

GENDERED POWER AND CLIMATE CHANGE: A CRITICAL DISCOURSE ANALYSIS OF THE GEOENGINEERING FIELD

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ABSTRACT

The Paris Agreement has been praised as a notable success in international political cooperation, yet Nationally Determined Contributions remain far below levels needed to adhere to even the 2°C set warming target (UNEP, 2018). In the face of lackluster movement towards significantly reducing global carbon dioxide emissions dialogue around geoengineering technologies - presented as a potential 'fix' for climate change - has increased. Geoengineering refers to 'artificial and deliberate attempts to manipulate a key facet of the earth's climate system' (Dalby, 2010, p. 192), encompassing technologies such as Solar Radiation Management and Carbon Dioxide Removal that seek to mitigate global temperature rise either by limiting incoming solar radiation to the earth's atmosphere, or literally removing carbon dioxide from the atmosphere.

These technologies are inherently bound up in social systems and values, and it is therefore imperative to thoroughly explore their justice and ethical dimensions. If such technologies were to be deployed and cause unintended negative side effects, already marginalized populations will be most adversely affected. Similarly, research on geoengineering is almost exclusively dominated by voices from universities in developed countries such as the US and UK, and in general the field currently lacks diversity. This is particularly concerning due to the global nature of their potential application.

Whilst gender should have little impact on the conception of the hard science itself, the lack of female voices currently contributing to the debate around geoengineering is cause for

concern from the point of view of the ‘framing and decision-making powers that participation in geoengineering research implies’ (Buck, Gammon & Preston 2014, p. 654). In terms of the history of science, this technocratic approach to ‘solving’ climate change evokes traditionally masculine attempts to control nature. As part of the broader justice puzzle, this project aims to explore the gendered power dimensions of the geoengineering field and how feminist theory might be able to contribute a more holistic approach to relevant justice issues. The project is grounded in theory from Ecofeminism and Feminist Science Studies, as they are two disciplines that critique masculine attempts to exploit nature, and the ways in which Western scientific institutions are implicated in such dynamics of domination and control.

Critical Discourse Analysis (CDA) was chosen as the methodology due to its concern with uncovering asymmetrical power relations within society: these aims fit well with the emancipatory nature of the feminist theory used. Academic texts were the focal point of analysis due to the power that researchers currently hold in shaping geoengineering discourse; in the absence of governance and oversight frameworks for geoengineering, academics are at the forefront of the agenda. Texts were chosen from 6 mainstream academic journals, within a timeframe of 2006-2019, and analysed in-depth according to the CDA framework. The analysis found that geoengineering is gendered at both an institutional and ideological level and helped to uncover and explore gendered power relations within the chosen discourse. The findings suggest that incorporating a gendered point of view more consistently in research would help develop a more nuanced understanding of justice and power relations within the geoengineering field.

Keywords: *gender, geoengineering, power, ecofeminism, feminist science studies, critical discourse analysis*