

## **Living contamination:**

### **Indigenous monitoring and toxic politics in the Peruvian Amazon**

This thesis analyses how Indigenous communities in the northern Peruvian Amazon monitor oil spills and engage with regulatory science to render oil-related contamination legible. It explores the possibilities that this engagement and epistemic encounter might afford for Indigenous demands for accountability and repair, considering the complex dependencies generated by extractivism and contamination.

The analysis is informed by extended ethnographic research with Quechua, Kichwa, Achuar, and Cocama Indigenous federations, whose territories have been affected by five decades of oil extraction. In response to the lack of transparency from oil companies, reinforced by Peru's environmental regulatory framework, Indigenous federations created their own monitoring programme that integrates territorial knowledge with digital technologies, including smartphones, GPS devices, and drones. Since 2010, Indigenous monitors have documented hundreds of previously unreported contaminated sites and continue to detect new oil spills weekly. However, Indigenous monitoring takes place in a context of ongoing extractive and colonial violence, in which state regulation of extractive industries is deeply implicated.

The thesis traces the ambivalence of 'knowing contamination' and of Indigenous attempts to make harm legible within regulatory science's inherently exclusionary logic. Indigenous monitors have achieved greater recognition of the scale of contamination and have themselves become knowledgeable about sampling procedures and environmental standards. However, in monitors' engagement with regulatory science, their roles and knowledge are continually minimised, and the political claims of Indigenous federations are constrained to narrow technical and bureaucratic parameters. The conceptualisation and recognition of contamination, therefore, constitute an ongoing site of struggle over how this harm should be understood and who is authorised to gather evidence.

Methodologically, this thesis is grounded in long-term accompaniment of Indigenous federations and monitors between 2018 and 2022, within the framework of an NGO-funded project. This included participant observation during monitoring activities as well as encounters and negotiations with state entities, semi-structured and open-ended interviews, and the analysis of archival and regulatory documents. The thesis critically reflects on the ethical as well as political challenges of engaged scholarship, particularly the author's positionality as an active participant in the politics of knowledge production.

First, this thesis explores how Indigenous conceptualisations of contamination have evolved, from the initial sensing of harm in the forest to encounters with scientific knowledge and environmental regulation. It then zooms in on the administrative trajectory of a single, ordinary oil spill to examine how Indigenous monitors engage with regulatory science, showing that, despite their marginalisation, monitors nonetheless raise new possibilities for contestation. The analysis

then moves to encounters between Indigenous federations and NGOs and focuses on drones to examine the narratives and optimism surrounding the use of monitoring technologies in struggles for environmental justice. Finally, the thesis explores how Indigenous federations understand the ambivalence of environmental remediation as an imperfect yet tangible effort within their ongoing refusal of extractive dispossession and impunity.