Book Review

Biber, Douglas and Bethany Gray, *Grammatical complexity in academic English*, 2016. Cambridge: Cambridge University Press, pp. 277. ISBN 978-1-107-00926-4

Reviewed by **Heli Tissari,** Department of English, Stockholm University, Stockholm, Sweden, E-mail: heli.tissari@english.su.se

https://doi.org/10.1515/flin-2019-2012

Biber and Gray's *Grammatical complexity in academic English* gives some answers to the fascinating question of what makes language complex. In this book the authors are also able to show that important linguistic changes can occur in written rather than spoken language (pp. 32–39, 246–251).

The first chapter of the book discusses stereotypes concerning academic writing. It is written in a spunky way that is likely to attract people not so familiar with linguistic theory, corpus linguistics or historical linguistics. In this chapter, the authors challenge such stereotypes as the idea that people writing academic research always pursue explicitness of meaning. They also underline that academic texts vary both according to genre and discipline and in terms of the historical period in which they were written. Lastly, they provide the reader with an overview of the rest of the book.

The second chapter is titled "Using corpora to analyze grammatical change". Although it contains several figures and tables, it is again written in a way that helps people unfamiliar with corpus linguistics understand what the authors want to do. Biber and Gray begin the discussion by introducing linguistic changes that have occurred in other genres, provide the reader with examples of various corpora, and then describe their own data and suggest a number of research questions. They compiled a corpus of their own that consists of four kinds of texts which they labelled 'specialist science' (1965–2005), 'specialist social science' (1965–2005), 'specialist humanities' (1850, 1965–2005) and 'non-specialist (multi-disciplinary) science' (1700–2005). The first two categories total circa 1.1 million words, the third one 2.5 million words, and the fourth one 2.4 million words. Biber and Gray then proceed to a detailed discussion of the linguistic characteristics of present-day academic writing. They provide the reader with examples of previous studies of the topic, illustrating them with the help of figures and tables. In this respect, Table 3.2 ('The oral/literate dimension (Factor 1) in selected MD studies of particular discourse domains in English', pp. 85–86), which is worth a special mention, shows that various spoken and written texts, including academic texts, differ in their linguistic features – supporting references are added. This chapter also includes many

text samples where specific characteristics of academic versus other texts have been marked with underlining and italics. These go together with clear explanations.

Biber and Gray's new research on academic English is reported in Chapters 4, 5 and 6. Chapter 4 begins with an explanation of historical changes in written texts more generally. To give an example, Table 4.1 compares changes in the use of different word classes, the passive, nominalizations and prepositional phrases in fiction, news reportage and science prose in the period 1750–1990; in addition, it compares the average word length in these genres. It is also well worth mentioning a cline that the authors describe on page 141: complexity features range from clausal to phrasal where clausal features characterize spoken, and phrasal features written texts. For example, dependent clauses characterize conversations, while dependent phrases characterize academic writing. The rest of the chapter is dedicated to the analysis of features whose frequency has either decreased or increased in academic prose – the former situation is illustrated by the definite article *the* and the noun + *of* phrase, while the latter is reflected by the frequencies of nouns, nominalizations and nominal premodifiers.

After establishing that phrasal features characterize academic writing, Biber and Gray focus on their functional extension in academic writing. This is the subject of Chapter 5. It covers a number of phrasal features and finishes with a general discussion of what the authors call a 'systemic drift towards structural compression'. It is, above all, this drift towards compression that has contributed to the increase in complexity of academic texts in the recent past. In terms of grammatical features, the drift is evinced by the occurrence of noun premodifiers and postmodifiers: nouns (*harvest effects*), attributive adjectives (*a large difference*), noun-participle compounds (*service-oriented architecture*), prepositional phrases (*a struggle over meaning among social groups*) and appositive noun phrases (*James Klein, president of the American Benefits Council*). All these grammatical strategies are amply illustrated and discussed.

The title of the sixth chapter makes the claim that the drift towards compression has caused a loss of explicitness in academic research writing. The chapter gives examples of grammatical constructions that hide original meaning from the un-initiated reader. For example, noun-participle compounds such as *accountability-focused reform efforts* and *self-reported disease status* may be interpreted in more than one way – 'the reforms are focused on accountability' versus 'the efforts are focused on accountability'; 'the disease was reported by self' versus 'the status of the disease was reported by self' (pp. 218–243).

The conclusion is a succinct summary of the book. It also includes a section on the implications of the book contents for applied linguistics, which touches

upon language teaching and assessment. The main gist of this, let's say, applied section is that outdated beliefs about academic writing should be replaced with what we now know based on research and that this should lead to development of how students are taught to write academic texts in English. Lastly, in addition to a list of references, the book also includes two appendices consisting of descriptive statistical information.

In contrast to the focus of this book on the increase of opacity in academic writing, the book itself is very explicit both in its aims and in reporting the findings. All the background information on the differences between spoken and written genres and on linguistic changes also contributes to its overall purpose and claims. At the same time, it can be said that the book is clearly limited to a few phenomena that are studied in terms of a single rigorous method. This is one factor contributing to its lucidity, and a reasonable decision, but it also means that other types of linguistic research on complexity are not considered. For example, Fenk-Oczlon and Fenk have studied complexity from various angles. In their (2014: 145) paper, they claim that the postulate "simplicity in one component of grammar is balanced by complexity in another" cannot be proven. If that is true, it is also relevant to the discussion of the development of academic texts. It would then potentially affirm the idea Biber and Gray are presenting because nobody could claim that the increase of complexity which they describe has been compensated for by other linguistic features. An obvious follow-up study could compare recent historical developments in academic texts written in various languages – Biber and Gray focus on English. In fact, comparisons between current academic practices in different languages have already been suggested to have implications for the students' understanding of how to report their research in English (Kaufhold 2018). Also in connection with the applied dimension of the topic, when planning what the implications of Biber and Gray's findings are for the teaching of academic English, one could consider discussions of complexity in other educational contexts. Janemalm et al. (2018: 3,10) deal with what is complex in complex movement, and suggest, among other things, that 'complexity' could be rephrased as 'advanced', that it is context-dependent and that it requires reflective processing. These authors point out that complexity is associated with progression and development. All these features are also relevant to academic English. If complexity drives advancement or vice versa, we might expect the linguistic quality of the scientific texts discussed by Biber and Gray to have improved. Interestingly, they nevertheless do not consider the development that they have documented as progress: "it seems obvious that academic writers should employ grammatical structures that are maximally explicit in meaning. But they do not" (p. 249).

References

Fenk-Oczlon, Gertraud & August Fenk. 2014. Complexity trade-offs do not prove the equal complexity hypothesis. *Poznań Studies in Contemporary Linguistics* 50(2). 145–155.

Janemalm, Lucas, Mikael Quennerstedt & Dean Barker. 2018. What is complex in complex movement? A discourse analysis of conceptualizations of movement in the Swedish physical education curriculum. *European Physical Education Review*. doi:10.1177/1356336X18803977. (published online on 14 October).

Kaufhold, Kathrin. 2018. Creating translanguaging spaces in students' academic writing practices. *Linguistics and Education* 45. 1–9.