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In the past three decades, grammaticalization has become an increasingly important approach within the field of diachronic linguistics. Arguably, it has even acquired the status of an informal set of theoretical assumptions in a period when linguistic schools in the strict sense are on the wane. This status is reflected by a number of seminal articles (e.g. Lehmann 1982, 1985; Traugott 1982, 1989; Hopper 1991) and central textbooks (e.g. Hopper & Traugott [1993] 2003; Heine & Kuteva 2002) which propose definitions of grammaticalization, and criteria by which such types of language change can be recognized. In addition, grammaticalization has spawned a series of conferences ('New reflections on grammaticalization'), and some workshops and symposia. The present volume finds its origin in such a workshop, the symposium 'What's new in grammaticalization?', held in Berlin in 2007. It brings together thirteen papers tackling issues and addressing unresolved questions in current grammaticalization research. In their introduction, the editors locate the contribution of the volume to the field in three areas, which is reflected in the three-part structure of the book.

The first part discusses old and recent issues that have figured prominently in functional approaches to grammaticalization. Topics of old standing include the notion of

grammar in grammaticalization research, Lehmann's parameter of erosion in grammaticalization, and the directionality of grammaticalization, extending the debate to degrammaticalization. More recent topics are constructional issues in grammaticalization and the notion of subjectification. The volume makes a flying start with an excellent paper by Gabriele Diewald. She identifies three problem areas in grammaticalization studies, and at the same time conveniently summarizes the state of the art in current theoretical models of grammaticalization. The first problem pertains to the discrimination and isolation of distinctive characteristics of the process of grammaticalization, as opposed to for example lexicalization. Here Diewald's answer is that there is no bundle of features that uniquely defines grammaticalization. The second problem involves the question of what counts as an explicitly expressed grammatical function, and the third problem relates to how to conceive of the distinct set of meanings and functions of grammatical items. Diewald convincingly argues that these problems are closely related and that they originate in the lack of a precise and explicit definition of the target area of grammaticalization, i.e. the notion of 'grammar'. She puts forth a highly personal view as to which features are defining of grammar, starting from the inherently indexal or deictic – relational – nature of grammatical signs. The defining features proposed involve three 'deictic' types of relational structure. First, grammatical signs often relate in some way to the deictic origo (the source of the linguistic production), which enables the hearer to retrieve the origo and the type of relation that holds between the linguistic utterance and the extralinguistic situation (e.g. tense, mood). Second, grammatical signs point to specific elements in their syntagm (establishing syntagmatic relations, e.g. valency relations). Third, on the paradigmatic plane, grammatical signs point to the unmarked value of a paradigm and establish intra-

paradigmatic oppositions. Diewald argues that grammatical elements always incorporate at least this third relational structure in their meaning.¹ In this contribution, Diewald puts some essential questions to grammaticalization theorists, to which her answers, as she notes herself, may as yet be somewhat speculative, but they warrant serious consideration.

The second theoretically oriented paper, by Graeme Trousdale, advocates a ‘holistic’ constructional approach to grammaticalization. It considers the emergence and development of whole constructional types, and how these are optimized in constructional networks. Referring to existing research on constructional grammaticalization in English, he focuses on the development of adverbial binominal degree modifiers from partitives (cf. Traugott 2007, 2008), the development of a set of composite predicate constructions (e.g. *to have lunch, to give a beating-up*) (cf. Trousdale 2008a), and the grammaticalization of argument structure, including the loss of impersonal-transitives (cf. Trousdale 2008b). He also argues that a constructional account can offer us a coherent analysis of both grammaticalization and lexicalization (cf. Trousdale 2008c) – in his terms, grammatical and lexical constructionalization – which both involve entrenchment of constructions. In the case of grammaticalization, what gets entrenched is a more schematic construction (at meso- or macro-level), whereas in the case of lexicalization it is a more substantive construction (at micro-level). In his view, grammaticalization also involves greater productivity, i.e. it becomes applicable to more lexical types, as well as a higher token frequency. Lexicalization, by contrast, is characterized by lower pattern productivity and is not expected to involve increased token frequency (53). Trousdale acknowledges that establishing what level of frequency is sufficient for pattern-storage is problematic (52, n1), and this, arguably, is Construction Grammar’s Achilles heel (see also Dahl 2004: 91, 125).

In this respect, it would have added to his story if he had included some quantitative evidence in the case-studies.

Rene Schiering takes a typological approach to grammaticalization, and investigates the universality of erosion, the loss of phonological substance, as a concomitant of grammaticalization, in particular in processes of cliticization. Although with 19 languages his cross-linguistic sample is fairly small, his findings are interesting. With regard to suprasegmental phonology, the – synchronic – prosodic behaviour of clitics is observed to vary according to the overall prosodic system of the language, namely stress, tone, intonation or combinations thereof (84), with erosive effects being restricted to stress phonologies. In segmental phonology, erosion seems to be one of a set of available options. Schiering goes on to propose a rhythm-based typology, which allows one to predict the cross-linguistic distribution of erosive grammaticalization. Across stress-, syllable-, and mora-based languages, the highest potential for erosion is predicted for stress-based languages, while syllable- and mora-based languages are predicted to show limited phonological reduction, taking place only at morpheme boundaries (85). Evidence is provided from two diachronic case-studies with data from the literature. In stress-based German, the encliticized definite article is often found to fuse phonologically with a preceding preposition, yielding a monosyllabic item (e.g. *an dem* ‘at the’ > *am*). In syllable-based Turkish, by contrast, the syllabic status of encliticized subject pronouns is retained (e.g. 2SG *sen* > *-sin*). Emphasizing the relevance of individual grammar or language types, Schiering thus draws our attention to the existence of structural factors that constrain the development of linguistic forms (97). It will be interesting to find out whether (and how)

other processes regarded as defining of grammaticalization (cf. Lehmann 1995) bear up to similar typological testing.

In her paper on the relation between grammaticalization and subjectification, Svenja Kranich returns to languages with long, well-documented histories that are popular in grammaticalization studies, viz. Germanic, Romance and Celtic languages. Adopting Traugott's (2010) distinction between primary grammaticalization (i.e. a lexical item or items first become(s) grammaticalized) and secondary grammaticalization (i.e. an already grammatical element or construction becomes more grammatical), she argues that while the former is typically accompanied by subjectification (cf. Traugott 2010), the latter is characterized by the reverse semantic development, namely objectification. This conclusion is a logical one, as – with Traugott (2010) – she sees optionality of the linguistic form or construction as a prerequisite for subjective meaning (i.e. the speaker must be free to choose whether or not to use it, 102-103), and as advanced grammaticalization has already been noted to be characterized by obligatorification (Lehmann 1995). She illustrates this point with three case-studies on tense and aspect markers in the language families mentioned above, which developed along well-known grammaticalization paths: (i) the development of perfect or past tense markers from expressions of possession, (ii) the development of progressives from expressions with a copula, locative or movement verb, and (iii) the development of future markers from expressions of volition or obligation (cf. Bybee & Dahl 1989: 57). She suggests that the very idea of subjectification characterizing the whole course of a grammaticalization process probably arose through the wealth of diachronic studies on modal auxiliaries, which do develop increasingly subjective meanings

(e.g. Traugott 1989). She holds that this idea should not simply be extrapolated to other types of grammatical markers.

Whereas the previous four theoretical contributions assumed either implicitly or explicitly that grammaticalization is a unidirectional process, the final two papers of the first part focus on what has often been assumed to be the ‘reverse’ process, i.e. degrammaticalization. Muriel Norde tackles three controversies about this topic, and proposes a definition and classification of degrammaticalization. First, she states that degrammaticalization is not a (potentially) full reversal of a grammaticalization cline, but rather represents a single change on the ‘cline of grammaticality’ presented in Hopper & Traugott (2003: 7). Secondly, she argues that degrammaticalization is – like grammaticalization – a composite process, involving changes in both function and form. Thirdly, she answers the question of whether degrammaticalization changes can be classified positively. In accordance with these premises, Norde proposes a framework for classifying degrammaticalization, building on Lehmann’s (1995) parameters of grammaticalization and Andersen’s (2006) ‘levels of observation’ in language change. She arrives at three distinct types of degrammaticalization and discusses examples. First, *degrammatization* involves the reanalysis of a function word as a member of a major word class through pragmatic inferencing (e.g. the development of the full verb *wotte* ‘to wish’ from the past subjunctive of modal *welle* ‘to want’ in Pennsylvania German). Second, *deinflectionalization* involves exaptation of obsolescent morphemes, accompanied by a shift to a less bound status (e.g. the development of the *s*-genitive in English and Continental Scandinavian; here the explanation of why this development instantiates deobligatorification is beside the point: there is no reference to the availability of other

strategies for marking a possessive/determiner relation). Third, *debonding* refers to a process in which a bound morpheme becomes a free morpheme. It may affect inflectional affixes (e.g. the development of Northern Saami *haga* ‘without’ from abessive case suffix to a postposition), derivational affixes (e.g. the development of English *ish* from a derivational suffix to a free morpheme), and clitics. Norde’s elucidation of degrammaticalization feeds back into a clearer delineation of the processes of grammaticalization and lexicalization.

David Willis is also concerned with counterdirectional change, but focuses specifically on obsolescent morphology. He discusses the development of the person-number inflection of the conditional auxiliary in Slavonic languages, which in some of them (e.g. Russian, Slovak) came to be identified with an existing clitic, i.e. the present tense of the perfect auxiliary ‘be’. In great detail he reconstructs the common Slavonic conditional, and then traces the developments of its paradigm up to present-day Russian. He shows that by the mid 14th century the earlier synthetic form *byste* of the second person plural had been replaced by an analytical form *by este* (*este* being an existing form in the language, namely the 2PL auxiliary form ‘be’), and that in the second person singular, the original form *by* had been augmented by the auxiliary form *esi*. The developments in Ukrainian, Slovak, Serbian and Croatian are discussed more briefly, but are agreed to also bear out the proposed reanalysis. Willis characterizes the development as exaptation-adaptation, which is yet different from the types of degrammaticalization discussed by Norde. In this type, material from an obsolescent morphosyntactic system undergoes category reanalysis, adapting to the properties of the other members of the category to which it is reassigned (171). The main points he makes are that morphs that encode

obsolescent morphosyntactic features are more likely to undergo reanalysis than morphs that mark productive morphosyntactic features, and that the reanalysis they undergo may be unexpected or counterdirectional (171).

The second part of the volume deals with the role of grammaticalization in the explanation of language change, in addition and contrast to other processes such as analogy and exaptation. As the editors signal in their introduction, the papers in this part address the tension between formal and functional approaches to grammaticalization and language change in general, and discuss whether (and how) these can be reconciled (7). Olga Fischer opens the debate somewhat provocatively by stating that current grammaticalization approaches are not adequate for the explanation of language change in that they do not take enough notice of formal factors (however, this is an overgeneralization, cf. the papers in Van linden *et al.* 2010). She confronts the functional model of grammaticalization, which emphasizes semantic-pragmatic factors as steering language change, with formal models, which see instantaneous intra-linguistic parameter shifts as important mechanisms of change. Her own position is to make equal use of formal and functional aspects, and to regard the cognitive principle of analogy, which draws on both iconic and indexical forces, as a cause as well as a mechanism of change. The analogy principle plays a crucial role both in language use and in the mind of the language user. More generally, she proposes an adaptive model of language (cf. Haspelmath 1999), in which grammaticalization is viewed as merely an epiphenomenon, rather than a mechanism, of change (cf. Lightfoot 1999; Campbell 2001; Janda 2001; Joseph 2001). She applies these ideas to the development of pragmatic markers in English, for which she proposes an alternative analysis. She makes the closely argued proposal that this development does not involve a direct scope increase

(*pace* Tabor & Traugott 1998: 244-245). Rather, analogy has been at work between verbal adjuncts (e.g. *truly*) and reduced clauses (e.g. *it is true (that)*), in which the formal features of position and word order as well as the original semantic content of the adverbial phrase or reduced clause played a crucial part. In this way, Fischer draws due attention to factors internal to the (current) language system that steer language change.

The contribution by Gunther De Vogelaer on the development of pronouns into clitics and agreement markers in West Germanic and Romance dialects fits in nicely with Fischer's paper. He too argues for the adequacy of explaining language change in terms of analogy rather than reanalysis. In the process, he pays ample attention to structural factors such as syntactic environments (main versus dependent clause), word order and the possibility of subject markers to combine with coreferential or non-referential elements,² or more generally, the synchronic state of the languages' grammars. In doing so, he is able to account for the observation that in some Romance dialects strong pronouns have fully grammaticalized into agreement markers, with uses as weak pronouns and clitics as intermediate stages, whereas in some West Germanic dialects, the final step of this development was hampered by the non-availability of some analogical extensions, specifically the use of clitics in the position enclitic to embedded clause verbs. In fact, clitics are found to move on to a different – cross-linguistically rare – pathway in East Flemish dialects, as they have developed a topic-marking function. De Vogelaer's detailed case-study adduces additional evidence for Fischer's point that the synchronic grammatical system has to be taken into account in the study of actual processes of grammaticalization.

Debra Ziegeler also draws on both generative and functional accounts in order to come to grips with the much-debated topic of same-subject control. Her starting point is the

observation of constructions in Colloquial Singaporean English (CSE) that seem to lack subject control relations, like (i) *this curry can eat with naan bread* and (ii) *the new telephone in your room is not able to use yet*. Noting that the Chinese and Malay substrates are topic-comment languages, Ziegeler invokes language contact to analyse sentences like (i) as topic-comment structures, with a dropped subject of the comment clause. For examples like (ii), which show agreement between the preverbal NP and the finite verb, she hypothesizes an analysis in terms of a further stage in the development towards subject-predicate structure. However, at least for this reader, her main question of how these CSE phenomena bear on a theory of subject control is not clearly answered. Ziegeler shows how Heine's (1993) account of the grammaticalization of auxiliaries can be used to explain the relation of subject control to subject selection in the complement. That is, in a grammaticalizing auxiliary complex (with the initial main verb, V1, and the initial complement verb, V2), subject selection shifts rightward from V1 assignment to V2 assignment with an accompanying shift in lexical weight across the verbal complex (Heine 1993: 60). In other words, subject selection properties of V2 are determined by the degree of grammaticalization of V1. However, Heine's account of the Verb-to-TAM development is not very clearly linked back to the “anomalous” (266, 269) CSE cases. It thus remains to be uncovered how the degree of grammaticalization of the auxiliaries relates to the analysis of these cases in terms of topic-comment or topic-subject structures, and what it reveals about same-subject control.

The last contribution investigating the explanatory power of grammaticalization is the one by Elisabeth Stark & Natascha Pomino. They trace the origin of the invariable Spanish pronominal forms *el*, *lo*, *est*, *es* and *aquel* back to Latin neuter pronouns, and

try to identify the type(s) of language change these forms underwent. They present a number of sound arguments from the literature for an analysis of the present-day Spanish forms in terms of non-individuation. That is, the pronominal forms refer to intensional objects like propositions or concepts, which cannot be individualized (they have no temporal or spatial delineation, unlike for instance concrete objects such as flowers) (275–276). In reconstructing the development of these ‘neuters’ from Latin to Spanish, they use Harley & Ritter’s (2002) analytical tool of feature geometry, specifying the various semantic properties of personal pronouns. However, it is not entirely clear whether the various geometries they present (in (10), (12) and (14)–(16)) are to be taken as real stages in the diachronic development from Latin to Spanish. (From the accompanying discussion (280, 283), I gather that the stage eventually posited for Modern Spanish (16) basically applies in Latin too.) Stark & Pomino make a strong case that the changes in the pronominal systems at issue are not adequately explained by grammaticalization, nor by exaptation. In the process, they seem to contradict themselves in arguing that the ‘neuters’ introduce a new functional category (that of non-individuation, 287), while later on they state that this function has been preserved from Latin, where the forms had several additional functions as well (referring to non-count nouns, abstract nouns, etc., 289). In my view, their alternative explanation in terms of metonymy leaves us with some questions, such as what type of contiguity relation is assumed to hold between which meanings, and when did this metonymic shift happen?

The final three papers present case-studies based on new empirical data, and home in on micro-processes of grammaticalization. Elke Gehweiler investigates the grammaticalization of German *lauter* and *eitel*, which developed from privative adjectives

meaning ‘pure, unmixed’ to intensifiers meaning ‘nothing else/less/better than’. *Lauter* also developed a determiner function in Early New High German, meaning ‘much/many, only’ (e.g. *lauter Blödsinn*, ‘pure nonsense, only nonsense’). Gehweiler illustrates these semantic developments with rich corpus data, and points out the role of ambiguity, collocation patterns, bridging contexts, (shifts in) semantic prosody, and (the emergence of) syntactic constraints, in this case the obligatorification of the adjectival inflection during Early New High German. Even though she waits until the last five lines of the paper to explicitly relate the diachronic developments of *lauter* and *eitel* to the process of grammaticalization, her contribution clearly shows the added value of combining detailed qualitative analyses with quantitative analyses.

Both types of analysis are also combined in Katerina Stathi’s study of the German construction *gehören* + passive perfect participle. Drawing on diachronic data from the *Deutsches Wörterbuch*, Stathi traces the semantic and structural changes of the verb *gehören* within its various syntactic environments. The historical data, together with the synchronic corpus findings, show that *gehören* + participle grammaticalized along the 7-stage Verb-to-TAM cline proposed in Heine (1993), to become a modal passive marker with negative semantic prosody (the participle typically expresses an unpleasant action, such as punishment, on the patient). Stathi presents convincing evidence that *gehören* is not yet fully auxiliarized, but can be located at about stages C-D of Heine’s cline. Nevertheless, some aspects of her argument could have been motivated in more detail, such as the analysis of *gehören* + participle as a construction in the sense of Construction Grammar, and the idea of the construction filling a functional niche in the modal passive domain.

In the final empirical study, Letizia Vezzosi not only uses diachronic and synchronic corpus data (albeit without quantitative analyses), but also written and oral language tests (with quantitative analyses). She presents a typologically informed study of (changes in) the system of reciprocal constructions in Italian, focusing on the rise of the uninflected form *l'un l'altro*, produced by young speakers in informal registers. Her synchronic analysis reveals that the distribution of the new marker is determined by the semantic type of the predicate (restricted to non-symmetric verbs, e.g. *parlare* 'talk') and its TAM marking (restricted to non-perfect tenses), and that it expresses the iteration or sequentiality of the sub-events of reciprocal actions. The diachronic argument shows how the rise of the new pattern fits in with the development of the whole system of reciprocal markers. It can be noted that this diachronic account shows some gaps (no coverage of the 15-17th centuries; just one line on the 18-19th centuries, 360-365), and focuses on the division of labour between the reflexive and reciprocal strategy in the final section only. Whereas the stages leading up to the rise of the new marker constitute steps in a grammaticalization process, the emergence of the new marker itself, Vezzosi argues, should rather be seen as a case of lexicalization of which the result is a 'sort of adverb' meaning 'mutually' (367).

There is no doubt that the arrangement of the papers into three parts, as laid out above, lends thematic coherence to the volume. However, the editors could have increased this coherence even more by pointing out topics and themes that recur across the three parts, and by inserting more cross-references. A first link that could have been given more prominence is the conclusion arrived at by various authors that language change is crucially subject to language-internal constraints, viz. Schiering, Fischer, De Vogelaer, Vezzosi and

Gehweiler. The distinction between grammaticalization and lexicalization forms another thread, connecting the contributions by Diewald, Trousdale, Norde, Willis, Fischer and Vezzosi. A third link is formed by the – by now almost canonical – recognition criteria of grammaticalization processes, featuring in the papers by Diewald, Trousdale, Kranich, Norde and Stathi. Another way to enhance the internal coherence would have been to stimulate volume-internal references. It is rather striking that the two authors writing on clitics, Schiering and De Vogelaer, do not refer to each other's paper, nor do Ziegeler and Stathi, who write on auxiliation and both use Heine's (1993) 7-stage pathway as a basic reference. The notion of semantic prosody is invoked in both Gehweiler's and Stathi's case-study, and the distinction between primary and secondary grammaticalization is used in Kranich's, Norde's and Willis' contributions, but this did not result in any cross-referring either.

Another potential shortcoming of the book is the degree of linguistic diversity covered. Despite Schiering's typological approach, the selection of languages discussed in the papers shows a strong genetic and areal bias, as it includes predominantly Indo-European languages spoken in Europe. In my view, it is Schiering's paper that suggests the most promising avenue for future research, since much explanatory import can be gained from adopting a cross-linguistic approach (cf. the papers in López-Couso & Seoane (2008)).

In general, however, this volume contains a valuable collection of strong contributions to the field of diachronic linguistics, and more specifically to the area of grammaticalization. In addressing issues of old standing as well as recent ones, it features a wide variety of research topics as well as research methods, such as corpus research, cross-

linguistic sampling, field work, and oral and written language testing. One can be confident that its principle of skilful empirical observation feeding into linguistic theory, and the combination of qualitative and quantitative analyses of language, will spark a range of stimulating new studies in the field.

Notes

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1. In their study on evidentiality, Boye & Harder (2009) propose to distinguish grammar from the lexicon in terms of discourse prominence: linguistic elements are grammatical if they are coded as secondary in relation to some other linguistic element, whereas lexical elements are ‘primary’ to the proposition. In my view, Diewald’s proposal can be regarded as a further elaboration of this idea, with secondariness originating in the indexal nature of grammatical signs.

2. Of course, referentiality is a semantic property, as he acknowledges (224).

References

- Andersen, Henning. 2006. Grammation, regrammation and degrammation. Tense loss in Russian. *Diachronica* 23(2). 231-258.
- Boye, Kasper & Peter Harder. 2009. Evidentiality: Linguistic categories and grammaticalization. *Functions of Language* 16(41). 9-43.
- Bybee, Joan & Östen Dahl. 1989. The creation of tense and aspect systems in the languages of the world. *Studies in Language* 13. 51-103.
- Campbell, Lyle. 2001. What's wrong with grammaticalization? *Language Sciences* 23. 113-161.
- Dahl, Östen. 2004. *The growth and maintenance of linguistic complexity*. Amsterdam: Benjamins.
- Harley, Heidi & Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78. 482-526.
- Haspelmath, Martin. 1999. Optimality and diachronic adaptation. *Zeitschrift für Sprachwissenschaft* 18. 181-205.
- Heine, Bernd. 1993. *Auxiliaries. Cognitive forces and grammaticalization*. New York: Oxford University Press.
- Heine, Bernd & Tania Kuteva. 2002. *World lexicon of grammaticalization*. Cambridge: Cambridge University Press.
- Hopper, Paul J. 1991. On some principles of grammaticalization. In Elizabeth Traugott & Bernd Heine (eds.), *Approaches to Grammaticalization*, vol. 1: *Focus on Theoretical and Methodological Issues*, 17-35. Amsterdam: Benjamins.

- Hopper, Paul J. & Elizabeth C. Traugott. 1993 (2nd edn. 2003). *Grammaticalization*. Cambridge: Cambridge University Press.
- Janda, Richard. 2001. Beyond ‘pathways’ and ‘unidirectionality’: On the discontinuity of language transmission and the counterability of grammaticalization. *Language Sciences* 23. 265-340.
- Joseph, Brian. 2001. Is there such a thing as ‘grammaticalization’? *Language Sciences* 23. 163-186.
- Lehmann, Christian. 1982. *Thoughts on grammaticalization*. Cologne: University of Cologne.
- Lehmann, Christian. 1985. Grammaticalization: Synchronic variation and diachronic change. *Lingua e Stile* 20. 303-318.
- Lehmann, Christian. 1995. *Thoughts on grammaticalization*. 2nd rev. edn. Munich: Lincom Europa.
- Lightfoot, David. 1999. *The development of language: Acquisition, change, and evolution*. Oxford: Blackwell.
- López-Couso, María José & Elena Seoane (eds.). 2008. *Rethinking grammaticalization. New perspectives*. Amsterdam: Benjamins.
- Tabor, Whitney & Elizabeth C. Traugott. 1998. Structural scope expansion and grammaticalization. In Anna Giacalone Ramat & Paul Hopper (eds.), *The limits of grammaticalization*, 229-272. Amsterdam: Benjamins.
- Traugott, Elizabeth. 1982. From propositional to textual and expressive meanings: Some semantic-pragmatic aspects of grammaticalization. In Winfred P. Lehmann & Yakov Malkiel (eds.), *Perspectives on historical linguistics*, 245-271. Amsterdam: Benjamins.

- Traugott, Elizabeth C. 1989. On the rise of epistemic meanings in English: An example of subjectification in semantic change. *Language* 57. 33-65.
- Traugott, Elizabeth. 2007. The concepts of constructional mismatch and type-shifting from the perspective of grammaticalization. *Cognitive Linguistics* 18(4). 523-557.
- Traugott, Elizabeth. 2008. The grammaticalization of *NP of NP* constructions. In Alexander Bergs & Gabriele Diewald (eds.), *Constructions and language change*, 21-43. Berlin: Mouton de Gruyter.
- Traugott, Elizabeth. 2010. (Inter)subjectivity and (inter)subjectification: A reassessment. In Kristin Davidse, Lieven Vandelanotte & Hubert Cuyckens (eds.), *Subjectification, intersubjectification and grammaticalization*, 29-71. Berlin: De Gruyter Mouton.
- Trousdale, Graeme. 2008a. Constructions in grammaticalization and lexicalization: Evidence from the history of a composite predicate in English. In Graeme Trousdale & Nikolas Gisborne (eds.), *Constructional approaches to English grammar*, 33-67. Berlin: Mouton de Gruyter.
- Trousdale, Graeme. 2008b. Words and constructions in grammaticalization: The end of the English impersonal construction. In Susan Fitzmaurice & Donka Minkova (eds.), *Studies in the history of the English Language 4: Empirical and analytical advances in the study of English language change*, 301-326. Berlin: Mouton de Gruyter.
- Trousdale, Graeme. 2008c. A constructional account of lexicalization processes in the history of English: Evidence from possessive constructions. *Word Structure* 1. 156-177.
- Van linden, An, Jean-Christophe Verstraete & Kristin Davidse (eds.), in collaboration with Hubert Cuyckens. 2010. *Formal evidence in grammaticalization research*. Amsterdam: Benjamins.