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Some (critical) questions for diachronic construction grammar

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Abstract: The paper critically reviews a recent volume on *Diachronic Construction Grammar*. It is argued that a more convincing case for the diachronic construction grammar approach could have been made by more explicitly comparing it to other approaches to historical linguistics, and that a number of central notions, such as "constructionalization", are not applied consistently throughout the volume. In addition, an analysis of the constructionalization of English *BE going to* presented in the volume is examined and shown not to be supported by the Early Modern English data.

Keywords: diachronic construction grammar, constructionalization, constructional change, Early Modern English, *BE going to*

1 Introduction

Constructional approaches to language have become increasingly popular in recent years, and it should come as no surprise that insights and ideas from construction grammar are also being applied to historical linguistics. The edited volume under review here, straightforwardly titled *Diachronic Construction Grammar*, argues for the usefulness of a constructional approach to historical linguistics and the study of language change. As an interested and sympathetic outsider to the field of construction grammar, I read the volume with great interest, but also found some aspects of it quite challenging. There are at least two reasons for this. Firstly, the volume does not present a unified framework or conceptual apparatus, meaning that a number of terms are used with different

Review article of Jóhanna Barðdal, Elena Smirnova, Lotte Sommerer & Spike Gildea, eds. 2015. *Diachronic Construction Grammar* (Constructional Approaches to Language 18). Amsterdam: John Benjamins. Pp. xi + 263. ISBN: 978-9-02-720440-0.

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meanings by the individual contributors. To be sure, this is explicitly acknowledged in the introductory chapter, but it might have been helpful to include a more structured comparison of the different approaches or a concluding chapter attempting a synthesis. Secondly, some contributions seem to presuppose more affinity with construction grammar than others, and at times I wondered if I was even part of the target audience, or if the book was only meant for linguists already working within the constructional tradition. However, given the lengthy introduction to construction grammar and its diachronic implications in the chapter by Barðdal & Gildea, I presume one of the motivations for publishing the volume was to show the value of a constructional approach to historical linguists not working within construction grammar.

In this review article, I will raise three issues which I think could have been addressed more directly in the book, and which linguists working on diachronic construction grammar may want to pay (more) attention to in future work. They concern the advantages of this framework over other approaches to historical linguistics; the nature of the "construction" and the role of linguistic variation in the framework; and the definition and usefulness of the concept of "constructionalization", in particular with reference to the analysis of English BE going to in Traugott's contribution (chapter 2 in the volume). In the following section, I will give a short summary of each of the seven contributions to the volume, after which I will consider each of the three guestions in turn in Sections 3 to 5. Section 6 concludes.

2 Summary of the volume

The volume under review contains seven chapters: an introduction (Barðdal & Gildea) and six contributions on five Indo-European languages, namely English (Traugott; Sommerer), German (Smirnova), Czech (Fried), Portuguese (Torrent), and Dutch (Colleman). I will summarize the chapters here in their order of appearance.

The introductory chapter by Jóhanna Barðdal & Spike Gildea is entitled "Diachronic Construction Grammar: Epistemological context, basic assumptions and historical implications". After a survey of a number of "pre-constructional" traditions in historical linguistics, the authors discuss six common assumptions in construction grammar and their implications for historical linguistics. Among the central tenets are the ideas that constructions, not just lexical items, are form-meaning pairings, and that grammar and lexicon are not categorically distinct, but fall under the larger inventory of constructions, here termed the "ConstructiCon". Constructions (rather than, say, individual morphemes) are taken to be the "basic building blocks of language" (p. 10) and can be located on a number of clines, e.g. from substantive ("lexicalized") to schematic and from compositional to idiomatic. Another important characteristic of most versions of construction grammar is that they are usage-based, i.e. they assume that speakers' knowledge of constructions is based on their use and that the frequency of a construction is a central factor in its entrenchment and productivity.

The contribution by Elizabeth Closs Traugott, "Toward a coherent account of grammatical constructionalization", attempts to integrate earlier work on grammaticalization in a constructional framework. A distinction between constructional change and constructionalization is taken over from Traugott and Trousdale (2013). In this framework, constructional change refers to change in either the form or the meaning of a construction, whereas constructionalization is the development of a new construction, i.e. a new form-meaning pair, where both form and meaning have changed (but not necessarily at the same time). Traugott uses the development of the future construction BE going to in English to illustrate the distinction and to argue that the competing views of "grammaticalization as increased reduction and dependency" (cf. e.g. Lehmann 2015), and "grammaticalization as expansion" (cf. Himmelmann 2004) are reconcilable under a constructional perspective. According to Traugott, the history of BE going to shows examples of both formal reduction and contextual expansion (constructional changes) before a new form-meaning pair was conventionalized (constructionalization) in the eighteenth century. Traugott also briefly revisits an older discussion about whether analogy or reanalysis constitutes the primary mechanism of language change. She argues that while there are no cases of analogy (here termed analogization) without reanalysis (here termed neoanalysis), the opposite is not true, meaning that reanalysis must be the more basic of the two.2

In "Constructionalization and constructional change: The role of context in the development of constructions", Elena Smirnova proposes a model of constructionalization which focuses on the role played by linguistic context. While it is generally acknowledged in usage-based models that language change happens in particular contexts of use, Smirnova argues that the role of the linguistic context has not received sufficient attention in the literature. In Smirnova's account, constructionalization is seen as the development of semantically opaque critical contexts which allow for structural reanalysis and spread of the new use to other, isolating, contexts (the terms are due to Diewald 2002).

¹ But cf. Section 5 below for a critique of this analysis.

² The same view is expressed in Hopper and Traugott (2003: Ch. 3) and Traugott and Trousdale (2013: Ch. 3). For an alternative view, see e.g. Fischer (2007: 115-124; in press), De Smet (2012), and Noël (2017).

The model is illustrated with three developments from the history of German: the evidential verb scheinen 'seem', the "periphrastic subjunctive" with würde, and the development of modal meaning in the verb gehören 'belong'. The chapter ends with some suggestions for applications of the model.

Lotte Sommerer's chapter is entitled "The influence of constructions in grammaticalization: Revisiting category emergence and the development of the definite article in English". The emergence of the definite article in English has been considered a canonical case of grammaticalization, but as Sommerer points out, this is only a description of the development, not an explanation of why and how it happened. According to her analysis, the definite article could develop in Old English because a "lexically underspecified construction" with a determination slot already existed in the language. To support this claim, Sommerer draws on data from the YCOE corpus and shows that in early Old English, definite noun phrases were already quite consistently marked by a pronoun or genitive phrase before the head noun. From this situation, speakers are assumed to have generalized a determination slot before the noun and then adopted the demonstrative pronoun as the default filler. Sommerer argues that analogy should be considered a primary trigger of language change, a position which differs from that taken by most of the other authors in the volume (as acknowledged by Barðdal & Gildea, pp. 19-20).

In "Irregular morphology in regular syntactic patterns: A case of constructional re-alignment", Mirjam Fried investigates the relation between form and function in Old Czech participial adjectives (PAs). In Old Czech, regular PAs were formed by adding a stem vowel (-ú- in most stem classes) and the participial affix -c- to the present stem, e.g. kaj-ú-c- 'repenting'. However, there were also a large number of morphologically irregular – and hence less transparent – PAs, which Fried terms pseudo-PAs. In a corpus of Old Czech (late 13th to early 16th century), Fried finds that while the two types of PA can occur with the same functions, the irregular pseudo-PAs show a greater tendency towards less prototypical participial meanings as well as non-participial meanings. Fried attributes this state of affairs to the morphological intransparency of the construction: because of their formal irregularity, the group of pseudo-PAs was less clearly verbal and more readily attracted to the adjective category through analogy.

The chapter by Tiago Timponi Torrent is entitled "On the relation between inheritance and change: The Constructional Convergence and the Construction Network Reconfiguration Hypotheses". It traces the historical development of a "network" of constructions in Portuguese containing the preposition para followed by an infinitive. The corpora used cover thirteenth- to seventeenthcentury Peninsular Portuguese, eighteenth- to nineteenth-century Brazilian Portuguese, and twenty-first-century spoken Brazilian Portuguese. It is argued that the network of constructions has been gradually expanding since the thirteenth century, and that it derives not from one, but from a number of different constructions in Vulgar Latin. Further, Torrent suggests that the "inheritance links" between the different constructions have been reorganized during the history of the language as new constructions were added to the network and that speakers have thus made connections between constructions which are diachronically unrelated.

Finally, Timothy Colleman's contribution, "Constructionalization and post-constructionalization: The constructional semantics of the Dutch *krijgen*-passive from a diachronic perspective", investigates the emergence of the Dutch ditransitive passive with *krijgen* 'get'. The construction is similar to the German *bekommen*-passive (cf. Smirnova's chapter, pp. 89–93), but the Dutch construction is a more recent development, which is only attested in written sources from around the beginning of the twentieth century. In the *krijgen*-passive, the recipient argument of a ditransitive verb, such as *overhandigen* 'hand' in (1), is the subject, and the theme argument is the direct object. The agent argument may or may not be expressed:

(1) *Ik kreeg de boeken overhandigd (van/door de hoogleraar)*. I got the books handed from/by the professor 'I was handed the books (by the professor).' (Colleman, p. 214)

Strikingly, a number of frequent ditransitive verbs, including *geven* 'give', are precluded from occurring in the *krijgen*-passive. Using a corpus of twentieth-century journalistic prose, Colleman shows that the construction initially favoured four restricted sets of verbs, in particular verbs of paying and complex particle verbs. It is suggested that these different "subconstructions" derive from multiple sources, namely a resultative construction with *krijgen* and uses of transitive *krijgen* with a co-predicative past participle, and that this diachronic background can explain the apparently random exclusion of certain verbs from the construction in Present-Day Dutch.

As this summary should have made clear, this is a diverse volume with some contributions devoted to explaining particular developments and others of a more theoretical nature, but always illustrated with examples from historical corpora. While it is clear that all of the contributors subscribe to construction grammar in some form or other, there are also important differences between them. I agree with Noël (2016: 40) that the use of capitals in the title of the volume is somewhat misleading – no clearly delineated framework is presented,

and some of the contributors disagree about the definitions of central terms, an issue which I will return to in Section 5.

3 The advantage(s) of diachronic construction grammar

The first issue which I wish to address here is that the research agenda and explanatory value of the constructional approach are not as clearly stated as one might wish. It is unclear to me to what extent diachronic construction grammar is an improvement over alternative frameworks in that it can answer certain research questions better, or whether it is merely intended to develop a terminological and descriptive framework which is compatible with (synchronic) construction grammar. If the latter is the case, it is not necessarily a problem; it seems perfectly reasonable that historical linguists who subscribe to the basic tenets of (some version of) construction grammar would want to approach their historical linguistic data from this perspective. However, the introductory chapter suggests that there is a more ambitious goal on the research agenda, and that diachronic construction grammar is assumed to be able to answer certain linguistic questions which other frameworks cannot, or at least do not, deal with.

One of these concerns syntactic reconstruction. Barðdal & Gildea devote some space to "pre-constructional" approaches to historical linguistics, such as the Neogrammarians and the grammaticalization tradition, and how these have generally not attempted to reconstruct syntactic patterns. They then discuss the work of a few linguists who have tried to do so, such as Harris's work on the Kartvelian language family (e.g. Harris 1985) and Gildea's work on Cariban (e.g. Gildea 1998), arguing that these fit well with the basic tenets of diachronic construction grammar even if they were not articulated within that framework. It seems from this discussion that one of the crucial advantages of diachronic construction grammar is that it enables one to (partially) reconstruct the syntax of non-attested proto-languages based on comparative evidence (cf. also the discussion and Proto-Germanic example in Barðdal 2013). In this regard, diachronic construction grammar departs rather radically from traditional historical-comparative linguistics, which has generally focused on phonological and morphological reconstruction.³ It is surprising, then, to find that none of the

³ Cf. for instance Beekes (2011), a standard introduction to Indo-European comparative linguistics, which treats phonological and morphological reconstruction at length, but has no chapter

contributions to the volume actually deal with syntactic reconstruction. Despite their theoretical and methodological differences, all six chapters essentially belong to the same research tradition, namely the study of the attested histories of individual languages - the languages investigated all have written traditions spanning several centuries and comparatively well-researched histories (that is, in comparison to the majority of the world's languages). If diachronic construction grammar indeed has the potential to bridge the gap between this "individual-language tradition" and the historical-comparative tradition, more work on the reconstruction of syntax is something I suspect many historical linguists will be looking forward to.

As one might expect from a volume with several contributors, the individual chapters differ in their goals and methodologies. Unfortunately, they also differ in how convincingly they argue the value of the constructional perspective. I found Torrent's contribution on Portuguese particularly problematic in this regard because it never articulates a clear research question. Torrent proposes that the "network" or "family" of infinitival constructions with para has been reconfigured several times during the history of Portuguese, but it is unclear how these reconfigurations are reflected in the data, and what linguistic facts Torrent's two hypotheses are supposed to account for. It is also not clear how much, if anything, the construction grammar perspective adds to Torrent's argument. The "Constructional Convergence Hypothesis" proposes that historically unrelated constructions can participate in "the same formally and functionally motivated network", while the "Construction Network Reconfiguration Hypothesis" proposes that "inheritance relations in construction networks change over time as new constructions emerge" (p. 175). However, the idea that speakers may make analogical connections between linguistic items or patterns based on formal or functional similarities, does not presuppose a construction grammar framework, but seems to me perfectly compatible with a conception of language which does assume a categorical distinction between grammar and lexicon (rather than an overarching construction, cf. pp. 22–23).⁴

In the chapter by Colleman, it is also argued that a construction may be "a coalescence of several threads" (p. 252), a point which appears very similar, if

on syntactic reconstruction. A notable exception, which Barðdal & Gildea do not mention, is Lehmann (1974).

⁴ For other examples of "convergence" see the contributions to De Smet et al. (2013). Barðdal & Gildea point out that the literature on grammaticalization has tended to overlook this possibility and focus on single-source developments that follow "a clear linear axis" (p. 25). This is probably correct, but it does not provide an argument for a constructional approach either, only against an overly narrow focus on (a particular type of) grammaticalization.

not identical, to Torrent's "Constructional Convergence Hypothesis". It is disappointing, then, that the two contributions do not engage with each other in order to find potential points of overlap or disagreement. The strength of Colleman's chapter is that it attempts to answer a clearly stated research question, namely why certain verbs in contemporary Dutch do not occur in the ditransitive *krijgen*-passive, and argues how the constructional perspective helps do this. (For a historical linguist, Colleman's analysis is of course also interesting because it suggests a diachronic explanation for a synchronic irregularity.) According to Colleman, earlier non-constructional accounts, most importantly Broekhuis and Cornips (2012), fail to explain the constraints on the *krijgen*-passive satisfactorily, and it will be interesting to see whether non-constructional experts on Dutch will be convinced by Colleman's analysis.

Like Colleman, Sommerer also clearly states what her constructional analysis is supposed to account for, namely why it was a demonstrative determiner that developed into the definite article in English. The motivation for why such an explanation is necessary is less clear, however, as Sommerer appeals to typological arguments without backing these up with cross-linguistic evidence. In the beginning of the chapter it is stated that "it is not a general tendency typologically to use articles as grammatical markers of definiteness" (p. 108), but Sommerer only supports this claim by mentioning a number of languages, such as Finnish, that do not have definite articles. However, a search in the World Atlas of Linguistic Structures reveals that definite articles are quite common cross-linguistically: Of the 620 languages surveyed in the chapter on definite articles, 377 (slightly more than 60 %) have some kind of definite article (Dryer 2005). In fact, English the belongs to the most cross-linguistically common subtype ("definite word distinct from demonstrative" in Dryer's terms), and so does not at all appear to be typologically unusual. Sommerer also states that the definite article is a relatively "late" development in the Germanic languages, which seems to suggest that it is somehow an unexpected development in need of an explanation. Apart from the unfortunate teleological implications of this argument and the fact that it lacks a standard of comparison - how does one determine what counts as an "early" or "late" linguistic development? - it can easily be interpreted as leading to the opposite conclusion: The fact that English, German, and the other Germanic languages all developed definite articles after the common Proto-Germanic stage rather seems to suggest that there is in fact a general tendency for languages to develop definite articles.⁵ Thus, while

⁵ Of course, it should be kept in mind that there has been extensive contact between many of the Germanic languages. Thus, the definite articles in these languages may not be wholly independent innovations.

Sommerer's analogical account may help us understand by what mechanisms (i.e. how) a demonstrative can develop into a definite article in an individual language, i.e. Old English, it does not explain why the category of definiteness is useful in the first place, in Old English or in any other language. While functional-typological questions like this one may not feature prominently, if at all, on the research agenda for diachronic construction grammar, it seems to me that this approach - just as any other individual-language approach - at least ought to look to typology in order to better understand which languagespecific facts are most unexpected and hence most in need of explanation.

To very briefly conclude this section, I have argued that the volume – with the notable exception of Colleman's chapter – might have made a more convincing case for diachronic construction grammar, as opposed to other approaches to historical linguistics, by more explicitly pointing out the added value of the constructional approach. While it is suggested in the introduction that diachronic construction grammar makes syntactic reconstruction possible, none of the contributions actually deal with prehistoric language stages, and it is not always clear to what extent the constructional perspective furthers our understanding of the observed linguistic phenomena. This is something future studies may – and should – address more directly.

4 The nature of the construction

One of the crucial differences between construction grammar and most other linguistic frameworks is that construction grammar does not distinguish categorically between atomic elements (words, morphemes) and abstract syntactic patterns, but instead views all linguistic knowledge as organized in a single inventory of form-meaning pairings, the constructicon. Linguistic knowledge is central to most versions of construction grammar, which generally stress the importance of understanding language as a cognitive phenomenon (cf. e.g. Goldberg 2013). This view appears to be shared by the contributors to the present volume, and the introduction more than once stresses the importance for the model to be psycholinguistically plausible. The locus of language – of the constructicon - is the speaker's mind, but unlike in some other models the

^{6 &}quot;... taxonomies are first and foremost intended to represent a plausible psycholinguistic reality of speakers" (Barðdal and Gildea, p. 23); "The aim of a usage-based model of language is to represent speakers' knowledge of their language in a psycholinguistically adequate manner" (p. 31).

language system is seen as "constantly evolving" (p. 33) and partially shaped by language use. In other words, *langue* is not completely independent from *parole*: "frequencies of use both structure the input a speaker is exposed to and, by the same token, help to shape his/her output. Hence, speakers' knowledge of language is shaped by linguistic use" (p. 31). One of the advantages of this cognitive conception of language is that it is perfectly compatible with the observation that there is linguistic variation between speakers, not just geographically and socio-economically, but also on an individual level. Different speakers have not received the exact same linguistic input and hence do not have the exact same linguistic repertoires. Although this is not explicitly spelt out in the introduction, it would seem to follow from this conception that the linguistic repertoires (i.e. constructions) of individual speakers of the same language do not have to be entirely identical, only sufficiently similar to allow the speakers to communicate.⁷

The cognitivist conception sketched out in the preceding paragraph situates language in the minds of individual speakers. What linguists do when they talk about "the" grammar (or "the" construction) of a given language, then, is to abstract away from all the different linguistic repertoires of individuals. This "speaker-external" grammar may be an unavoidable abstraction – otherwise the linguist would be tasked with writing a grammar of the language of each individual speaker – but it is an abstraction nonetheless (cf. Noël 2016: 42–44; 2017: 74-75). As mentioned above, the introduction by Barðdal & Gildea repeatedly refers to the speaker's knowledge and psycholinguistic reality, but some of the contributors to the volume still seem to adhere – at least implicitly – to some kind of externalism whereby "language" is seen as an abstract entity outside the minds of the speakers. For instance, while Torrent refers to "the way speakers organize their knowledge about the language" (p. 174), the postulated "inheritance networks" between the constructions of the language are presented as entirely homogenous. Torrent's models are supposed to represent "the configuration [NB singular, SG] of the construction networks for each period of the history of the language" (p. 191), which is all the more striking because the available data are so sparse – at the earlier stages, some of the "subconstructions" are only attested once or twice. The possibility that speakers may not

⁷ For vocabulary, i.e. the lexicon, there is nothing controversial about this, but construction grammar, at least in principle, goes further than that. By considering grammar and lexicon parts of a larger whole, it opens up for the possibility that the repertoires of grammatical constructions may also differ between speakers of the same language (cf. Noël [2017] and references there).

always have made the same analogical connections between constructions is not considered.

The status of the constructioon is also left ambiguous in Traugott's chapter. While Traugott, too, refers to the "knowledge system" of the language user, she also uses "system" for something which is clearly speakerexternal, as new constructions "are understood as types that are new to the system, i.e. as conventionalized pairings of form and meaning, not merely innovations by individuals" (p. 54, my emphasis). Traugott distinguishes between innovations (or "micro-innovations", and change, which only happens when an innovation spreads to other speakers. An obvious question which Traugott makes no attempt to answer is how much an innovation has to have spread before it counts as "change". Does it have to be shared by the whole linguistic community, or is, say, half of the population sufficient? For historical linguists in particular, this is an important issue because not all parts of the linguistic community are equally well represented in the, usually patchy, textual record. In cases where a given linguistic feature only sporadically shows up in the surviving written material, this may reflect dialectal or sociolinguistic variation at the time. It seems to me that Traugott's approach implicitly privileges the written standard and hence risks overlooking such variation. Since "language" as such is only said to have changed when a feature has been adopted by a sufficient number of writers, potentially interesting linguistic variation, if insufficiently attested, may simply be disregarded as noise in the written record. A case in point are the two seventeenth-century attestations of BE going to with an inanimate subject (Traugott, p. 68). According to Traugott, two attestations are not sufficient to say that constructionalization had happened in the seventeenth century, so these attestations are taken to be individual innovations rather than indicative of actual change to the language. But if one truly commits oneself to a cognitivist view of language and does away with the idea of a speakerexternal language system, such sporadic attestations do not have to be disregarded - they may simply indicate that the language of at least two speakers/writers in the seventeenth century had changed. As I will argue in the next section, however, inanimate subjects with BE going to were more common in the seventeenth century than Traugott suggests.

⁸ An otherwise unexplained term which apparently refers to the same thing. The prefix does not appear particularly helpful to me, as it is not explained what a "macro-innovation" would consist in.

5 Constructionalization and the history of BE going to

The third and final issue which I wish to address concerns the concept of "constructionalization" and how this is defined and distinguished from other types of change. It has already been mentioned in Section 2 above that some of the contributors disagree on the role of analogy as a mechanism of change, but this is not the only point of disagreement. Notably, the definitions of constructionalization in Traugott's and Smirnova's contributions are quite different -Smirnova considers constructionalization to be "characterized by the development of critical contexts and the structural reanalysis enabled by them" (p. 87), whereas according to Traugott's more narrow definition, it is only the conventionalization of a formal and semantic reanalysis which counts as constructionalization; otherwise, Traugott speaks of constructional change. This difference of opinion is pointed out several times in the volume (pp. 19; 54), but given the importance assigned to the distinction between constructionalization and constructional change, a more extensive discussion of how compatible these different definitions are would be a welcome topic for future consideration.

On a related note, I was struck by the offhand remark in Traugott's chapter that "the distinctions" between constructionalization and constructional change are "gradient" (p. 54). Perhaps the point here is that it is a question of gradience exactly how many constructional changes are necessary before one can speak of a "new" construction, but if the distinction is to be of use to other historical linguists, it seems necessary to have at least some indication of where to draw the line. ⁹ It is also worth noting that the distinction is not applied consistently throughout the volume. Barðdal & Gildea write that Sommerer's chapter "focuses on the role of analogy in driving constructional change" (p. 19), but Sommerer herself calls the emergence of the definite article a case of constructionalization (pp. 119; 130). The distinction also appears to be of limited use in characterizing the Old Czech developments in Fried's contribution (cf. pp. 21–22; 167–169). For a lengthy and more general discussion of the terminological pair, I refer to the review of Traugott and Trousdale (2013) by Börjars, Vincent and Walkden (2015), who point out a number of problems with the distinction. ¹⁰ In the remainder of this section, I will have a

⁹ Barðdal & Gildea do take a step in this direction by explicitly defining constructionalization as the development of a new construction alongside the original one (p. 16). As the authors admit, however, it is a matter of interpretation where to draw the line between separate constructions and different uses of the same construction ("constructional polysemy", p. 18). 10 See also Hilpert (2015: 133-135) and Norde and Van Goethem (2018: 479-483, 502-505) for other recent discussions of the distinction.

closer look at the particular case study which Traugott uses to illustrate it, namely the development of the English future construction *BE going to*.

The development of *BE going to* has traditionally been seen as a paradigm example of grammaticalization, whereby an original motion verb has developed into a periphrastic future.¹¹ Originally, *go* was only a verb of motion, which just like many other verbs could be followed by a *to*-infinitive with purposive meaning, as in (2):

(2) they departed frome hym, takynge theyr waye to Rome with greatte ioye, as though they were goinge to brynge tydynges to Rome of victory 'they departed from him, setting out for Rome with great joy, as if they were going to bring tidings of victory to Rome' (1544 Anthony Cope, Anniball and Scipio; EEBOCorp)

According to Traugott, the development into a future construction happened in a stepwise fashion. First, the meaning 'motion with purpose' came to be reanalysed as a prospective future meaning in a particular context, namely when the present participle *going* was directly followed by periphrastic passive, as in (3):

(3) He is fumbling with his purse-strings, as a Schoole-boy with his points, when hee is going to bee Whipt, till the Master wearie with long Stay, forgiues him. 'He is fumbling with his purse strings, like a schoolboy with his points when he is going to be whipped, until the master, tired of the long wait, forgives him.' (1628 John Earle, Micro-cosmographie, §15 "A Sharke"; EEBOCorp)¹²

The earliest attestations of this critical context are ambiguous between a motion and a future reading. The early seventeenth-century example in (3) is one of the first where the future reading ('be about to') seems more likely. As Traugott writes, "although the schoolboy could conceivably go somewhere to be whipped, this does not appear to be the point of the passage" (p. 67). However, examples like (3) are only indicative of constructional change in Traugott's terms, not constructionalization, as only the semantics have changed. Since constructionalization requires formal change as well, Traugott suggests

¹¹ Thus, e.g., Jespersen (1931: 217), despite not using the term *grammaticalization*: "going loses its meaning as a verb of movement and becomes an empty, grammatical word". In Hopper & Traugott's textbook, *BE going to* is the very first example used to illustrate the notion of grammaticalization (Hopper and Traugott 2003: 1).

¹² I quote from the version in EEBOCorp (Petré 2013), which preserves the original spelling. The noun *points* refers here to the threads which hold together the doublet and the hose (*OED*, s.v. *point*, n.¹, sense 17).

that constructionalization only happened when BE going to was extended to also occur with inanimate subjects. As mentioned in Section 4, Traugott refers to two attestations with inanimate subjects from the seventeenth century (dated to 1630 and 1647, respectively, cf. Garrett 2012: 70), but according to Traugott these two examples "do not [...] provide convincing evidence that conventionalization and change has taken place" (p. 68). Hence, it is only when inanimate subjects become more frequent in the early eighteenth century and we find more examples like the one in (4) that constructionalization can be said to have happened.

(4) Mr. Luke Whitton deposed. That he saw William Price go in and out of the Mug-house several times, pull at the Sign with so much Force, that he thought the whole Front of the House was going to fall (1716 Trial of John Love et al.; Old Bailey Proceedings, t17160906-2)

After constructionalization, further constructional changes to either form or meaning can occur, which Traugott calls "post-constructionalization". Traugott mentions one such change in the history of BE going to, namely the reduction to gonna in the spoken language, which is "first attested in the twentieth century" (p. 69). Table 1 sums up Traugott's account of when the different changes happened:

Table 1: Traugott's analysis of BE going to.

Period	Innovation or change	Traugott's interpretation
early 17th c.	'motion with purpose' > prospective future in the context <i>going to</i> + passive infinitive	constructional change (semantic)
early 17th c.	inanimate subjects sporadically attested	individual innovations = no constructionalization yet
early 18th c.	inanimate subjects are conventionalized	constructional change (formal) = constructionalization has occurred
20th c.	formal reduction to gonna	constructional change (formal) = post-constructionalization

I think there are two problems with this analysis, one theoretical and one empirical. To begin with the former, Traugott's distinction between formal and semantic change seems rather tenuous to me. The widening of possible subjects to also include inanimate nouns is not strictly speaking a change in syntactic form, but rather in syntactic material. The possible subject material of BE going

to is expanded to include another semantic type, but on the surface nothing changes. However, there must also have been a change in subject material when the semantic change happened in the early seventeenth century: the original meaning 'motion with purpose' requires a subject with the semantic role of AGENT, as in (2) above, while the new meaning 'prospective future' does not in itself seem to require any particular semantic role. Rather, the semantic role of the subject is determined by the verb in the infinitive, such as in (3), where the subject hee is the PATIENT of the verb whip. 13 Again, nothing changes on the surface, but the range of possible subject material has been widened. In other words, if a change in possible subject material is considered "formal", there was a formal change already when the semantic change happened in the early seventeenth century, and Traugott's analysis does not explain why there would be a century-long gap before inanimate subjects were allowed.

Turning to the second problem, a brief corpus investigation reveals that the Early Modern English data do not in fact support Traugott's two-step analysis. As we have already noted, there are two early seventeenth-century examples with inanimate subjects which Traugott regards as irrelevant because two examples are considered insufficient for constructionalization. Traugott does not mention how much data has been scrutinized or if she has carried out any structured corpus search to investigate the frequency of inanimate subjects in the seventeenth century. Fortunately for this purpose, however, a number of very large Early Modern English corpora have become available in recent years. In order to investigate whether the two attestations quoted from Garrett (2012) are in fact isolated cases, I searched the seventeenth-century portion of EEBOCorp (Petré 2013) for the string going to be (with various spelling variants), i.e. the present participle followed by the infinitive to be. I then went through the concordances manually and marked all instances with an unambiguously inanimate subject.

In total, I found 575 attestations of the string going to be. The majority of these contain a periphrastic passive, such as going to be taken in (5) below, but there are also a few examples of stative be, as in going to be an inhabitant in (6). Of these 575 attestations, 72 (ca. 12.5 %) had an unambiguously inanimate subject. Table 2 shows the number of inanimate subjects per decade. Note that the corpus is not stratified, so the individual decades are not necessarily comparable in terms of genre, text type, etc. Hence, I give only the raw number of attestations and the word count for each decade.14

¹³ In generative terms, there is a change from control verb, as in example (2), to raising verb, as

¹⁴ Because of the composition of the EEBO database, which includes the year 1700, the final decade is in fact 11 years long.

Table 2: Occurrences	of	going	to	be	with	in a nimate	subjects
in EEBOCorp.							

Period	Hits	Corpus size (million words)
1600-09	0	30.5
1610-19	1	32.5
1620-29	0	24.9
1630-39	1	25.4
1640-49	2	38.1
1650-59	9	68.7
1660-69	5	45.2
1670-79	8	52.9
1680-89	17	56
1690-1700	29	64.6
In total	72	438.9

As Table 2 shows, 4 of the 72 attestations are from the first half of the century and the remaining 68 are from the second half; there is thus a clear increase in the number of attestations toward the end of the century. An example of an inanimate subject is given in (5), which is from the published version of a speech given by Charles I. It is also included in the OED (s.v. go, v., sense 51). The noun Magazine refers to the king's store of munition and can thus only be interpreted as inanimate. Note that the construction is actually used twice in the excerpt; however, I have not included the second attestation in the count in Table 2, as Militia refers to an institution consisting of animate beings and is thus not prototypically inanimate.

(5) To be short, you see that my Magazine is **going to be taken** from me (being my owne proper goods) directly against my will; The Militia (against Law and my consent) is going to be put in Execution (1642 Charles I, *Speech to the gentry of Yorkshire*; EEBOCorp)

The data also included a few instances with subjects referring to animals or lower organisms, such as the "Water-Insect or Gnat" in (6). These, of course, were also excluded from the count in Table 2.

(6) I still marked its progress from time to time, and found its body still to grow bigger and bigger, Nature, as it were, fitting and accoutring it for the lighter Element, of which it was now going to be an inhabitant (1665 Robert Hooke, Micrographia, §43 "Of the Water-Insect or Gnat"; EEBOCorp)

While 72 examples may seem like very little in a corpus of more than 400 million words, it is important to remember that I looked for a very specific pattern, namely attestations of going with an unambiguously inanimate subject and the infinitive to be immediately following. Hence, any examples with verbs other than to be, or with an adverbial between going and to, have not been included. As (7) shows, such examples do occur in the data, and future investigations into the early history of *BE going to* should of course attempt to include these as well.

(7) Give me leave to tell you Sir, you have not guessed so much misfortune, as your distraction is going now to make.

(1659 Montagu, The Shepheard's Paradise; EEBOCorp)¹⁵

Finally, it has to be kept in mind that inanimate nouns generally occur in subject position less often than animate nouns. In their investigation of BE going to in Late Modern English, Budts and Petré (2016) find that inanimate subjects are very much the exception (between 2% and 4%) throughout the eighteenth century, i.e. in the period when constructionalization happened in Traugott's account. In the most recent period in their material, 1886-1920, the relative frequency of inanimate subjects has increased, but not to more than 10 % (Budts and Petré 2016: 20).

To conclude this brief corpus investigation, the material in EEBOCorp suggests that Traugott's two-step analysis of the development of BE going to does not stand up to closer scrutiny: There does not appear to be any time gap between the development of the prospective future meaning in the seventeenth century and the possibility of BE going to taking inanimate subjects. 16 The history of BE going to is thus an unfortunate choice as an illustration of the proposed distinction between constructional change and constructionalization. It is also important to note that even if there were two separate changes, Traugott's analysis does not provide any explanation for why inanimate subjects would be precluded from occurring in the construction until the eighteenth century. As I have argued above, such a restriction would in fact be unexpected – the change in possible subject material seems

¹⁵ Note that because of a typographical error, this text is wrongly dated to 1629 in EEBOCorp. Montagu's play was first published in 1659, but the date was misprinted as 1629 on the title page (Greg 1900: 81).

¹⁶ It is worth pointing out that Traugott's dating of the phonetic reduction to gonna (cf. Table 1) is not supported by the data either. Traugott writes that it starts to occur in the twentieth century, but the OED gives several examples from colloquial writing from the nineteenth century (s.vv. gonna, gointer). The spelling of this reduced form varies, as is often the case in non-standardized "eye dialect", but that it is intended to represent a phonetic reduction seems beyond doubt.

to follow directly from the semantic change from 'motion with purpose', which requires an AGENT, to prospective future, which does not. In short, the distinction between constructionalization and constructional change does not seem to help improve our understanding of the early history of BE going to.

6 Conclusion

In this review article, I have addressed three issues which, in my opinion, could have been considered in more detail in Diachronic Construction Grammar, and which I think are relevant to anyone with an interest in this emerging framework. By way of a conclusion, these issues can be summarized as three questions:

- Which specific research questions does diachronic construction grammar answer better than other approaches to historical linguistics?
- 2. Does the "constructicon" refer to the individual speaker's linguistic repertoire, or is it an abstraction over the whole linguistic community?
- 3. Are the competing definitions of "constructionalization" and "constructional change" commensurable, and how does the terminological pair contribute to our understanding of language change?

In addition, I have pointed out a number of problems with Traugott's analysis of the early history of BE going to in English, and shown how a large corpus like EEBOCorp can help shed light on even a low-frequency pattern like BE going to with inanimate subjects in Early Modern English. I hope that at least some of these considerations will be of use to other linguists interested in diachronic construction grammar.

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