The Epistemological Capture of Climate Journalism
Conceptualizing the relationship between infrastructure and epistemology

In recent years platforms have become so intertwined with journalism that scholars coined the term "platformization of news" (Møller Hartley et al., 2023) to describe the phenomenon of the "enmeshment of news producers and digital technology platforms" (p. 376). This article proposes *epistemological capture* as one implication of this phenomenon, as big tech infrastructures subtly impact the processes of (journalistic) knowledge production. The platformization of news is becoming increasingly visible with the advent of AI in the newsroom. Indeed, platform companies dominate the field of AI, as news organizations do not have the resources to develop their own tools and rely on platform companies to provide tools for all the stages of the gatekeeping process – information gathering, news production, and distribution (Simon, 2022). Previous research (Simon, 2022; Kristensen and Møller Hartley, 2023) discusses the implications of the platformization of news in terms of ´infrastructure capture´ (Nechushtai, 2018). While such research conceptualizes the impact of infrastructure capture focusing on the potential loss of journalistic autonomy, I focus on processes of knowledge production, introducing the concept of epistemological capture.

Previous work has taken interest in platforms as companies, detailing infrastructure capture in terms of tech giants' ownership of different layers of infrastructure, and its implications for journalistic autonomy, news distribution, and monetization (Simon, 2022; Kristensen and Møller Hartley, 2023). In this article I conceptualize the implications of infrastructure capture looking at platforms as "infrastructural architecture" (Helmond, 2015), through the lens of critical platform studies (Bogost and Montfort, 2009). Critical platform studies foreground the importance of technical aspects, which are key to understanding that: (1) "while platforms position themselves as neutral intermediaries or utilities, they (pre)format data passing through their infrastructure according to the logic of their underlying infrastructure" (Helmond, 2015, p. 7); (2) this ´datastructuring´ (Flyverbom and Murray, 2018, p. 3) has consequences for knowledge production. Shifting the perspective from platform as companies to platforms as infrastructures allows to get a sense of more profound and subtle implications of the platformization of news, namely epistemological capture, or the inevitable reshaping of the epistemic architecture of knowledge production.

To outline the concept of epistemological capture and its potential implications for news and journalism I use climate journalism as case study. Climate journalism relies on data and knowledge from the domain of climate science, where climate models are built and implemented with the aid of AI technologies developed and owned by big tech companies. An example is Microsoft´s AI for Earth initiative for which Microsoft allowed academic researchers and research institutes to make use of its Azure cloud computing and AI capabilities (Microsoft, 2019, as cited by Nost and Colven, 2022). Using climate journalism as case study allows to highlight the deep ramifications of infrastructure capture beyond but at the same time affecting news and journalism, as well as to put forth the argument that infrastructure capture always results in epistemological capture.

References

Bogost, I., & Montfort, N. (2009). Platform Studies: Frequently Questioned Answers. *Proceedings of the Digital Arts and Culture Conference*. https://escholarship.org/uc/item/01r0k9br

Flyverbom, M., & Murray, J. (2018). Datastructuring—Organizing and curating digital traces into action. *Big Data & Society*, *5*(2), 205395171879911-. https://doi.org/10.1177/2053951718799114

Helmond, A. (2015). The Platformization of the Web: Making Web Data Platform Ready. *Social Media + Society*, *1*(2), 205630511560308-. https://doi.org/10.1177/2056305115603080

Kristensen, L. M., & Møller Hartley, J. (2023). The Infrastructure of News: Negotiating Infrastructural Capture and Autonomy in Data-Driven News Distribution. *Media and Communication*, *11*(2).

Møller Hartley, J., Petre, C., Bengtsson, M., & Kammer, A. (2023). Autonomies and Dependencies: Shifting Configurations of Power in the Platformization of News. *Digital Journalism*, *11*(8), 1375–1390. https://doi.org/10.1080/21670811.2023.2257759

Nechushtai, E. (2018). Could digital platforms capture the media through infrastructure? *Journalism (London, England)*, *19*(8), 1043–1058. https://doi.org/10.1177/1464884917725163

Nost, E., & Colven, E. (2022). Earth for AI: A Political Ecology of Data-Driven Climate Initiatives. *Geoforum*, *130*, 23–34. https://doi.org/10.1016/j.geoforum.2022.01.016

Simon, F. M. (2022). Uneasy Bedfellows: AI in the News, Platform Companies and the Issue of Journalistic Autonomy. *Digital Journalism*, *10*(10), 1832–1854. https://doi.org/10.1080/21670811.2022.2063150