Overall, though, by successfully engaging with more 'global' matters, the volume shows that Construction Grammar is no longer a niche framework, but a serious alternative to other well-established approaches to language description.

Reviewer's address:
Linguistics and English Language
School of Philosophy, Psychology and Language Sciences
Dugald Stewart Building
3 Charles Street
Edinburgh EH8 9AD
United Kingdom
Nadine.Dietrich@ed.ac.uk

References

Croft, William A. 2003. Lexical rules vs. constructions: A false dichotomy. In Hubert Cuyckens, Thomas Berg, René Dirven & Klaus-Uwe Panther (eds.), *Motivation in language: Studies in honor of Günter Radden*, 49–68. Amsterdam and Philadelphia: John Benjamins.

Diessel, Holger. 2011. Language, usage and cognition. *Language* 87(4), 830–44.

Goldberg, Adele E. 1995. *Constructions: A Construction Grammar approach to argument structure*. Chicago: University of Chicago Press.

Goldberg, Adele E. 2006. *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.

Harris, Catherine L. 1992. Connectionism and cognitive linguistics. In Noel E. Sharkey (ed.), *Connectionist Natural Language Processing*, 1–27. Chicago: University of Chicago Press.

Hudson, Richard. 2010. *An introduction to word grammar*. Cambridge: Cambridge University Press.

Stefanowitsch, Anatol & Stefan Th. Gries. 2003. Collostructions: Investigating the interaction of words and constructions. *International Journal of Corpus Linguistics* 8(2), 209–43.

Traugott, Elizabeth Closs & Graeme Trousdale. 2013. *Constructionalization and constructional changes* Oxford: Oxford University Press.

Turo Hiltunen and Irma Taavitsainen (eds.), *Corpus pragmatic studies on the history of medical discourse* (Pragmatics & Beyond New Series 330). Amsterdam and Philadelphia: John Benjamins, 2022. Pp. vii + 322. ISBN 9789027211101.

Reviewed by Francisco Alonso-Almeida 🆔, University of Las Palmas de Gran Canaria

Corpus Pragmatic Studies on the History of Medical Discourse (2022), edited by Turo Hiltunen and Irma Taavitsainen for John Benjamins, is a fascinating collection of

thirteen articles by leading specialists in the field, along the lines of Taavitsainen, Jucker & Tuominen (2014). The book constitutes a significant step forward in the general use of corpus linguistics methodology for doing pragmatics on historical data. This being the case, the studies seek to unveil and explore changing communicative patterns, roles, language use, and functions in the language of medicine to gain insight for later generalisations or to serve as springboards to benefit future studies that expand our understanding of the changes that occur in genres, here broadly understood as agreed institutionalised semiotic spaces. What sets this monograph apart is that it takes a serious approach to the motivation of corpus-based registered evidence of variation and change at any level of language output on appropriate historical, social and political circumstances, rather than on solely individual idiosyncratic motivations. Other variables come into play in the qualitative interpretation of data.

The book is divided into two main parts, namely 'Tracing discursive changes' (chapters 2–7) and 'Changing functions, roles and representations' (chapters 8–13). Additionally, the editors present a programmatic view of what the entire volume is about in an introductory chapter, where they try to settle an idea of the methodological practices in the book and provide other relevant information for understanding the rationale of the edited volume so that one can easily see its place in the overall market of related scholarly material. While they achieve this, they also address issues that may raise eyebrows among those with a more traditional view of pragmatics and textual analysis. I will address this below in this review. The organisation of the contents proposed by the editors seems sensible, since overlapping areas, in my opinion, may be largely unavoidable, as language cannot be diced up neatly and without side effects. The book contains some typos and misplaced footnotes, but they do not diminish the overall quality of the work.

The 'Introduction' (pp. 1–19), as already said, presents justificatory aspects concerning the pragmatic study of early medical texts and the common methodological perspective that gives unity to the entire volume, namely the use of corpus methodology. The editors aptly evince the suitability of the object of study, the medical texts, to unveil changing discourse patterns and functions in language to accommodate social, historical and political aspects, and technological and epistemic novelties in existing textual genres. The overall argument is convincing, and the reader finds that these texts are certainly appropriate for corpus-based pragmatic explorations. The editors include a wealth of scholarly references to back their stand, some of them dating back more than twenty-five years. If anything, these references allow the reader to see the epistemological tradition one should expect in this volume. In addition, this chapter introduces a notion of corpus pragmatics (CP) taken from Romero-Trillo (2017: 1), to which I add some serious caveats. To say that CP is 'a science' that pursues a description of 'language use in real contexts through corpora' is, in my view, inadequate. Pragmatics is indeed a science and the addition of the word *corpus* to this barely reflects a particular methodology in the same way as corpus linguistics is a methodology applied in language research, but the field and the science is linguistics. Biber & Reppen (2015: 1–2) recall that, despite some minor supporters of the

theoretical approach that corpus linguistics represents, '[c]orpus linguistics is a research approach that facilitates empirical investigations of language variation and use'. Corpus linguistics has great diagnostic and validating potential so that researchers may empirically demonstrate the existence of language patterns and variation trends. Indeed, how Hiltunen and Taavitsainen later describe the implications of combining the use of corpora and pragmatics, define both concepts and show their role within CP studies demonstrates that CP is not 'a science' in itself, but a methodological practice, as they put it, 'the use of corpora enables the analysis of patterns across a wide spectrum of texts and brings quantitative rigour to the analysis of discourse' (p. 2).

The authors go on to describe the value of CP to offer empirical substantiation that argues for pragmatic and discursive innovation by analysing the role of context. I missed, though, an explicit mention of a unified theory of communication enabling readers to know how to interpret form and context. The notion of context has ever been pervasive in historical pragmatics, as the works of Taavitsainen, Jucker & Tuominen (2014) and Kohnen (2009) illustrate. This volume wants to bring this to the forefront to argue that studies in the field of discourse and pragmatics cannot ignore the fact that changing patterns are due to a set of contextual forces in their various natures that lead to the accommodation of existing communicative structures and functions. The relationship between textual production (form) and context in the field of medical texts is beautifully described in the section 'Medical writing from a historical perspective', although I still have concerns about the alleged impersonal characterisation of (medical) texts, as I have argued elsewhere (cf. Alonso-Almeida 2015).

Going to the core of this introductory chapter, how one may analyse language using textual compilations largely depends on the author's choice, the data at hand, the level of annotation on specific corpora and the mark-up conventions. The more annotated the compilation, the better, although this raises the questions of who does the annotation and their intentions, how this annotation is done and how accurate the annotation is. Although artificial intelligence may in the future remedy this by learning how humans annotate corpora according to a set of pre-established parameters, safe quasi-accurate automatic annotation is only possible at certain levels of grammatical description (e.g. parts of speech) and according to a specific conventional annotation scheme; the automatically annotated rendering is not always exact, even so. Pragmatic annotation nowadays requires extensive manual work and consideration, and so does discourse annotation, as the METOOL project carried out at Polytechnic University Valencia has demonstrated (Carrió-Pastor 2020). This project pursues semi-automatic annotation of metadiscourse variables, including other discourse features such as polarity. The machine offers initial annotations of the corpus that are later checked by experienced linguists. New input leads to more machine learning towards accuracy. The results, however, reveal that semi-automatic discourse tagging is possible, but the amount of human effort is still enormous and, altogether, annotated chunks still include errors and avoid the possibility of providing categorical conclusions. As explained in this volume, however, corpora may be used without prior annotation, leaving linguists the option of conducting vertical and horizontal inspections of the

data retrieved from the compilation and performing their annotations from which empirical conclusions are quantitatively and qualitatively substantiated; cf. McEnery & Baker's and Hiltunen's chapters in this volume. In the latter, attention is drawn to careful examination of the context obtained in automatic concordances as polarisation, for instance, may play a role in the categorisation of certain epistemic items, e.g. *doubt* (p. 131).

The second chapter, by Tony McEnery and Helen Baker, '"A geography of names": A genre analysis of nationality-driven names for venereal disease in seventeenth-century England' (pp. 23–48) is, in my opinion, an excellent sample of how well corpus linguistics and pragmatics can combine to integrate context in the description of language use, also with a diachronic scope. Overall, the chapter deals with how reference to nationalities in labelling diseases was applied to seventeenth-century venereal medical conditions, which raised issues of social moralising critique and reproof to the extent that wrong accusations may also lead to legal actions, which, for our benefit, ends in new texts in genres like the medical ones. The association of nationalities and diseases also has a moral aspect, as blame for the existence of a particular disease is supposedly laid on specific nations. The authors reckon the topic cannot be timelier as the COVID-19 pandemic triggered nationalistic reactions, all looking at China for responsibility. Using a fine-grained method to learn which words were used during the modern English period to refer to a venereal disease, the authors obtain a robust list of terms that serves for inquiry into the transcriptions of the *Early English Books Online* (EEBO) as rendered by the EEBO-TCP consortium. They use a genre approach to conclude that some of the words in their list barely show up in their huge corpora, while a few others have a strong presence; in any case, the number of instances also resonated in their distribution in the EEBO genre groups analysed. The authors succeed in quantitatively and qualitatively showing certain associations between the use of the attributive *French* and *Neapolitan* to refer to syphilis, based on historical and social events. If affectivity is at the core of these uses, an aspect which I find convincing, it does integrate nicely how a person as a member of society feels in their own vital space and, therefore, uses language to represent this, accordingly. In short, this is an excellent piece of research that uses the means of CP to provide and explain evidence that demonstrates the factual relationship between the physical and epistemic contexts and the use of linguistic forms with a persuasive tone based on realistic and jargon-free descriptions. As a reader and linguist, I found this chapter a real pleasure to read.

Chapter 3, entitled 'Medical topics and style from 1500 to 2018: A corpus-driven exploration' (pp. 49–78), is authored by Gerold Schneider. This study entails methodologically intricate research that is applied to multiple corpora to uncover changes over time in common patterns found in medical discourse, also using document classification. The study builds upon the concept of 'culturomics' introduced by Michel *et al.* in 2011, although this term is not explicitly defined in the scope of this chapter. Conclusions report on top features that are computationally retrieved, including lexical items as well as Arabic numbers and combinations of parts of speech, which the author interprets according to different contextual aspects, e.g. time and

genre. I sorely missed clear instances for each of the features taken as more frequent in each period and genre, which I understand that space limitations work against, in this case. Indeed, one of my major concerns is the number of research questions developed in the second section of this chapter, which inevitably require attention throughout the chapter; I would have preferred a good display of factual instances illustrating the findings. The conceptual maps given in this chapter unveil pivotal vocabulary for each era and terminology shared across multiple periods. Furthermore, the maps demonstrate a progression from scholasticism towards empiricism, as evidenced by the inclusion of words related to empirical testing in the earliest periods examined.

The following chapter is 'Medical discourse in Late Modern English: Insights from a multidisciplinary corpus of scientific journal articles' (pp. 79–104) by Katrin Menzel. This chapter deals with language features in research articles in Late Modern English. While the author offers valuable information from a diachronic perspective, some aspects have remained underexplored, as is the case with the *It BE adjective* structure to indicate its value as a stance marker to signal modulation. This chapter simply categorises this structure as evaluative language (for the author, a pragmatic function), without providing additional semantic details or other specific pragmatic functions. Research on the *Coruña Corpus*, eighteenth and nineteenth centuries, has already revealed evidence of this and other language structures in Late Modern English scientific writing, particularly in related registers, as demonstrated in the studies drawing data from the *Corpus of English Life Sciences Texts* (CeLiST, Moskowich *et al.* 2021). To strengthen the persuasive findings, it would have been useful also to reference Banks (2008, 2017), which I believe is essential literature for studies like the one presented in this chapter.

In 'Survival or death: *Mine/my* and *thine/thy* variation in Early Modern English medical writing' (pp. 105–25), Terry Walker and Merja Kytö study, as the title itself suggests, the loss or preservation of these determiners on evidence from the corpus of *Early Modern English Medical Texts* (EMEMT, 1500–1700). The chapter reports the gradual loss of the n-forms during the centuries covered in this study and explains this with instances showing varied phonological environments co-occurring in the corpus. Interestingly, the authors have shown that popular medical genres, contrary to what has been reported in the literature, also exhibit a similar pattern of decline. Their findings in EMEMT are consistent with the evidence they have obtained from the *Corpus of English Dialogues* (1560–1760).

Chapter 6 is 'Towards a local grammar of stance expression in Late Modern English medical writing' (pp. 127–52) by Turo Hiltunen. The author focuses on stance within the framework of local grammar (Hunston & Su 2017). His definition of stance on page 127 strongly echoes that of Biber *et al.* (1999), among others, and, as it stands, shows a traditional view of the concept. At this point, I missed the inclusion of the notion of 'involvement', which he otherwise uses later in the chapter on page 128, and which for many linguists is subsumed within the notion of 'commitment'. As explained in Cornillie (2009) and Alonso-Almeida (2015), these are not homonymous terms in linguistic description, as they may reflect different attitudes and

communicative intentions and are therefore treated differently in the literature. This study deals with stance as reflected by the so-called stance *that*-clause, as described by Hyland & Tse (2005a, 2005b), which has a primary interpersonal dimension. The use of the term 'stance *that*-clauses', which I have used in my study of these structures in Late Modern English (see Alonso-Almeida & Álvarez-Gil 2021), following Hyland and colleagues (Hyland & Tse 2005a, 2005b; revised and updated in Hyland & Jiang 2018), seems quite unconvincing, because the *that*-clause, as it is, appears to have the potential for showing perspective. For that reason, in a recent article (Alonso-Almeida forthcoming), I opted for the phrase 'stance matrices licensing *that*-clauses' to mean the evaluative dimension of these matrices in terms of modulation and involvement concerning the information claimed in the subordinated clauses. This is, however, a nuanced observation that does not undermine the quality of the chapter and solely represents my preference in this respect.

Hiltunen's analysis focuses exclusively on verbs found in matrices, with no consideration given to nouns and adjectives, to obtain a list of verbs revealing the type of processes involved in the evaluation of the information in the subordinated clause. My major concern with his analysis involves the classification of social actors into averral and attribution following Sinclair (1986), Hunston (2000) and Charles (2006), as this distinction focuses on the (in)visibility of actors and may, therefore, blur further pragmatic and discursive aspects in terms of how (inter)subjectively claims have been construed. In this context, the example *It is well known* ... is classified as a plain averral, which means that no explicit attribution is made, while *These experiments indicate, that* ... (p. 141) is a case of hidden averral in which an inanimate entity is presented. Both, however, may signal intersubjective claims by using an opaque conceptualiser in the case of the former, and a hidden or even contextually implicit one in the case of the latter, representing how authors engage in the modalisation and construal of the contents in the subordinated sentence. In addition, emphasised averrals and plain averrals may be indicative of intersubjective positioning in the context of a particular community of practice. Therefore, they can fulfil similar discursive functions as attributions. Finally, the discussion of top stance verbs (and the evidence in figure 5) developed in the conclusion should be given earlier, as it deserves more space. The author highlights the increase in the number of 'verbs of accomplishment' in line with the contemporary empirical trends in scientific research, while this also encompasses a decrease in the use of 'communication verbs'. Nothing is said, however, of cognitive verbs, even though these appear in figure 5, showing uneven frequencies. I wonder whether grouping these verbs by semantic category would have been more visually revealing. These findings could have been compared to those obtained in the study of these structures in CeLiST, as research verbs are preferred over cognitive and communicative verbs in general terms (see Alonso-Almeida & Álvarez-Gil 2021).

Chapter 7, written by Gohar Schnelle, Carolin Odebrecht, Anke Lüdeling, Laura Perlitz and Catharina Fisher, is entitled '"Die Blumenzeit der Frau": A corpus-based study on the development of medical references to menstruation in historical texts on herbology' (pp. 153–76) and offers a diachronic study of linguistic expressions

referring to menstruation in a corpus of medical texts written in German during four centuries, from different grammatical and semiotic perspectives. Their research reveals certain tendencies in the development of terminology, which the authors consider with regard to the social context in which these texts circulate, and which also encompasses the consideration of authorial perspective over the terminology. As stated by the authors, the corpus has its drawbacks and, given the topic of menstruation, they consider that an alternative corpus of midwifery would be more revealing, which comes as no surprise, as these texts seem more likely to provide the terminology they expect. I missed some scholarly references which, I think, might have added much to the contextualisation of findings, at least to the section of the earliest texts; Green (2005) on menstruation in medieval Europe is one such example.

Sharing an interest in the field of midwifery, Richard J. Whitt's chapter 'Language, labour and ideology: Constructing epistemologies of childbirth in the first three centuries of English-language midwifery texts (1540–1800)' opens Part II. This chapter explores how midwifery texts developed, departing from a more theoretical view of the subject matter into a scenario more considerate to patients, which is explained by the new authoritative role played by women. In this sense, the author pursues how ideology is construed in these texts. For this, the author finds important the construction of a corpus exclusively dealing with midwifery texts. In this chapter, the author focuses on a set of prefaces preceding these texts to unveil language aspects revealing ideology. Among these, the author claims that some categories should be analysed under the prism of Critical Discourse Analysis, some of which have to do with actors, argumentative resources and perspectivisation strategies. The author criticises scholars reporting on 'historical and medical changes in the field' for doing so 'without any systematic linguistic framework at hand', and therefore their 'observations – while apt – lack in precision and technical rigour' (pp. 184–5). Yet Whitt's study seems to have ignored other published material that coincides with his research agenda. Alonso-Almeida & Mele-Marrero's (2014) study on the authorial stance in the prefatory material of seventeenth-century manuals on women's diseases is an instance, encompassing the examination of effective and epistemic strategies, including evidential devices.

The following chapter by Anu Lehto is entitled '*Unhappy patients* and *eminent physicians*: The representation of patients and practitioners in Late Modern English medical writing' (pp. 203–28). This text examines how patients and practitioners are represented in the corpus of Late Modern English medical texts. The author presents ample evidence from the corpus to demonstrate the descriptive techniques and evaluative language employed to portray patients and practitioners (physicians, surgeons, apothecaries). The study concludes that collocates may polarise into such functional criteria as treatment and reputation in the case of patients and practitioners, respectively.

In chapter 10, 'The discursive dynamics of personal experience narratives and medical advice in 18th-century British consultation letters: The case of Dr. William Cullen' (pp. 229–49), Anna Franca Plastina analyses twenty-three letters related to Dr William

Cullen; these include patients' narratives and Dr Cullen's responses. Plastina's argument concerning language strategies is clear, reveals particular viewpoints of medical practice and knowledge, and is well illustrated with evidence from her corpus, which is also properly contextualised. All in all, this text evinces the importance of emotional language in medical narratives (cf. Taavitsainen 2011) and sociolinguistic analysis to understand language selection.

Chapter 11, 'Communicating authority: Self-mentions in Early Modern English medical narratives (1500–1700)' by Karoliina Ollikainen, provides a sociopragmatic approach to the study of self-mentions in medical narratives to conclude that the use of these devices responds to raising notions of expertise, authority and credibility. In chapter 12, 'How old is old? The discourse of "good" ageing in nineteenth-century self-help medical texts' (pp. 273–96), Kim Grego's work delves into the historical evolution of the concept of 'old age' through a micro-diachronic analysis of self-help medical texts from the Wellcome collection. While the corpus used in this study is limited to only four texts, chosen to represent the categories identified after examining a collection of 130 texts responding to the search 'old age', this constraint provides the opportunity for a more in-depth analysis of the language used. This approach allows for the identification of nuances concerning the notion of 'old age' over time and their contextual interpretation. Although the small corpus may limit the generalisability of the author's conclusions, it provides valuable insights into the evolution of this concept and highlights the importance of examining language in its historical context.

The last chapter in this monograph, 'The popularization of learned medicine in late seventeenth-century England: Accommodating translation strategies and textual aspects' (pp. 297–316) by Giulia Rovelli, describes the role of translation in disseminating Latin medical texts in English. The author uses a corpus of three recipe collections in Latin and their corresponding translations in English and two treatises on specific diseases, distributed evenly across three decades. She intends to see whether information on the diachronic evolution of these genres can be traced out, which I see as hardly feasible given the period covered, unless a micro-diachronic analysis of specific forms and functions is intended. Her analysis of the translation strategies and procedures adapted from Alonso-Almeida & Sánchez (2016) reveals the tendency of translators to offer verbatim translations along with amplification and adaptation procedures. These appear to come from a desire to make information more accessible to readers. Interestingly, explication is not among the most frequent procedures. The procedures may also have been a matter of preference, regardless of the potential audience of the texts, if vernacular terminology tended to be privileged over more learned variants. Rovelli makes clear in this chapter that corpora, pragmatics and translation can be combined to examine how social and cultural and idiosyncratic circumstances lead to variation in the forms selected for communication.

Corpus Pragmatic Studies on the History of Medical Discourse is indeed a remarkable demonstration of the effective use of corpora to investigate changes in language patterns and functions, specifically in the context of medical language. This volume is an impressive achievement and is sure to inspire new research avenues in the field, offering excellent opportunities to explore historical pragmatics through selected corpora.

Reviewer's address:
Discourse, Communication & Society (DiCoS)
Departamento de Filología Moderna, Traducción e Interpretación
Universidad de Las Palmas de Gran Canaria
C/ Pérez del Toro, 1
35004 Las Palmas de Gran Canaria
Spain
francisco.alonso@ulpgc.es

References

Alonso-Almeida, Francisco. 2015. The functions of *seem* and *parecer* in early medical writing. *Discourse Studies* 17(2), 121–40.

Alonso-Almeida, Francisco. Forthcoming. Stance matrices and interpersonal meaning in nineteenth-century women's instructive writing in English. *Language Value* 22(1).

Alonso-Almeida, Francisco & Francisco J. Álvarez-Gil. 2021. Evaluative *that*-structures in the *Corpus of English Life Sciences Texts*. In Isabel Moskowich, Inés Lareo & Gonzalo Camiña (eds.), *'All families and genera': Exploring the Corpus of English Life Sciences Texts*, 228–47. Amsterdam: John Benjamins.

Alonso-Almeida, Francisco & Margarita Mele-Marrero. 2014. Stancetaking in seventeenth-century prefaces on obstetrics. *Journal of Historical Pragmatics* 15(1), 1–35.

Alonso-Almeida, Francisco & Ángeles Sánchez. 2016. 'If they have not the french': Translation choices in *The Happy Deliverie of Women* (1612). *The Translator* 22(1), 40–58.

Banks, David. 2008. *The development of scientific writing, linguistic features and historical context*. London: Equinox.

Banks, David. 2017. *The birth of the academic article: Le Journal des Sçavans and the Philosophical Transactions, 1665–1700*. Sheffield: Equinox.

Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad & Edward Finegan. 1999. *Longman grammar of written and spoken English*. London: Longman.

Biber, Douglas & Randi Reppen. 2015. Introduction. In Douglas Biber & Randi Reppen (eds.), *The Cambridge handbook of English corpus linguistics*, 1–8. Cambridge: Cambridge University Press.

Carrió Pastor, María Luisa. 2020. Conocer la lengua a través de los corpus: La herramienta METOOL, retos para el análisis de los marcadores discursivos. *Pragmalingüística* 28, 255–74.

Charles, Maggie. 2006. The construction of stance in reporting clauses: A cross-disciplinary study of theses. *Applied Linguistics* 27(3), 492–518.

Cornillie, Bert. 2009. Evidentiality and epistemic modality: On the close relationship of two different categories. *Functions of Language* 16, 44–62.

Green, Monica. 2005. Flowers, poisons and men: Menstruation in medieval Western Europe. In Andrew Shail & Gillian Howie (eds.), *Menstruation: A cultural history*, 51–64. New York: Palgrave Macmillan.

Hunston, Susan. 2000. Evaluation and the planes of discourse: Status and value in persuasive texts. In Susan Hunston & Geoff Thompson (eds.), *Evaluation in text: Authorial stance and the construction of discourse*, 176–207. Oxford: Oxford University Press.

Hunston, Susan & Hang Su. 2017. Patterns, constructions, and local grammar: A case study of 'evaluation'. *Applied Linguistics* 40(4), 567–93.

Hyland, Ken & Feng (Kevin) Jiang. 2018. 'We believe that …': Changes in an academic stance marker. *Australian Journal of Linguistics* 38(2), 139–61.

Hyland, Ken & Polly Tse. 2005a. Evaluative *that* constructions: Signalling stance in research abstracts. *Functions of Language* 12(1), 39–63.

Hyland, Ken & Polly Tse. 2005b. Hooking the reader: A corpus study of evaluative *that* in abstracts. *English for Specific Purposes* 24(2), 123–39.

Kohnen, Thomas. 2009. Historical corpus pragmatics: Focus on speech acts and texts. In Andreas H. Jucker, Daniel Schreier & Marianne Hundt (eds.), *Corpora: Pragmatics and discourse*, 11–36. Amsterdam: Brill.

Michel, Jean-Baptiste, Yuan Kui Shen, Aviva Presser Aiden, Adrian Veres, Matthew K. Gray, Joseph P. Pickett, Dale Hoiberg, Dan Clancy, Peter Norvig, Jon Orwant, Stephen Pinker, Martin A. Nowak & Erez Lieberman Aiden. 2011. Quantitative analysis of culture using millions of digitized books. *Science* 331(6014), 176–82.

Moskowich, Isabel, Inés Lareo & Gonzalo Camiña (eds.). 2021. *'All families and genera': Exploring the Corpus of English Life Sciences Texts*. Amsterdam: John Benjamins.

Romero-Trillo, Jesús 2017. Editorial. *Corpus Pragmatics* 1, 1–2.

Sinclair, John. 1986. Fictional worlds. In Malcolm Coulthard (ed.), *Talking about text: Studies presented to David Brazil on his retirement*, 43–60. Birmingham: English Language Research.

Taavitsainen, Irma. 2011. Medical case reports and scientific thought-styles. *Revista de Lenguas para Fines Específicos* 17, 75–98.

Taavitsainen, Irma, Andreas H. Jucker & Jukka Tuominen. 2014. *Diachronic corpus pragmatics*. Amsterdam: John Benjamins.

Paula Rautionaho, **Hanna Parviainen**, **Mark Kaunisto and Arja Nurmi (eds.),** *Social and regional variation in World Englishes: Local and global perspectives* (Routledge Studies in Sociolinguistics). New York and London: Routledge, 2023. Pp. xiii + 219. ISBN 9781032130361.

Reviewed by Axel Bohmann ⓘ, Universität Freiburg

Social and Regional Variation in World Englishes is a Festschrift for Juhani Klemola on the occasion of his 65th birthday. As typical of this publication format, and as indicated by the title, the volume comprises a topically diverse range of contributions. In addition to the unifying focus on variation and World Englishes, however, all chapters follow a corpus-based, empirical methodology, giving coherence to the book despite its breadth of topics. Following a foreword by Kate Corrigan, the first chapter is