Media Bias in German Online Newspapers

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Online newspapers have been established as a crucial information source, at least partially replacing traditional media like television or print media. As all other media, online newspapers are potentially affected by media bias. This describes non-neutral reporting of journalists and other news producers, e.g., with respect to specific opinions or political parties. Analysis of media bias has a long tradition in political science. However, traditional techniques rely heavily on manual annotation and are thus often limited to the analysis of small sets of articles.

In [1] we investigate a dataset that covers all political and economical news over a four-year period from four leading German online newspapers, namely *faz.net*, *spiegel.de*, *taz.de*, and *zeit.de*. We perform a comparative analysis of party coverage by analyzing the occurrences of both acronyms and parliament members in title, text and meta-information. The comparative analysis shows significant differences in coverage between different parties. For example, it can be observed that *faz.net* favors the conservative parties CDU and CSU over the left and green parties Linke and Grüne.

We also investigate a relation in ideology by comparing the usage of ideological terms (e.g., freedom, solidarity) in online newspapers and party manifestos, by counting occurrences and computing the cosine-similarity. Results show that a higher similarity in the usage of key vocabulary can be observed for some parties and online newspapers. For example *taz.de* tends to favor a key vocabulary similar to the left party Linke over other parties.

Finally, we analyze the expression of sentiment towards parties but the results are inconclusive.

References

1. Dallmann, A., Lemmerich, F., Zoller, D., Hotho, A.: Media bias in german online newspapers. In: Proceedings of the 26th ACM Conference on Hypertext & Social Media. pp. 133–137. ACM (2015)