Towards a linguistic consideration of technical documentation: Compilation and analysis of a representative corpus

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As each technical product needs to be documented, there is a huge demand for technical documentation. Despite their significance, however, technical documents are underrepresented in linguistic research. This thesis argues that while it belongs to the genre of technical writing, technical documentation has specific characteristics and deserves more thorough linguistic analysis. For such analysis, a representative corpus is needed to revisit existing claims about characteristics and to unearth new ones.

The thesis reviews the types of technical documentation, not only based on existing research in fields like text linguistics, genre analysis and discourse analysis, but also by examining the services provided by leading companies in the documentation industry. On that basis, a representative corpus is compiled. With the aid of the corpus, it is established whether existing claims about technical documents, such as their limited lexical richness and low syntactic complexity, can be confirmed. Then, to possibly unearth additional characteristics, the corpus is analysed with methods such as collocation analysis and keyword analysis.

Altogether, this research contributes to different fields. Firstly, technical documentation itself can profit from the insights when it comes to optimising documents. Secondly, genre-based language teaching can utilise the results, especially in the training of future technical writers. Thirdly, within linguistics, this research promotes the understanding of different genres and uses of language, especially of those that have traditionally been overlooked. In the future, this newly compiled corpus can be utilised as the basis for further analysis in all of the above fields and beyond.

Keywords: technical documentation, technical writing, corpus design, lexical richness, syntactic complexity, collocation analysis, keyword analysis

References (selection)

Blake, Gary & Robert W. Bly. 1993. The elements of technical writing. New York: McMillan.

- Brady, Brock. 1991. The function of phrasal verbs and their lexical counterparts in technical manuals. https://doi.org/10.15760/etd.6065
- Dobrin, Sidney I. et al. 2014. *Technical communication in the twenty-first century*, 2nd edn. Columbus, OH: Pearson.

Egbert, Jesse et al. 2022. *Designing and evaluating language corpora: A practical framework for corpus representativeness.* Cambridge: Cambridge UP.

Frutos, Araceli Cristobalena. 2015. A corpus-based genre study of instruction manuals for household appliances. Procedia - Social and Behavioral Sciences 198. 103-111.

Kropf, Franziska. 2020. *Machine translation of technical documentation: Exploring the effects of writing rules on translation results*. Regensburg: University of Regensburg B.A. Thesis.

Lassen, Inger. 2003. Accessibility and acceptability in technical manuals: A survey of style and grammatical metaphor. John Benjamins Publishing Company.

Laursen, Anne Lise et al. 2014. Using an AD-HOC corpus to write about emerging technologies for technical writing and translation: The case of search engine optimization. *IEEE Transactions on Professional Communication* 57(1). 56-74.

Manrique-Losada, Bell et al. 2019. Applying rhetorical analysis to processing technical documents. *Acta Scientarum Language and Culture* 41. https://periodicos.uem.br/ojs/index.php/ ActaSciLangCult/article/view/43382 (27 July 2022).

Povolná, Renata. 2020. Persuasion in technical discourse: The role of interpersonal metadiscourse markers in user manuals. In Dontcheva-Navratilova, Olga et al. (eds.), *Persuasion in specialised discourses*, 229-262. Cham: Palgrave Macmillan.

Puga, Karin & Sandra Götz. 2017. Keep out of reach of children! Introducing the Corpus of Product Information (CoPI) and its potential for corpus-based genre teaching. *Corpora* 12(3). 393-423.

Saint-Dizier, Patrick (ed.). 2014. *Challenges of discourse processing: The case of technical documents*. Newcastle upon Tyne: Cambridge Scholars Publishing.

Schubert, Christoph. 2016. Cohesion in contrast: A case study of English and German user manuals. *SKY Journal of Linguistics* 29. 95-117.

Sharpe, Michael. 2014. Language forms and rhetorical functions in technical instructions. *English for Specific Purposes World* 43(15).