Notes from the Icehouse

Unequal Knowledge: Justice, Colonialism, and Expertise in Global Environmental Research

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Academic knowledge production depends on everyday tasks, from securing resources and employment to building arguments for research agendas. Viewing science and other fields of knowledge production in this way opens up a series of questions about the complex social and institutional arrangements that structure academic labour (Hackett et al. 2016). These arrangements define how, where and when researchers interact, how disciplines are defined, and how expertise, methods and conventions are recognised and endorsed (Jasanoff 2004; Oppenheimer et al. 2019).

Researchers interact and collaborate in specific organisational settings (academic departments, government agencies, universities and research centres), and in specific spatial contexts, from laboratories

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and professional meetings to international exchanges and scholarly visits. These interactions are conditioned by budgetary restrictions, research infrastructure and personal obligations. The social, material and spatial organisation of intellectual labour powerfully determines how individual scholars participate in expert networks, impact disciplinary fields and influence public agendas.

Social, cultural and institutional arrangements also influence the ways in which knowledge is validated or dismissed. Scholars legitimate their own knowledge and the work of others through publications and peer-review, and by informing decisions within (e.g., recruitment and promotion) and outside (e.g., advising public policy) academia. All of this has profound epistemological implications, as settings shape the legitimisation of research networks and determine what and whose knowledge is authoritative.

According to Linda Tuhiwai Smith (2012), a scholar of indigenous methodologies, researchers are human carriers of research. As such, it is vital to understand how they engage with other researchers and their human subjects of research across geographical, socio-cultural and institutional boundaries. Equally important are the power disparities and hierarchies that define the nature of those interactions – including our assumptions and institutional structures that delimit who is a valid expert and knower, and the boundaries of academic expertise (Kidd et al. 2017; Ottinger et al. 2016).

Questions about socio-epistemological disparities and the unequal nature of intellectual labour are central to global environmental research. Indeed, the effects of vector-borne diseases in increasing health inequalities, the rise of social movements fighting for social and racial equity and the uneven socio-physical and intellectual realities of the Anthropocene have sharpened concern about how scholars conceptualise and reproduce inequalities in the study of environmental issues. Today, many agree that ecological change differentially impacts communities across class, race, gender, species and ecosystems. Yet the complex mechanisms by which these injustices arise, the social and epistemic relations that enable these disparities, and their long-lasting effects, are still under-theorised and under-historicised.

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Few acknowledge that our current environmental crisis is also an epistemological crisis. I would argue that the lack of diversity and representation in the production of environmental knowledge creates epistemological gaps that compromise our understanding of complex socio-ecological issues. As the impacts of socio-ecological disparities increase and public awareness of them grows, these epistemological challenges will have to be addressed.

International scientific assessments of climate change provide a paradigmatic case of the uneven distribution of intellectual labour in global environmental research. In the 1980s and 1990s, developing countries struggled to gain influence in international networks and negotiations. Few researchers from these countries participated in the early assessments. The 1985 Villach Conference, the most influential climate assessment of the 1980s and a critical step toward the creation of the Intergovernmental Panel on Climate Change (IPCC), included no experts from the global South. Developing nations participated little in the first IPCC reports and this absence has remained a structural feature of other international frameworks such as the UNEP Global Biodiversity Assessment of 1995 (Biermann 2006; Yamineva 2017). Similar North-South power disparities are also evident in the mechanisms used to calculate anthropogenic emissions and in debates on the distributions of responsibilities (Roberts and Parks 2007).

Students of environmental governance attribute these asymmetries to the dominance of the North in setting the international scientific agenda. Differential access to resources has translated into the predominance of scientists and researchers from industrialised nations, and rendered issues particular to the South less visible in the global environmental governance arena. Because scientific networks and institutions from beyond the developed world are unable to participate in equal terms, 'global' knowledge tends to be Northern knowledge (Karlsson et al. 2007).

Unequal research capacities and minimal infrastructure also influence public debates at local and regional scales. National science-policy frameworks relevant to socio-ecological issues (e.g., nitrogen governance) may be lacking because policies and institutional

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cultures restrict the admission of certain types of knowledge into the policy arena (by prioritising economic over environmental or agricultural expertise, for example), or dismantle formal communication channels between research institutions and policy-making agencies (San Martín 2017; San Martín 2020). There is a profound lack of understanding in global governance research about how different scientific communities interact with policy frameworks.

Power disparities in international scientific assessments also result from specific research priorities and institutionalised linguistic barriers. The knowledge divide is not a gap to be filled with more research, but an issue that requires reform of the ways in which networks based outside Northern institutions are legitimised, valued and integrated. Researchers in the South often prioritise issues of acute local importance, rather than those of global significance. Whether to engage local agendas or as a consequence of institutional or linguistic barriers, many Southern researchers publish in national and regional journals and in languages other than English, making their work almost invisible in 'global' assessments and international networks. When this knowledge enters the global policy arena (often under the sponsorship of institutions deemed to be global such as the IPCC or the United Nations Environment Program), these power disparities create long-term consequences far beyond the realm of science.

Institutional cultures often bestow disproportionate legitimacy on knowledge produced in the developed world. This means that national policy debates in the South often ignore intellectual labour that lacks the imprimatur of organisations in the North. Local researchers without international credentials are unable to influence decision-making as governments disqualify their own researchers as experts. Those with access to the resources of the North, including post-graduate education and demonstrated collaborations with northern authors and institutions, are more regularly able to influence national policy (Steinberg 2001; Karlsson et al. 2007).

Implicit in these institutional cultures – and often forgotten in the scholarship of global inequality – is that the uneven distribution of research capacities and expertise has been a product of long-term processes of epistemic colonialism. Western research as an 'institu-

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tion of knowledge' and a set of ideas and practices that organises intellectual labour, is embedded in global processes of imperial expansionism and colonisation (Smith 2012). Through material and cultural endeavours – closely tied to physical violence and resource extraction – colonial projects divided those able to produce authoritative knowledge from those unfit to become legitimate knowers. These epistemic hierarchies became institutionalised in academic disciplines, schools, curricula, universities and finally in the knowledge institutions of modern states (e.g., Cañizares-Esguerra 2006; Mavhunga 2018).

By reorganising labour relations, and ultimately, people and bodies, imperial expansion and colonialism also reshaped epistemic divisions within communities (foreign scientists vs indigenous knowledge) and across new socio-political organisations (imperial centres, colonies and nations). So colonial assumptions about the legitimacy of knowledge and the transformation of local knowledge into expert knowledge became institutionalised in intellectual networks. All of this marginalised non-western ways of knowing and doing.

Understanding the coloniality of global environmental research historicises concerns about diversity and injustice as long-term processes of epistemic colonialism and violence. It reminds us that diversifying environmental knowledge requires the decolonisation of intellectual labour across social, disciplinary, institutional and geographical borders.

Yet, it is important to remember that epistemic disparities did not begin with the work of scholars publishing in English in legitimised outlets (journals) and working in academic institutions in the North. As intersectional theorists and other scholars of power have pointed out, where there is oppression, there is also resistance. We have to remember that epistemic injustices and resistance practices have been embedded in the daily experiences of the marginalised. Separating academic discussions about knowledge inequalities (framed in the language and institutions of the North) from the social processes (beyond the North) that have informed those intellectual agendas continues to invalidate the resilience of those who have experienced – and contested – these inequalities (Guha et al.

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1998; Martínez-Alier 2002; Escobar 2008; Mignolo 2010; de la Cadena et al. 2018).

Focusing the discussion of inequalities on the organisation of knowledge invites us to think again about the ways in which socio-epistemic disparities have shaped the production and circulation of expertise. It encourages reflection on the epistemic value of diversity, and a re-evaluation of how we assess problems and frame answers in the so-called natural sciences, social analysis and the humanities. Finally, it invites a more critical assessment of the ways in which institutions and academic networks distribute intellectual labour and epistemic values across socio-cultural, disciplinary and geographical boundaries.

It is critical to ask how the organisation of intellectual labour in global environmental research – including environmental history and the humanities – has (re)produced epistemic injustices. Who defines the boundaries of research agendas and their potential influence in public debates? What place is there for non-western ways of knowing and practices of epistemic resistance? What are the challenges and implications of bringing these conversations to the analysis of so-called post-truth? How can the history of intellectual labour help identify processes of epistemic marginalisation? Ultimately, how can we link current discussions on diversity and injustice with long-lasting experiences of epistemic colonialism and resistance?

Taking these concerns seriously raises difficult questions about the nature and means of academic work. Consider: I am a Latin American scholar who went North to receive credible academic credentials. Today, I live and work in the United States (immigration status often requires demonstrating qualifications granted by Northern institutions). I wrote this piece while in residence at a distinguished European institution. I wrote in English – rather than my native language – following (Northern) academic conventions for a peer audience with similar academic training. In effect, this work is part of the very epistemic system that it challenges. It begs the question, do we try to evolve our institutions from within, or do we need to support new paradigms? Are there alternative ways of thinking and doing to be found where the political agendas of those from the South writing and teaching in the North intersect with the

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agendas of those from the South writing and teaching in the South? Academic knowledge production rests on everyday tasks. Decolonising knowledge institutions will require interrogation of those tasks and a new set of strategies to de-link them from (neo)colonial practices. But doing this will enhance understanding of the epistemic value of diversity across academic-public debates and cultivate new socio-epistemic relations across various boundaries that better fit the multiple nature of the problems we aim to study and solve.

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