorization strategies. Chapter 5, “How generalizations are constrained”, argues that children are exposed to constant indirect negative evidence that helps them to avoid overgeneralizations. Finally, Chapter 6, “Why generalizations are learned”, centres on constructions as predictors of sentence meaning.

Part III, “Explaining generalizations”, discusses “Island constraints and scope” (Chapter 7), “Grammatical categorization: Subject-Auxiliary inversion” (Chapter 8), “Cross-linguistic generalizations in argument realization” (Chapter 9), and “Variations on a constructionist theme”
(Chapter 10). Except for Chapter 10, the driving force of Part III is the idea that a number of phenomena often assumed to be amenable only to formal treatments are best explained in terms of pragmatic notions such as presupposition (islands and scope, for instance), broad cognitive categorization through prominent exemplars (inversion), and processing demands. The last chapter clarifies the author’s position vis-a-vis other constructionist approaches to grammar.

Coming now to an evaluation of the book, I would like to start by saying that its main merit lies in the fact that Goldberg has managed to incorporate her previous pioneering research on constructions into the broader domain of cognitive science. In her earlier work, Goldberg focused on showing that constructional schemas are linguistic primitives (as opposed to epiphenomenal creations), and that knowledge of language resides very much in knowledge of the network that binds all the schemas together at all possible levels of organization (syntactic, semantic, pragmatic). As she now suggests, the constructions are already there, and “it’s constructions all the way down” (p. 18). Given that constructions are there, what this book does is to ask two important questions about them, namely, a) is such a huge system learnable? That is, how do constructions and a myriad of relations get there in the first place?, and b) why are constructions, rather than (more economical) rules or principles, useful?

Emphasis on learnability is most prominent in Part II—to my mind, the best part of the book—and is particularly welcome since the whole issue of learnability has been one of the central pillars of the generative paradigm, a paradigm that the author openly challenges. The reader of Constructions at work who is not familiar with Goldberg’s earlier research will be pleasantly surprised to find that most of the work on acquisition referred to in this part has in fact been done either by Goldberg’s own team or herself in collaboration with leading psycholinguists such as Kathryn Bock. With Construction Grammar acting as an inspirational force throughout, Goldberg faces Plato’s problem head-on and effectively proves that the system of generalizations is learnable. After a brief allusion to the rather impressive learning (i.e. generalization-making) skills of honeybees, Chapter 4 starts with a precise characterization of the arch-famous generative view:

These sorts of advances in our understanding of what even insects are capable of learning could not be envisioned in the 1950s and 1960s when Chomsky asserted that critical aspects of syntax were “unlearnable” by human beings and therefore
must be innate; yet the assertion became dogma in our field and led to the continuing, widespread belief in the necessity of a biological endowment that contains knowledge representations that are specific to language: i.e. “universal grammar” (p. 70).

Goldberg’s alternative proposal is that “before we decide that language-specific properties must be innate, it is worth investigating how they might be learned, given general cognitive processes such as categorization, together with a closer look at the input children receive” (p. 92).

It is easy to see that Goldberg’s educational background (she is a former student of George Lakoff’s) places her in an advantageous position to talk about learnability via categorization, since categorization is indeed the hallmark of the Cognitive Linguistics enterprise, something that cannot of course be said of rival theories. Goldberg’s position as regards the poverty of the stimulus argument and the question of so-called linking rules, i.e. cross-linguistic regularities in how participants of an event are expressed in surface grammatical forms (see Baker 1996: 1), rests largely on the notion of cognitive anchoring, where a high-frequency exemplar acts as an anchor or salient standard of comparison for category formation (i.e. a ditransitive, a passive, a noun). Drawing from corpus data (CHILDES; see MacWhinney 1995) and an impressive number of experiments, the author manages to prove that particular constructional schemas are very often dominated by particular verbs. Most of these are light verbs which depend on the schema for a full interpretation. For instance, in data from the speech of mothers addressing twenty-eight-month-olds, go accounts for a full 39 per cent of the uses of the intransitive motion construction (e.g. the fly buzzed into the room). Given that this construction is used with as many as thirty-nine different predicates, one might reasonably wonder whether high token frequency of a single exemplar (“skewed input”) facilitates (or impedes) category formation. So Goldberg refers us to Casenhiser & Goldberg (2005) for an experiment that tested learners’ ability to learn to pair a novel constructional meaning with a novel form, that is, “exactly the task that the child faces when naturally learning language” (p. 79). It turned out that after only three minutes of training, both children and adults could discern the novel abstract meaning associated with the novel formal pattern and use it productively with new verbs. Crucially, the results also demonstrated that high token frequency of a single exemplar clearly facilitates the acquisition of constructional meaning.
Overall, in this part of the book Goldberg’s intimate knowledge of categorization, her scholarly use of a wealth of data (from corpora, as well as from linguistic and non-linguistic experiments), and a clear exposition of the facts that never loses track of the main goal (to challenge received wisdom on the innateness issue), constitute a strong case for the view that general cognitive abilities may indeed be enough to get the acquisition process off the ground without special innate machinery. Part II concludes with an insightful demonstration (more corpus data, more experiments) that constructions are better predictors of overall sentence meaning than verbs, despite a long tradition in the field of linguistics of considering the main verb to be the key word in a clause. Given the importance of prediction in actual language use, this makes constructions more than just useful in learning. Over and above learnability per se, their strong predictive value strengthens their representational status in the grammar.

The third part of the book feels a little less homogeneous than the first two, perhaps because Part III reverts to the arena were linguistic battles are fought, and thus its connection with the more cognitively-oriented Part II is not immediately apparent. A commendable feature of Part III is no doubt the extension of Goldberg’s constructionist views to areas of grammar, such as constraints on movement or Subject-Auxiliary Inversion, not previously examined by constructionist approaches and often claimed to be amenable only to formal explanations. In the context of the rivalry between formal and functional/cognitive models of language, the two fundamental notions that Goldberg wields in order to defend functional/cognitive models are discourse and information structure on the one hand, and processing needs on the other. I would like to concentrate more on information structure, since it takes up by far the bulk of Goldberg’s attention.

Part III opens with a brief outline of Ross’s seminal analysis (1967) of certain syntactic constructions as ISLANDS to unbounded dependency relations or EXTRACTION. Islands include, for instance, complex noun phrases, as in (1), and complex subjects, as in (2):

(1) *Who did she see the report that was about? (cf. She saw the report that was about x)
(2) *Who did that she knew bother him? (cf. That she knew x bothered him)
Building on research by Erteschik-Shir (1979) and Van Valin (1998), among others, Goldberg suggests (p. 135) that (almost) all unbounded dependency relations can be accounted for with the generalization in (3):

(3) Backgrounded constructions are islands (BCI)

Backgrounded constructions are understood as those constituents that correspond neither to the primary topic of a sentence nor to part of the potential focus domain (i.e. that part of a sentence that is interpretable as being asserted). In declarative sentences topics are usually identified as subjects. As for the potential focus domain, Goldberg uses the habitual constancy under negation test to check whether something is part of the potential focus domain or not. Thus, for instance, if we negate the sentence She saw the report that was about Jim to yield She didn't see the report that was about Jim, the report is still understood to be about Jim, which means that the predication 'The report was about Jim' is outside the focus domain.

Having thus identified a procedure for revealing backgroundedness, the rest of Chapter 7, an important chapter, is devoted to putting the BCI to the test. For instance, Goldberg argues, convincingly, that the ditransitive recipient argument (e.g. her in Chris gave her the book) resists unbounded dependencies because it is backgrounded. She uses corpus counts to show that when a recipient is questioned, prepositional paraphrases (i.e. Who did Chris give the book to?) outnumber ditransitives by forty to one (this despite prescriptive pressure against stranding). This statistical difference reflects the fact that recipients rarely introduce a new argument into the discourse –note that they are typically pronominal or tend to be realized by definite NPs–, unlike the goal argument of the prepositional paraphrase (Chris gave the book to a man), which is not constrained in this way and can introduce new information. Yet despite the statistical trend for the recipient argument to be backgrounded, Goldberg is quick to add that, since “backgrounded arguments correspond to a lack of cognitive attention” (p. 141), some gradience is to be expected, which explains apparent exceptions like The US committee hoped to give an American the award, where an American is new information and therefore not an island. Goldberg surveys a large number of constructions and generally manages to prove that: a) backgroundedness is indeed gradient; b) when something is clearly backgrounded it cannot be moved; and c) when backgroundedness is unclear, acceptability judgements on extraction are less robust, as one would predict.
One positive aspect regarding her account is that when the “tricky cases” come, namely relative clauses headed by indefinite NPs such as She didn’t meet a boy who resembled her father and wh-complements such as She wasn’t wondering whether she would meet William —two structures which, contrary to the prediction of the BCI, are not backgrounded and yet are islands—we are informed that the BCI cannot explain them. At this point Goldberg compares (p. 150) what the BCI can explain with the predictions made by the subjacency constraint that is usually appealed to in formal accounts of island phenomena, and one is left with the impression that the comparison supports her case. Indeed, as she herself points out, when it comes to explanatory adequacy, it is not clear that the formal account offers much of it when merely stating the obvious, namely that some constructions are islands, and the not so obvious, namely that they must therefore reflect innate formal properties of language. Goldberg’s stance strikes one as much more explanatory: movement brings something under the spotlight, so “it is pragmatically anomalous to treat an element as at once backgrounded and discourse-prominent” (p. 135). In this way, “[m]ost if not all of the traditional constraints on ‘movement’ — i.e. the impossibility of combining a construction involving a long-distance dependency with another construction — derive from clashes of information-structure properties of the constructions involved” (p. 132).

The one aspect where her account of long-distance dependencies leaves us asking for more is when she discusses the role of processing demands (pp. 151–155). She starts by recognising the processing load involved when arguments are displaced relative to canonical word orders, a load caused by holding a filler in working memory while scanning the sentence in search of a gap for it. Thus, for instance, in Who do you think Jane has told Anne to come here with _ in the end?, who must be kept in memory till a place for it can be found after the preposition with, while the rest of the sentence continues to be processed. However, she immediately points out, correctly, that processing accounts of island effects cannot predict the full range of facts she has examined in Chapter 7 (for instance, why clause boundaries involving manner-of-speaking verbs should prove harder to cross than clause boundaries of other verbs; compare in this respect the unacceptability of ???What did she whisper that she left with the fully acceptable What did she think that she left?). In view of this, when just two pages later she concludes that “displacement from canonical position creates additional processing load and this combines with the pragmatic clash to result in unacceptability”
(p. 155), one misses the combination of shrewd linguistic thinking and knowledge of experimental research that so brilliantly characterizes Part II. The section is too sketchy and the topic too fascinating and complex to be left solely at that. Within the burgeoning growth of psycholinguistic literature on gap-filling (see Phillips & Wagers 2006 for a review), there is, in fact, a particular topic in psycholinguistic research where Goldberg’s view might be of the greatest value. This has to do with the so-called FILLED-GAP EFFECT (Stowe 1984) that is routinely registered when a NP is encountered at a position where a gap is postulated, as is the case of us in (4):

(4) Jill wishes to know who Pete will want US to talk to.

Stowe (1984) detected a clear slowdown at positions like that of us due to an expected gap co-indexed with the filler who precisely at that point in the sentence (as in Jill wishes to know who Pete will want). This robust effect has been replicated in language after language. Such expectancies of the parser have been used to argue for “active” gap-filling (the parser does not wait but instead predicts) and the existence of traces/empty categories (Frazier & Flores D’Arcais 1989). However, Pickering & Barry (1991) have argued for a DIRECT ASSOCIATION of the filler and the verb, which would make postulating a gap, and a trace/empty category, inessential (the so-called DIRECT ASSOCIATION HYPOTHESIS). When results from Japanese and other head-final languages showed filled-gap effects before the verb, the Direct Association Hypothesis lost much of its credit. And it is precisely here where a constructionist approach such as that which Goldberg so ardently advocates might show its value: in Japanese arguments are case-marked, which means that language-users might have conjured up a constructional schema with an abstract V feature even before the actual appearance of the verb. In the light of the great predictive value of constructions (even over verbs) that Goldberg so eloquently demonstrates in Part II, one would have liked her to explore such a possibility, and to examine its implications. Maybe the future will, if you forgive the pun, fill this gap.

It must be said that, if I dare express a little dissatisfaction over the processing issue, it is precisely because the author has written an excellent book in which she manages to bring together evidence from a variety of different sources to erect a building where constructions in a systemic network on the one hand and general cognitive abilities on the other hold so much weight. I have found Constructions at work a must-have book. The
author’s elegance and clarity of vision, her knowledge of research beyond linguistics proper, as well as her empathy with the reader and her honesty about the not-so-clear cases, are engaging. If at times one is left wanting a little more, it is precisely because the book’s broad cognitive orientation makes it all the more appetizing.

References


Reviewer’s address
Department of English
Facultad de Filología
Universidad de Santiago de Compostela
15782 Santiago de Compostela, Spain

Received: 18 May 2006

Reviewed by J. LACHLAN MACKENZIE, Lisbon

Anna Siewierska’s *Person* is the latest of the Cambridge Textbooks in Linguistics to carry a one-word title, in the tradition of Bernard Comrie’s *Aspect* (1976) and *Tense* (1985), Greville Corbett’s *Gender* (1991) and *Number* (2000), and Barry Blake’s *Case* (2001). Her book can lay claim to similar authoritative status, being based on an enormous database covering more than 400 languages (the “sample”); but it actually goes beyond this database, drawing on over 700 languages and offering in the bibliography only the references directly quoted.¹

Any naïve expectation that person is a straightforward category of grammar, with few differences among languages, is quickly dispelled by the immense complexity of the data presented. Siewierska shows that each language displays systematicity in its person forms, but also that there is enormous variety, not least because many languages contain different systems of person forms. Her aim, then, is to provide an exhaustive description of the data and to account for the cross-linguistic variation that she finds. Her approach to explanation is functionalist: emphasis is laid on the cognitive and discourse factors that motivate the structure of person systems.

The book consists of seven chapters, as well as two appendices, the first listing the languages in the sample, the second indicating the genetic classification of all languages cited. The introductory chapter lays the foundation for the book, carefully demarcating its scope. *Person* is to deal with only those references to speaker, addressee and third party that belong to the “closed set of expressions for the identification of the three discourse roles” (p. 2); this excludes, for example, such playful uses of proper names as in (1), said by Peter to his wife Sarah:

---

¹ The additional references for *Person* can be found at http://www.ling.lancs.ac.uk/staff/anna/additionalreferences.doc.
(1) Peter is going to take Sarah out for dinner tonight.

In addition, Siewierska announces that she will eschew the term PRONOUN, since the book awards equal status to free and bound forms. Thus, in (2) both she and –s indicate person (among other categories, of course):

(2) She likes chocolate.

In Siewierska’s parlance she and –s are PERSON FORMS or PERSON MARKERS. She tends to use the latter term, although this can at times be rather confusing: to me, –s may be seen as marking like as third-person, but it is strange to see she as doing so. I myself will therefore henceforth use only person form except where a true marker is meant.

Chapter 2 presents a typology of person forms, arguing for a distinction between independent and dependent forms (such as she and –s respectively in (2)) and for a cline of dependent forms ranging from weak forms, through clitic and bound forms, to zero. The chapter then considers how these distinctions cross-classify with syntactic functions (subject, object, etc.), before giving a thorough presentation of morphological alignment (nominative–accusative, ergative–absolutive, active, etc.) for both mono- and ditransitive clauses, with reference also to split alignment. Chapter 2 closes with a treatment of emphatic person forms, with emphasis being understood as discourse prominence.

The closed sets of person forms are known as paradigms, and it is to their structure that Chapter 3 is devoted. Siewierska has found that paradigms that fail to distinguish all three persons are relatively infrequent; an example would be the homophony of first and third person singular tinha (‘I had’, ‘s/he had’) in the Portuguese “imperfect” past tense. But the bulk of the chapter concerns the cross-cutting of person with number and gender. While there are languages in which the person forms do not co-indicate number (e.g. Pirahã, familiar for its lack of numbers and of counting; cf. Everett 2005), Siewierska shows that person paradigms may evince as many as five number oppositions (singular, plural, trial, quadral and plural in the case of Sursurunga), although not necessarily in all persons. “The resulting array of person paradigms is quite bewildering”, she writes (p. 96), going on to present Cysouw’s (2001) systematizing of this profusion (note, incidentally, that Siewierska misdates Cysouw as 2000 and that a book such as hers published in 2004 could have quoted his 2003 OUP version). The chapter
continues by showing how gender (sex-based or otherwise) interacts with both person and number in the paradigms and concludes, rather abruptly and without any summary of the major findings, with a comparison of the relative richness of independent and dependent paradigms (the former being generally but not exclusively richer).

Person forms are found not only in association with verbs (or more generally "predicates"), but also nouns (as possessives) and adpositions. This comes to the fore in Chapter 4, which deals with person agreement. Agreement is taken to involve covariance between a controller and a target within a domain (e.g. a clause, a NP, etc.). To return to (2) above, she is a controller and –s a target, and are classifiable as anaphoric pronoun and agreement marker respectively. However, Siewierska considers other types of language, namely pro-drop languages in which the marker can occur with or without the controller, and languages such as Macushi in which the marker is absent when the controller is present, concluding that the distinction between anaphoric pronoun and agreement marker cannot be made universally. She therefore distinguishes PRONOMINAL (Macushi) and SYNTACTIC agreement (English), with pro-drop languages manifesting AMBIGUOUS agreement. On this basis, the rest of the chapter considers how person agreement varies with the nature of the target, as intransitive, monotransitive, or ditransitive predicate, as noun, or as adposition. It then turns to a study of the controllers of person agreement, revealing a strong correlation with topicworthiness, i.e. controllers will tend to be human rather than inanimate, definite rather than non-specific, and not in focus. The chapter closes, again rather suddenly, with an analysis of the markers of person agreement, in which the claimed universal preference for suffixes over prefixes (Hawkins & Gilligan 1988, Fortescue & Mackenzie 2004) is shown to be only very weakly supported for person agreement.

Having set out the data in all their complexity, the author in Chapter 5 turns to functional explanation, seeing person forms as reference-tracking devices in discourse. The approach taken is that of cognitive discourse analysis, as propounded in differing ways by Ariel (1990) and Gundel et al. (1993). The discussion covers such matters as discourse saliency, topic shift, competition between referents, and accessibility. Chomsky’s (1981) Binding Theory is presented, with its radical refinement in Reinhart & Reuland (1993), and argued to be fully compatible with and indeed understandable through the insights of the cognitive approach. However, these insights are
Knowledge of person forms and their discourse functions is not the whole story, however: the morphosyntax of person is crucially impacted by the social relations between speaker, addressee and third parties. Basing her discussion of these matters in Chapter 6 on Brown & Gilman’s (1960) dimensions of power and solidarity, Siewierska considers variation in number (e.g. French plural vous for respectful reference to a singular addressee) and in person (e.g. Italian 3rd-person Lei for respectful reference to a singular addressee), as well as the use of reflexives (notably in Dravidian languages) to indicate honorification. The remainder of the chapter deals with special honorific person forms, giving an impression of the vast complexity that prevails in some languages, and with some languages’ strategy of indicating respect by omitting person forms.

The final chapter considers the diachronic origins of person forms. These are shown to be quite varied: some have lexical origins, such as Dutch U from Uw Edelheid (‘Your Nobility’) – although Siewierska does not mention that this massive reduction probably went via the contraction U.E.; others come from demonstratives; dependent markers may derive from independent ones; some person forms develop from reduced periphrastic (cleft or auxiliary) constructions; and so on. The following theme is the development of syntactic agreement markers of the kind found in English: these, it is emphasized, are “cross-linguistically very uncommon” (p. 268), which should surely make theoreticians wary of assuming universal Agreement Phrases. Three hypotheses about their origins are passed in review, but none is found entirely satisfactory. The chapter (and the book) closes with description of the borrowing and attrition respectively of person markers.

Siewierska’s book is demanding, squeezing between the covers an enormous amount of information collated over years of painstaking consultation of grammars and presented for the first time. The series in which it appears aims according to its website to provide volumes “suitable for undergraduate students taking linguistics as part of an introductory course”, a modest ambition indeed. Person, by contrast, is first and foremost a work of great scholarship, presupposing considerable familiarity with linguistic concepts, and not fare for a beginner. Although the excellent and reliable indexes make the content very accessible for a researcher, the medias in res approach to chapter beginnings, the unremitting surge of information
within the chapters and the lack of summarizing sections put this book beyond the reach of the novice.

The amount of data presented in the book is huge: there must be well over 1,000 items quoted. Nevertheless, this has not always been done with the accuracy that would befit the intensity of the argumentation; I cannot but conclude that the editorial work by the publisher has been rather slipshod. Let me give some examples. On pp. 242–243, data is quoted from Maithili on the basis of Bickel et al. (1999). The morpheme from example (54a) āuh is given in the text as auh; the textual word and is confusingly italicized; in example (54b) the morpheme –l is glossed as IMPF rather than as PAST; neither (54b) nor (54d) is quoted on the page from Bickel et al. that is given; (56b) is wrongly given as (56c); in (58c and d) the same word (properly dekh-al-k-ainh) is given as dekh-ak-ainh and dekha-l-k-ainh respectively. These errors do not make the complex argumentation on these pages any easier to follow. On p. 252, a paradigm is presented for Pari from Andersen (1988: 297). Consultation of the original article reveals that of the 14 forms, 7 are wrongly cited: 2SG Indep should be ?iini, 2SG S/P should be i-/l-, 1PL EXCL should read wá-, 2PL should also indicate a lax high back vowel as an alternative to ú-, 3PL should be gi-, and the correct form for 1PL INCL, both Indep and S/P, is ?ɔ̀ɔní. I have found so many of these inaccuracies that I would advise readers of the book not to quote any data without checking back to the original (as one always should, of course, cf. Muir 2002).

There is also imprecision in the quoting of European languages: on p. 32, Polish proszę ‘I ask’ appears as prozse; on p. 157, we should read Porteño Spanish (with tilde); on p. 158, the correct 3SGM form in Romanian is îl; on p. 218, French présenterons should be glossed as future tense; it is not true to state of French on p. 223 that like in German (Sie) the third person plural is used deferentially for second person; in Hungarian, 2PL (formal) is maguk, not maguuk, cf. (26) on p. 226; in example (49) on p. 236, the accents are missing from French épousera and fière; and homophony of second- and third-person singular forms of the indicative in Dutch is not, as is stated on p. 269, limited to weak verbs (cf. jij komt ‘2SG comes’ and hij/zij komt ’3SGM/F comes’, from the strong verb komen). It is also surprising (and at times confusing) that the glottal stop is represented throughout by the interrogation mark <?>, also used to indicate dubious grammaticality, and not the phoneme /ʔ/.

Siewierska recognizes six morphological alignments in ditransitive clauses, including the secundative alignment whereby P (transitive patient)
and R (ditransitive recipient) are aligned as against T (ditransitive theme). A language argued to instantiate this type is Spanish, for which three examples are given under (86) on p. 59. Unfortunately, there are errors here that vitiate the discussion. In (86a) and (86b) the acute accents are missing from mí, darán and él, and the T of (86b) is wrongly glossed as ‘him’ rather than ‘it’.

The real problem, however, is with (86c), La lo darán ella a Antonia (no mi), glossed as ‘They sent her to Antonia, not me’, in which we must take ‘me’ to be T not R (i.e. They chose her rather than me as their envoy to Antonia). This example has the lexical error dar ‘give’ for enviar or mandar ‘send’, and the grammatical errors of the wrong selection of tense (future –án rather than past -aron) and of having two 3rd-person pronouns in sequence (the first must in such circumstances change to se). In addition, the contrastively focused ditransitive theme (T) ella is better placed initially and, being human, must be marked by the preposition a, as must the T (mi) of the elliptical clause. A rule against double occurrences of a-marked human arguments in turn makes it impossible to mark the R with a, which has to be replaced by the preposition con ‘with’, which for its part cannot have a coreferential clitic se. (86c), which as Siewierska admits is “a highly atypical construction” (p. 61), above all in having a human T, should therefore read A ella la mandaron con Antonia, no a mí. The conclusion must be that secundative alignment in Spanish is more complex than Siewierska presents and does not apply in the presence of a human T.

For all these lapses, Siewierska’s book remains a goldmine of inspiration. Among the many observations cited in her compendious study is Cardinaletti & Starke’s (1999) distinction between “weak forms” and clitics. These authors identify such forms as French il (3SGM) in preverbal position as weak forms rather than clitics because they take lexical word stress and can be elided, as in (3) (my example is based on Siewierska’s (56a) and (56b), p. 37):

\[
(3) \quad \text{Il me verr-a et *(me) salu-er-a} \\
3\text{SGM} \quad 1\text{SG} \quad \text{see.FUT-3SG} \quad \text{and} \quad 1\text{SG} \quad \text{greet-FUT-3SG}
\]

‘He will see (me) and greet me.’

I wish to thank Francisco Gonzálvez-García and Chris Butler for their help with the analysis of this example.
Note, however, that French thereby constitutes an exception to Siewierska’s prediction that “there should be no languages … with weak subject forms but clitic object ones” (p. 46), since me is clearly clitic, not being omissible from the second clause in (3).

This is but one modest example of how the many hypotheses launched in *Person* will be submitted to verification and falsification in the years to come. Siewierska is to be congratulated on establishing the study of person as a unified, if highly complex, field within linguistics.

**References**


Reviewer’s address
Av. António Augusto de Aguiar 110 6ºB
1050-019 Lisboa, Portugal

e-mail: lachlan_mackenzie@hotmail.com

Received: 15 December 2005
Table of Contents

Editorial note 189

Articles

Alja Ferme (Ljubljana): Obstruent devoicing and voice assimilation in Slovene 191

Christian Lehmann (Erfurt): The value of a language 207

Eva van Lier (Amsterdam): Parts-of-speech systems and dependent clauses: A typological study 239

Víctor M. Longa (Santiago de Compostela): A misconception about the Baldwin Effect: Implications for language evolution 305

Peter Willemse (Leuven): Esphoric the N of a(n) N-nominals: Forward bridging to an indefinite reference point 319

Book Reviews

Walter Bisang, Nikolaus P. Himmelmann & Björn Wiemer, eds.: What makes grammaticalization? A look from its fringes and its components
Reviewed by Torsten Leuschner (Ghent) 365

Laurel J. Brinton & Elizabeth Closs Traugott: Lexicalization and language change
Reviewed by Ilse Wischer (Potsdam) 372

Sonia Cristofaro: Subordination
Reviewed by Francisco Gonzálvez-García (Almería) 381

Adele E. Goldberg: Constructions at work. The nature of generalization in language
Reviewed by J. Carlos Acuña-Fariña (Santiago de Compostela) 391

Anna Siewierska: Person
Reviewed by J. Lachlan Mackenzie (Lisbon) 400

Miscellanea


Acknowledgements 412

Notes to Contributors 413

Conference Announcement: 40th Annual Meeting of the Societas Linguistica Europaea 421

Index to Volume 40 422

© 2006
Mouton de Gruyter, Berlin & Societas Linguistica Europaea

ISSN 0165-4004 print
ISSN 1614-7308 online