Decoding the Discourse: Analyzing the Linguistic Features and Strategies behind the Querdenken Movement's COVID-19 Narrative

Keywords: COVID-19, Natural Language Processing (NLP), Critical Discourse Analysis (CDA), protest movement, Querdenken

Extended Abstract

This study aims to examine the language and discourse utilized by the German anti-COVID movement "Querdenken" and its representation in prominent news sites and online blogs within the movement. Researching this movement's narrative is of important social relevance as understanding how misinformation is created through linguistic strategies could have practical implications for policymakers, health professionals and researchers who seek to address scientific misinformation. The study is based on a dataset of approximately 20,000 COVID-19-related articles collected from five Querdenken-affiliated websites, spanning from March 2020 to January 2023. The analysis is currently underway, results are expected in March 2023.

This study draws on the framework of critical discourse analysis (CDA). Discourse analysis examines the production and distribution of meaning in language and how it contributes to the construction of knowledge and societal norms (Baker & McGlashan, 2020). In this study, the discourse surrounding the COVID-19 pandemic and its representation by both Querdenken and mainstream media is analyzed to understand how the Querdenken's perspective on the pandemic is constructed and how it differs from the dominant narrative. As previous research suggests, political sources play a prominent role in constructing pandemic news, suggesting that mainstream media coverage strongly leans towards political elites (Mellado et al., 2021). However, it remains unclear how those who do not feel represented by or agree with the mainstream media or political establishment construct their coverage of the pandemic. Initial research on the Querdenken movement suggests that seemingly scientific evidence is used frequently by the movement's outlets which, however, support their own lines of thinking (Marko, 2022).

Wishing to close this gap in the literature, this study asks two research questions: First, which linguistic features and strategies are used by Querdenken media in the discourse to legitimize their views on the pandemic? Second, which evidence is brought into the discourse when reporting on their perspective on the pandemic?

To answer the first research question, a dictionary was created to measure scientific language used by Querdenken outlets in their messaging (see Figure 1 for a visualization of quantitative methodology used). Developing a dictionary to measure scientific language allows for a systematic and quantitative analysis of the language used by Querdenken media and provides insight into the extent to which they use scientific terminology in their discourse.

In continuation, a longitudinal comparison is being conducted between Querdenken articles and online articles from a newspaper (Der Tagesspiegel) and a tabloid (Bild), spanning from March 2020 to December 2021. The comparison is done using linear mixed modeling and includes variables such as emotional valence in language (e.g., emotional tone, anxiety or anger), topic-related variables (e.g., death or health), and ingroup versus outgroup variables

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(e.g., first and second person plural) from the LIWC (Linguistic Inquiry and Word Count), and the four variables derived from the scientific terminology dictionary. This methodology enables an evaluation of the relationship between pandemic events (such as new SARS-CoV-2 variants or lockdown measures) and the usage of emotional, scientific, and topic related language in the articles within our dataset. Additionally, the methodology allows for an analysis of the relationship between the Querdenken and dominant narrative represented in mainstream and the movement's media.

Regarding the second research question, a qualitative analysis of the claims made by Querdenken outlets is being conducted in this study, specifically evaluating the manner in which evidence through cited sources is used to support the movement's claims. To achieve a sufficient degree of objectivity in this analysis, a codebook consisting of five categories and providing instructions for the evaluation process was created. A manual analysis of 250 claims and their respective sources from the sample's Querdenken outlets is being carried out to achieve this objective (see Figure 2 for a more detailed visualization of the process).

The impact of this study lies in its potential to shed light on the communication strategies and the use of evidence by the German anti-COVID movement "Querdenken" in their discourse on the pandemic. Furthermore, the use of a dictionary to measure scientific language is a novel approach, too, complementing previous psycholinguistic research on language used by prominent conspiracy theorists (Fong et al., 2021). The results of this study may provide insights into the extent to which the movement uses scientific terminology and the ways in which different sources of information contribute to the discourse surrounding the pandemic. The findings may contribute to a better understanding of how conspiracy theories and misinformation spread and are created, which could have implications for public health policies, communication strategies during pandemics, and scientists wishing to communicate more efficiently about their work.

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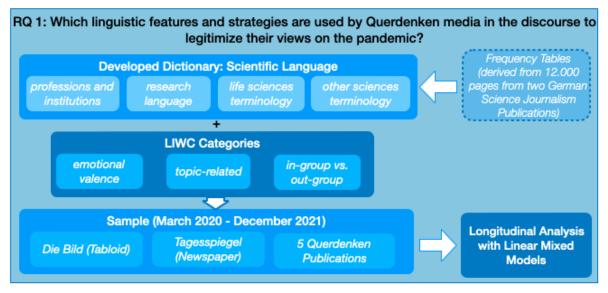


Figure 1. Visualization of Quantitative Methodology: Creation of a Dictionary to Measure Scientific Language Used by Querdenken Outlets.

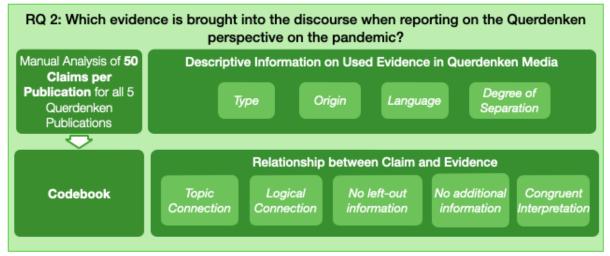


Figure 2. Detailed Visualization of Qualitative Analysis of Claims Made by Querdenken Outlets and the Supporting Evidence.