DiaCollo and Die Grenzboten

Exploring diachronic collocations in a historical German newspaper corpus

This contribution presents an application of the open-source software tool DiaCollo to a recently curated historical German newspaper corpus published over the course of the `long nineteenth century'. DiaCollo was developed at the Berlin-Brandenburgische Akademie der Wissenschaften (BBAW) in close cooperation with historians to facilitate discovery, analysis, and interactive visualization of diachronic change with respect to collocation behavior in digital text corpora, and thus help to provide a clearer picture of corresponding change in word usage.

The national-liberal German-language periodical *Die Grenzboten* ("messengers from the border(s)") was published from 1841 to 1922, covering a wide range of subjects in politics, literature, and the arts, and has been recently integrated in into the digital corpus infrastructure hosted by the BBAW. Its coverage of civic life, opinions, and debates surrounding the revolution of 1848, the restoration period, industrialization, the German Empire (*Kaiserreich*), and the First World War makes it a valuable source for a broad range of disciplines.

Two use-cases serve to demonstrate the utility of DiaCollo, as well as the corpus' potential for further (digital) historical research. These examples derive from current research by humanists participating in the ongoing DiaCollo design and development cycle. Both examples deal with the manner in which religious affiliation and the institution of the church are discussed and utilized in political discourse and national policy in 19th-century Germany. Looking for and at debates on antisemitism and education in the corpus data, we provide research perspectives from the fields of (historical) political science and cultural history.

First, we investigate the discourses of religion in terms of antisemitic sentiments within the *Grenzboten* corpus. DiaCollo profiles are compared to close reading observations which suggest that *Die Grenzboten* took up a more pro-Jewish position during the widely received *Berliner*Antisemitismusstreit ("Berlin antisemitism dispute", 1879-1881). As *Die Grenzboten* was witness to several changes and attempted reforms of school systems in German-speaking territories during the course of its publication, our second use-case starts with simple DiaCollo searches on "education". Pursuing the leads thus discovered, we look at the different views on the churches' and the states' claims of authority regarding education as appearing in the corpus. In this way, we demonstrate how DiaCollo can not only enable distant reading and analysis informed by a researcher's historical background knowledge, but can also inspire subsequent close reading to enrich and potentially revise existing interpretations.

References

- Jurish, B.: DiaCollo: On the trail of diachronic collocations. In: De Smedt, K. (ed.) CLARIN Annual Conference 2015 (Wrocław, Poland, October 14–16 2015). pp. 28–31 (2015), http://www.clarin.eu/sites/default/files/book%20of%20abstracts%202015.pdf
- Jurish, B., Geyken, A., Werneke, T.: DiaCollo: diachronen Kollokationen auf der Spur. In: Proceedings DHd 2016: Modellierung – Vernetzung – Visualisierung. pp. 172–175 (March 2016), http://dhd2016.de/boa.pdf#page=172
- Jurish, B., Thomas, C., Wiegand, F.: Querying the deutsches Textarchiv. In: Kruschwitz, U., Hopfgartner, F., Gurrin, C. (eds.) Proceedings of the Workshop "Beyond Single-Shot Text

Queries: Bridging the Gap(s) between Research Communities" (MindTheGap 2014). pp. 25–30. Berlin, Germany (March 2014), http://ceur-ws.org/Vol-1131/mindthegap14 7.pdf

Werner, F.: Die Grenzboten: aus der Geschichte einer achtzigjährigen Zeitschrift nationaler Bedeutung. Die Grenzboten Jg. 81, 448–452 (1922), http://brema.suub.uni-bremen.de/grenzboten/periodical/titleinfo/178709

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Bryan Jurish is a researcher at the Berlin-Brandenburg Academy of Sciences and Humanities. He received a B.A. in Philosophy and Cognitive Science from Northwestern University in 1996, where he was awarded the Daniel Bonbright Scholar award for excellence in the humanities. His subsequent study of Computational Linguistics at the Universität Potsdam led to a Diplom in 2002 and a Ph.D. in 2011. His research interests include diachronic computational linguistics, automated spelling correction for historical and non-standard text, theory and applications of weighted finite state automata, noise-tolerant stochastic models for natural language processing tasks, and formal language models of musical structure.

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Thomas Werneke is a historian at the Centre for Contemporary History Potsdam. He earned his Ph.D. in 2013 in the field of historical semantics by writing a conceptual history of human rights language during the Cold War. Since 2014 he has been coordinating a working group of historians within the CLARIN-D infrastructure project. His research interests include methodological approaches in the larger field of historical semantics. His current research project is a history of nutrition regimes in Germany during the 20th century.

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Maret Nieländer studied cultural sciences at the European-University Viadrina (Frankfurt/Oder, Germany), conducting further Studies in Oviedo (Spain) and practical training in South Africa, Spain, and Mexico. At the University of Heidelberg, Nieländer worked as a research assistant on the project "The Dialogue of Cultures in the Andes" for the Transcultural Studies programme. She completed her doctoral thesis on the role of the Mercedarian order in the emergence of colonial society in Central and South America in the faculty of history in 2013. In 2014 she joined the Georg Eckert Institute - Leibniz-Institute for International Textbook Research (GEI) as a research fellow in the department for Digital Information and Research Infrastructures. She coordinates the field of Digital Humanities at the GEI as well as the CLARIN-D discipline-specific working group on history that is led by the ZZF Potsdam and the GEI.