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THEMED INTERVENTION

Changing climate, changing geographies?

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Abstract

Ever since climate change came to occupy a place on the research and policy landscape in the 1980s, geography and geographers have been at the forefront of understanding its dynamics and social, economic, ethical, and political consequences. In this collection, we explore how the geographical understanding of climate change has evolved over time. We reflect on what we consider to be the most significant contributions that geography has made to our understanding of climate change, how the discipline's approach to this issue has changed over time, the gaps and limits in our understanding, and what the future of climate-changed geographies might be.

KEYWORDS

climate change, futures, human geography

1 | INTRODUCTION

Ever since climate change came to occupy a place on the research and policy landscape in the 1980s, geography and geographers have been at the forefront of understanding its dynamics and consequences. In this Themed Intervention, *Changing Climate, Changing Geographies?*, we explore how understandings of climate change in Human Geography have evolved over time, and set out directions for future research. We examine some of the ways in which human geographers have contributed to wider understandings of climate change in research, policy, and public contexts, and consider both the gaps and limits in our understanding, and the potential futures of climate-changed geographical research.

The collection builds on a panel held at the 2023 annual conference of the Royal Geographical Society (with the Institute for British Geographers). That event assembled a small group of five human geographers working on climate change, ranging from early career to more established voices. We asked them – Savannah Cox, Diana Liverman, Susan Owens, Laurie Parsons, and Linda Westman – to reflect, from the grounds of their own experience and research engagements, on four broad questions. First, what are the most significant contributions that human geography has made to our understanding of climate change? Second, how has the approach to climate change changed over time? Third, what are the gaps and limits in our understanding of climate change in human geography? Fourth, what would you wish for the future of climate-changed geographies?

The results collected here are not, of course, exhaustive responses to those questions. Given the trajectory, transformation, and multiplication of perspectives on climate change in human geography over the past four decades, that task

goes beyond a collection of short commentaries. In addition, it is important to be clear from the outset that the focus of our discussions was on *human* geography. We hope this conversation might also provoke future reflections on the critical role that physical geography has played in both research and policy on climate change – from paleoclimate reconstruction and glacial dynamics to Earth-system modelling, climate impact assessments, and flooding (see, for example, Garner et al., 2017; Jordan et al., 2023) – but that is not our focus here. What we do offer, though, is a set of reflections that narrate some of the central ways in which human geographical research on climate change has itself changed, including how human geographers have played important roles in the wider research and policy understanding of climate change, and how the questions human geographers are asking now have changed or might change in future.

What becomes clear is that given the radical interdisciplinarity of climate change, even just within human geography, many of the changes that have taken place in how geographers approach climate change have taken shape in close dialogue and exchange with other disciplines. For Owens (2024), this interdisciplinarity is exemplified by the engagement between human geography, political science, and science and technology studies. Indeed, Westman (2024) focuses on how geographers have collaborated with political science to map, critique, and propose alternatives to mainstream forms of climate governance. Over time, she continues, this work has changed with engagements with other disciplinary areas on environmental justice, including deepening concerns with various forms of social inequality, as well as participatory planning.

An important contribution from human geographers to wider interdisciplinary understandings of climate change has been a sharp concern with spatial inequality. For Liverman (2024), central here has been the focus human geographers have brought to broad debates on vulnerability, including through foregrounding concerns on the importance of vulnerability mapping, or the ways in which climate risk compounds with socio-economic processes to generate what is termed 'double exposure', in how the changing nature of climate risks is manifest socially and spatially, and in the increasing recognition of intersectionality as fundamental to vulnerability. At the same time, geographers have brought sharp critique to what have sometimes been aspatial or apolitical conceptualisations of prevalent ideas like resilience, including by seeking to critique and sometimes reconstitute those ideas.

Indeed, as Parsons (2024) argues, as skilled analysts of the relations between power, space, and knowledge, human geographers have been well equipped to challenge prevailing orthodoxies, including what he sees as often antipolitical discourses of adaptation, sustainable development, and green growth. As both Parsons and Westman stress, human geography makes important contributions here as part of the growing imperative to decolonise geography that not only critiques dominant forms of knowledge and sources, but also carefully seeks out 'alternative' and typically marginalised environmental knowledges. Doing so places climate change discourses in a heightened political and historical context, and with a new commitment to the transformation of dominant epistemologies and institutions (from universities to global agencies).

Geographers, it has often been argued, are trained 'connectors', seeking out alliances in and beyond the academy. Inhabiting a discipline that is always already interdisciplinary and models a stark diversity of scholarly approaches has positioned human geographers well for forming links on climate change not just to other disciplines but also to policy-makers, think-tanks, civil society, and public institutions and groups. This has taken geographers to significant places in climate change debates, including, as several contributors note, to IPPC reports and through this to the wider framing and understanding of what the climate problem is and how it might be addressed. Yet as we see throughout the commentaries, geographers tend not to be passive occupants of the liminal spaces between disciplines and across the boundaries of different communities of knowledge and practice, but rather often inhabit a reflexive and critical disposition within them and, as Savannah Cox notes, can adapt their roles over time as they move through these spaces. This in turn can mean that disentangling the specific role that geographical thinking has had in policy and public debates on climate change can be difficult.

At the same time, this enmeshing of geographers in domains outside the academy has lent a flexibility to geographical knowledge as it encounters the many and varied external events and processes, including policy openings, that shape the to and fro between science and policy in complex ways. As Susan Owens notes, reflecting on multiple examples including emission reduction targets, the goal established in the IPCC of keeping global temperature increases to 2 degrees, and growing debates on geoengineering, rarely is it possible to see policy following the science. Instead, as Cox (2024) also comments, geographers have been engaged in constituting climate change as one or more forms of boundary object around which meaning, action, and ties between the past, present, and future come to be formed, and where the relations between scholarly knowledge and policy can be deeply fraught and politicised, even as they are so often rendered 'technical'.

Yet for all of this implicit work on the future, as Cox argues, given that climate change is so heavily freighted with concerns about what is to come, it is perhaps surprising that human geographers have had relatively little explicit engagement with the potential futures climate change brings forth. Calls for decarbonisation and climate justice, she continues,

clearly want for a particular kind of future, yet climate-changed futures are rarely taken up as a question of investigation in and of themselves. Her question – how is the future known and acted on? – is a useful provocation for both human and physical geographers to keep in frame as they engage with the pressing concerns contributors raise. Those pressing concerns range from the need for greater attention to how climate change and potential responses to it are understood and shaped in different global geographies, to how different ways of knowing climate change inform understanding, policy, and public debate, to the potential impact of geoengineering and other emerging technological solutions, and towards calls for a more disruptive and affirmative politics of knowledge production.

A final word on interdisciplinarity. We have argued here that part of what has enabled human geography to make its mark on research, policy, and practice on climate change is its interdisciplinary nature, always pulling in and speaking to ideas, debates, and colleagues in different fields. In making this case, we are clear that the next step in this conversation is to reflect on how both physical geography and the conversations between physical and human geographers (which are touched on in places across the contributions but not developed in this collection) have also shaped understanding and action on climate change. In their intervention over a decade ago for the potential intellectual vitality of further integrating critical human and physical geography, Lena et al. (2013) argued that the profound and multiplying environmental and social transformations we collectively face mean that separating out human and physical geography is no longer intellectually tenable. We are sympathetic to this view and just as we hope the collection gathered here will provoke reflection and debate about how human geography might move forward in its encounter with climate change, we hope too that colleagues across human and physical geography will see value in extending the conversation here into those exciting but still too rarely charted directions.

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DATA AVAILABILITY STATEMENT

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