

Global Warming, global discourse?
Geographical patterns of communication on Twitter

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Global warming is among those challenges that clearly surpass the political agency of single nation states and therefore requires coordination and joint efforts among countries to address the issue. However, the case of global warming is particular in the sense that many of those societies, which have contributed the least to create the problem (first and foremost countries in the global south), are at the same time those most vulnerable to its consequences (Althor et al., 2016, Wheeler, 2011, IPCC, 2014). The complexity of this paradoxical situation, including the normative questions of equality, political participation and democracy it raises, is best captured in the notion of climate (in)justice (Schlosberg and Collins, 2014, Chatterton et al., 2013, Roosvall and Tegelberg, 2015).

Borrowing from Nancy Fraser’s vocabulary, the above constitutes an issue of political legitimacy and political efficacy (Fraser, 2007) at once, given that those most affected by this particular problem find themselves in the least favorable position to transform their democratic will into effective political commitment. In the case of the most vulnerable countries this is not (only) due to the lack of local democratic structures, but rather the fact that even rigorous climate change policies are less effective, given that many of these societies play a only a minor role in causing the issue in the first place. Deliberative theorists have argued, that in a situation where global democratic structures are absent, transnational public spheres may provide arenas for political participation on a supranational scale (Bohman, 2004) and thereby alleviate these democratic shortcomings to some extent. Following these lines, Ugarteche (2007) argues transnational political efficacy can be achieved when civil society actors successfully become involved in democratic debates abroad.

This raises questions about the inclusiveness of the global discourse on climate change, about the actors who dominate it and whether those from the most affected regions get a say in it. The paper to be presented addresses these questions by focusing on the debate around global warming on one particular computer mediated arena of discussion, namely Twitter. While platforms such as Twitter are technically open to everyone¹, empirical research has shown that the economies of attention they operate exhibit strong signs of inequality, that these constrain the prospects of political participation and that the lack of attention becomes a de facto form of exclusion (Schlögl, 2015). In other words, while (almost) anyone can talk, many are not heard. These types of inequalities and exclusions are reflected in the outcome of discourses itself, or as Chantal Mouffe puts this “social objectivity is ultimately political and [...] it has to show the traces of exclusion, which governs its constitution” (Mouffe, 2000, 13f). This coincidence is what Mouffe and Laclau denominate hegemony (Laclau and Mouffe,

¹Of course, participation is limited to those with internet access, which remains a serious limitation in many parts of the world. While the latter can therefore not be dismissed, I argue that it is legit to factor the general topic of Internet access out, while studying structural inequalities among those already participating

2014). Describing this notion of hegemony empirically by studying the structural composition of a specific discourse in terms of its dominant and non dominant voices is the goal of this paper. I thereby seek to answer the following research questions:

1. What is the geographic structure of the discourse on global warming on Twitter?
2. Whose voices receive attention and whose don't? Where do either of them speak from?
3. Whom are the participants actively bridging geographical gaps by forwarding and including content from actors abroad?

The major part of this analysis is yet to be done. Tweets matching a set of keywords in 4 widely spoken languages² regarding global warming have been collected between 1st of December 2021 and 30th of November 2022 resulting in a total of 19 053 487 Tweets. The respective accounts were then automatically geocoded based on self disclosed profile information. The successfully geocoded accounts will form the basis for analysis. Figure 1 displays an overview of the geocoding results at the time of writing (yet to be improved).

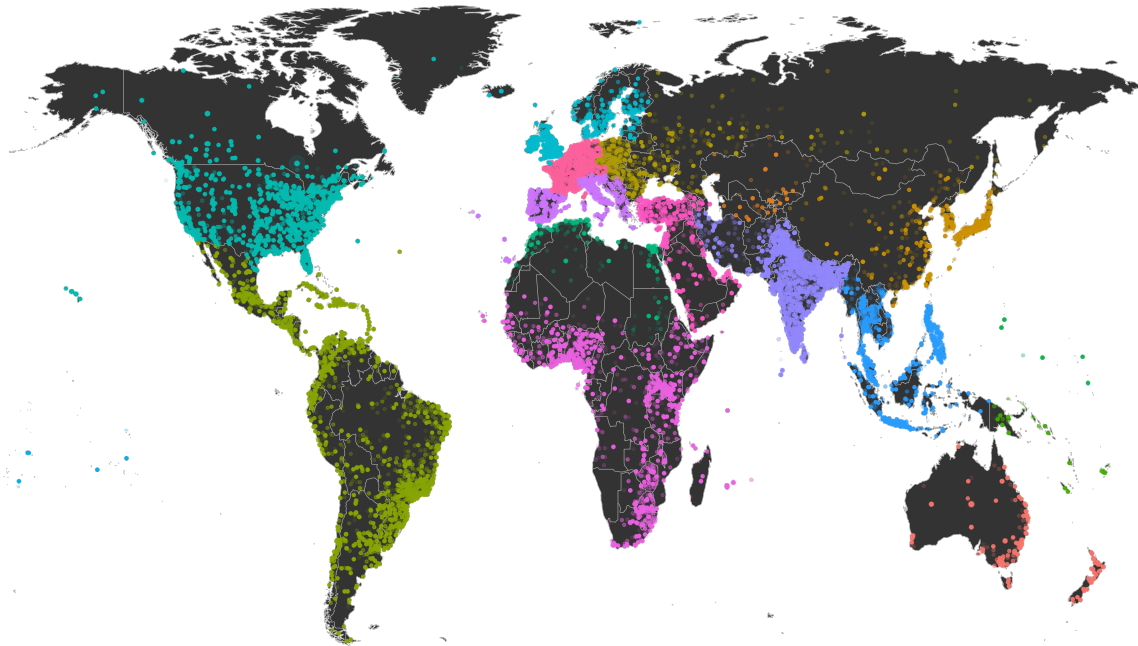


Figure 1: Automatically detected locations of Twitter users in the dataset (N = 2 158 265)

The analysis follows a quantitative approach mainly based on social network analysis. In order to understand the structural properties of the discourse (RQ1), unveil geographical hierarchies in terms of audiences (RQ2) and identify the actors that allow to overcome potential

²Mainly due to pragmatic reasons these are English, Spanish, French and Portuguese

geographical boundaries (RQ3), communication data will be interpreted as social networks in which individual users comprise nodes and retweets connections among them.

This paper directly relates to the overall theme “Hegemonie” of this conference. I consider social media such as Twitter strongly constrained by power inequalities, which in turn shape the discourses these platforms bring about. Hence, I understand them as “hegemonic“ in Laclau’s and Mouffe’s sense. I will study the nature of this hegemony empirically with regards to inequalities among users in different world regions, which I deem particularly relevant in the case of global warming. However, my research still seeks to understand the dynamics and identify political actors that work against potential geographic inequalities (see RQ 3), thereby eventually shifting hegemonic constellations.

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