

# **Manchester Geographical Society**



*Funding Report*

# The shifting boundaries of boundary work: ‘human dimensions’ and the Amazon basin in the Anthropocene.

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## Summary

This report provides an overview of the fieldwork conducted for the PhD project “The shifting boundaries of boundary work: ‘human dimensions’ and the Amazon basin in the Anthropocene,” which was partially supported by the Manchester Geographical Society Postgraduate Research Fund. The document begins by providing the context of the research, followed by its methodology and fieldwork, and concludes with the remaining work to complete the project.

This project explores the role of so-called ‘boundary organisations’, such as the Intergovernmental Panel on Climate Change (IPCC), in addressing the Brazilian Amazon crisis and the assumptions underpinning their efforts. By employing thematic analysis and conducting interviews with diverse participants, the project seeks to gain a nuanced understanding of boundary work processes and their implications for Amazon’s conservation governance systems. This research aims to contribute to developing more effective and equitable approaches to representing the diverse realities of the Brazilian Amazon at different scales.

## Context

The project focuses on the Brazilian Amazon ecosystem crisis, which is of local, national, and international concern, as demonstrated by its socio-ecological realities. The Amazon rainforest spans approximately 2.6 million square miles across nine South American nations: Brazil, Bolivia, Peru, Colombia, Ecuador, Venezuela, Guyana, Suriname, and French Guiana. However, the majority of the Amazon Basin, roughly 60%, lies within Brazil’s borders (Earth Org, 2023; WWF, n.d.; Greenpeace, n.d.). The Brazilian Amazon has been undergoing significant environmental changes in recent years. Deforestation has been a major concern primarily driven by agricultural expansion, logging, and infrastructure development (Nepstad *et al.*, 2014). These activities have led to habitat loss, biodiversity decline, and alterations in the region’s hydrological cycle. Moreover, climate change has exacerbated the effects of human-induced disturbances, causing increased temperatures, altered rainfall patterns, and more frequent droughts (Marengo *et al.*, 2018; Castello & Macedo, 2016). As a result, the Brazilian Amazon faces critical challenges in maintaining its ecological integrity and the ecosystem services it provides to local communities and the global climate system (Nobre *et al.*, 2016).

The so-called Boundary Organisations (BOs) are entities established through the collaborative efforts of scientific and political communities to undertake expert, impartial analysis and facilitate communication and collaboration between stakeholders (Guston, 1999, 2000). BOs, such as the Intergovernmental Panel on Climate Change (IPCC), aim to address issues such as those faced by the Amazon by facilitating collaboration between scientists and non-scientists (usually policymakers) and providing scientific evidence (Miller, 2001). However, the way different BOs frame issues may obscure certain legitimate perspectives on human, biophysical, spatial, and extra-local aspects of the problem (Cash *et al.*, 2003). This framing depends on who represents these aspects and to what extent (Jasanoff, 2004). Therefore, this thesis explores the assumptions that underpin BOs in their attempts to manage and conserve the Amazon and how, by taking a systemic approach, the findings can provide a better understanding of how the science-policy relationship is enacted,

by whom, and with what consequences, specifically for the Amazon's conservation governance systems. The hope is that by exposing the gap in current representations, experts can shift boundaries and become more overtly normative when conceptualising global environmental changes' core issues.

To achieve its objectives, this project employs thematic analysis as its primary methodology, focusing on the language, nuances, and underlying assumptions present in the collected data (Braun & Clarke, 2022). Thematic analysis is a method that involves identifying, analysing, and reporting patterns or themes within qualitative data. The empirical material consists of two main components: official documents published by the relevant organisations and interviews conducted with experts who were involved in the publication of the analysed materials. The rationale behind this approach for this project is based on how thematic analysis is valuable when the aim is to gain a detailed and nuanced understanding of the data. It allows for exploring both explicit (surface-level) and implicit (underlying) aspects of the data (Yanow, 1996). This makes thematic analysis well-suited for identifying and analysing patterns or themes within the collected documents and interviews.

### **Fieldwork**

The interviews were semi-structured and carried out through different means (in person, online, or by telephone). The interviews lasted between 30 and 60 minutes and were conducted in English, Spanish, and Portuguese. The in-person interviews took place during the project's fieldwork visit to Brazil in June and July of 2023, covering the cities of Sao Paulo, Brasilia, Manaus, and Rio de Janeiro, supported partially by the Manchester Geographical Society Postgraduate Research Fund. The criteria for participant selection in the interview process were designed to ensure a comprehensive and diverse representation of perspectives. Key criteria included the participant's expertise, involvement in the publication of analysed materials, gender balance, regional representation, and diversity of roles within their organisations.

A total of 56 people were selected as participants. Among them, 24% were affiliated with the IPCC, 32% were associated with the Intergovernmental Panel on Biodiversity Ecosystem Services (IPBES), and 18% were connected to the Science Panel for the Amazon (SPA). The remaining 32% were from various organisations within Brazil, encompassing diverse entities such as non-governmental organisations (NGOs), government agencies, and research institutions. Of the participants, 45% were female, while 55% were male. The participants covered all regions, with Latin America being the most represented (54%).

### **Further work**

The interviews were transcribed in their original languages (English, Portuguese, or Spanish) and translated to English for consistency. To ensure confidentiality, each participant was assigned a pseudonym. The transcribed and anonymised data was then uploaded into the MAXQDA software. After finalising the thematic analysis, the results will be written and included in the PhD's dissertation. Another fieldwork component involved attending the IPBES-10th Plenary in Bonn, Germany, in August 2023 and the IPCC-60th Plenary in Istanbul in January 2023. These events provided an opportunity to engage with experts and stakeholders relevant to the project's focus.

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