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Geography and the Present Conjuncture

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ABSTRACT

Anthropogenic global heating is accelerating, with dramatic implications for the long-term prospects of humans and many other species, underwritten by the logics of Euro-centric capitalism compounded by the colonialism, racism, patriarchy and commodification of nature that has accompanied it. Nationalism is re-emerging, as are socio-cultural divisions within national societal assemblages. Global capitalism faces a series of crises stemming from the consequences of these relations. Critics are quick to argue that non-capitalist alternatives can advance socio-ecological justice, but how? Geography is ideally suited to making sense of this conjuncture, critiquing the processes facilitating its emergence, and realizing alternatives. Yet we are far from achieving our potential, caught up in our own philosophical, ideological and substantive silos. I argue that five priorities must be taken up if geographical thinking is to be suited for the present moment. We must be more historical in our thinking (integrating the temporal with the spatial). We must pay more attention to the macro-scale: to how local events are complexly bound-up in spatially differentiated planetary processes? We must be socio-ecological: incentivizing productive collaboration across its earth science, social science and humanities sub-fields. We must deconstruct our disabling quantitative-qualitative methodological divide, incentivizing training in multi-methods. We must work harder to diversify the perspectives and socio-spatial positionalities incorporated into geographical thinking to decenter white male, Anglophone and settler geographies. Excitingly, the potential for all this exists within Geography today.

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3 As our increasingly commodified planet heats up, with implications for humanity that are
4 compounded by racialized and gendered socio-spatial inequality, thinking geographically about
5 this conjuncture would seem central to making sense of why this is happening and its socio-
6 ecological impacts, and to imagining and practicing more socially and environmentally just
7 trajectories (Sheppard, 2015). Yet Geography's internal divisions stand in the way. Our scholarly
8 community remains riven epistemologically, methodologically (quantitative vs. qualitative),
9 substantively (human vs. physical), in terms of identity (race, gender, disability, etc.), and
10 geographically (Anglophone dominance). Yet I remain optimistic that we can move closer to
11 realizing our collective potential.¹
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15 Why this optimism? For forty-five years I have taught an introductory graduate seminar
16 to diverse cohorts of first year Geography MA and PhD students (and undergraduates). As my
17 thinking matured, this diversified from a course on 'geographical analysis' (named by John
18 Adams after the eponymous journal) to one on the history of geographical thought. Meeting
19 the challenge of crafting relevant content for those self-identifying as both human and physical
20 geographers became increasingly important after moving to UCLA, where physical geography is
21 stronger than at Minnesota. Yet I have been gratified to observe the common ground that
22 incoming students create for themselves as we work through the course, enacting a collective
23 discipline-wide intellectual identity--that dissipates once students separate into their
24 individualized research programs. Students entering our discipline remain ready to transcend
25 barriers we have created, seeking boundary objects that enable this and the legitimation that
26 such boundary-crossing scholarship is valued. The GIS/critical geography debates of the 1990s
27 created such objects, transforming GIS-informed research (Cope & Elwood, 2009; Elwood &
28 Leszczynski, 2018; Kwan, 2002; Leszczynski, 2020; Wilson, 2017). Taking up such
29 epistemological influences as engaged pluralism (Barnes & Sheppard, 2010) we can do this
30 again, and again. Indeed, we must.
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35 In this paper I identify core challenges we face if we are to bring contemporary
36 geographical thinking to bear on the present global conjuncture, and the opportunities that
37 could be created by transcending these. I begin by detailing what I see as the nature of this
38 conjuncture (expanding conjunctural reasoning to embrace the geographical). I then discuss
39 five priority areas for change: Historicizing geography, advancing macro-geographies,
40 transcending intra-disciplinary substantive divides, transcending intra-disciplinary
41 methodological divides, and expanding the voices influencing geographical thinking (socially
42 and geographically).
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46 **The present global conjuncture**

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48 The term conjuncture, from the 17th century, references the present state of events: here, the
49 present state of Earth. It has become common to describe this conjuncture as an
50 unprecedented crisis. Our restless Earth has faced much more severe crises in the past (e.g.,
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55 ¹ I joined the editorial board of *Environment and Planning F* because its mission challenges the balkanization of
56 Geography, exemplified in the Environment and Planning stable to date.
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3 Axelrod & Bailey, 1968) and humans have experienced sharper disruptions, such as that
4 following the 1815 Mount Tambora eruption (Behringer, 2019). Humans also long have had a
5 measurable impact on climatic and ecological processes (Ruddiman, 2003). But the present
6 conjuncture feels more existential, at least for humans.
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9 Existing conceptualizations of conjuncture, initiated by Antonio Gramsci and elaborated
10 on by the Stuart Hall school of cultural theory (Gramsci, 1971; Hall, Critcher, Jefferson, Clarke, &
11 Roberts, 2013; Koivisto & Lahtinen, 2012), cannot capture the complexity of what we face.
12 These conceptualizations highlight unexpected emergent political-cultural conjunctures at the
13 nation-state scale (e.g., Fascism in 1930s Italy, Thatcherism in the 1980s UK), but their scope
14 falls short of what is necessary to make sense of the present global conjuncture. With Helga
15 Leitner, I have explored what it would mean to think geographically about conjunctures
16 (Leitner & Sheppard, 2020). This requires two moves. First, a primarily historical
17 conceptualization must be spatialized: Examining how a particular territorial conjuncture is
18 shaped also by events elsewhere, how conjunctures concatenate across different geographical
19 scales, and the variegated nature of conjunctural moments across space.² Second, biophysical
20 processes and the more-than-human world must be integrated into our conjunctural analysis.
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24 The present global conjuncture reflects intersecting climatic, ecological, economic,
25 political and cultural processes. Humans' interactions with and impact on the more-than-
26 human world are ever more intense. First and foremost, at least in global discourses, is global
27 heating. The COVID pandemic is a further aspect: The most recent in a long sequence of
28 moments when our relations with the more-than-human world released pandemic-causing
29 viruses, each with a particular geography of origins and diffusion. This nature-society
30 conjuncture has been dubbed the Anthropocene, highlighting the driving force of human
31 actions and the blow-back consequences for human livelihood possibilities and the more-than-
32 human world.
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35 These relations are compounded by the logics dominating human interaction with the
36 more-than-human world. Since at least the sixteenth century these logics have been dominated
37 by those of globalizing capitalism, once capitalism coagulated in a particular nation-state
38 organized form in Europe (Blaut, 1976; Sheppard, 2019a). The more-than-human world is
39 valued for its profitability not its inherent value, entailing an ever-expanding commodification
40 of the lithosphere, hydrosphere, biosphere, atmosphere and now stratosphere as the logics of
41 economic growth endemic to capitalism rub up against biophysical processes (the second crisis
42 of capitalism: O'Connor, 1991). Examining these processes at length, Jason Moore proposes
43 that we should retire Anthropocene in favor of Capitalocene in order to highlight the logics
44 through which humans interact with the more-than-human world: "understood as a system of
45 power, profit and re/production in the web of life" (Moore, 2015; 2017, p. 594). Not only are
46 the long-standing logics of capitalist political economy ever more globally hegemonic, but after
47 1980 neoliberal political governance, launched from the US and UK, unleashed a relentlessly
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53 ² Elsewhere, I have made the distinction between place-based thinking, in which events within a place are
54 conceptualized as being caused entirely by conditions and processes operating within that territory, and
55 connectivity-based thinking that extends causality to include the causal effect of conditions and processes in other
56 places (Sheppard, 2016). Mainstream conjunctural analysis is largely place-based.
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3 pro-market variant of capitalism (Harvey, 2005; Peck, 2010). This is catalyzing socio-spatial
4 inequalities the like of which have not been seen in the global North since the end of the long
5 nineteenth century colonial-era phase of UK-centered globalization some hundred years ago
6 (Arrighi, 2010; O'Rourke & Williamson, 2000; Piketty, 2014 [2013]). The recent post-Trump and
7 pro-Brexit (re)turn to state intervention (cf. Polanyi, 2001 [1944]) has been more business
8 friendly than Keynesianism and even more nationalist. With the rise of China as an alternative--
9 much more state-driven--global hegemon, we may be entering an authoritarian and
10 xenophobic era of political governance for globalizing capitalism (Sheppard, 2020).³

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13 A further compounding factor is how the class inequalities emphasized in Western
14 economic thought complexly intersect with socio-culturally constructed hierarchies of 'race',
15 gender and other social positionalities (ability, sexuality, age, etc.). We now have a deeper
16 appreciation not only of the masculinist norms driving how capitalism works (phallogentrism;
17 Gibson-Graham, 1996), but also the role of slavery, colonialism and racial capitalism in shaping
18 globalizing capitalism (Bhattacharyya, 2018; Federici, 2018; Mies, 1986; Robinson, 1983). This
19 has been deeply geographically uneven: Racialized and masculinist discourses underwrote a
20 capitalism centered on wealth-creation in western Europe and its white-settler colonies,
21 accelerated by commodifying and exploiting third world bodies and nature--uneven
22 development geographies that persist long after de-colonization. Building on the work of
23 others, Wendy Wolford (2021, p. 1622) proposes Plantationocene to draw attention beyond
24 capitalism, to how "large-scale, export-oriented agriculture dependent on forced labor has
25 played a dominant role in structuring modern life since the insertion of European power in the
26 Americas, Asia, and Africa." The geography of global heating catalyzed by these processes
27 further disadvantages marginalized bodies, now facing the prospect of bearing the human
28 brunt of socio-ecological changes that they bear little responsibility for. As became clear at the
29 COP26 meeting in Glasgow, those causing this socio-ecological breakdowns have little appetite
30 for redressing this contradiction. Calls for social, environmental and racial justice seek to resist
31 the terms of this crisis, and varied livelihood practices contest its norms from capitalism's
32 raggedy edges (Gibson-Graham, Cameron, & Healy, 2013; Sheppard, 2019b). Yet the
33 predominant way proposed to escape this conjunctural crisis is to green capitalism--which feels
34 like a contradiction in terms.

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37 We need to restructure geographical thinking, if is to better realize its potential for
38 making sense of, and offering alternatives to, the present global conjuncture. I suggest five
39 priorities.

40 41 42 43 44 45 46 **Priority 1: Taking an Historical Turn**

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48 Whether we consider millennia-long biophysical processes or centuries-long socio-ecological
49 processes it should be clear that the present global conjuncture cannot be adequately
50 understood, or redressed, without geographical thinking paying more attention to the
51 evolutionary trajectory that has brought Earth to this point (and to paths not taken to
52 unrealized alternatives). This means working extending our focus on multi-faceted spatialities

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56 ³ On how nationalist Keynesianism exacerbated underdevelopment in the third world, see Myrdal (1960).

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3 to emphasize spatio-temporality. Historical geography has come to be seen as something of a
4 side-branch of the discipline, receiving little attention even when its practitioners ask questions
5 of interest to other human geographers. This must change: Questions of history and evolution
6 must be made central to geographical research, cutting across the human and physical
7 domains. Some have identified the importance of time/space (e.g., May & Thrift, 2001), but
8 centralizing this into disciplinary practice is another matter.
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11 This does not mean simply tracing events through calendar time. It requires engaging
12 with: the philosophical and epistemological questions raised by temporality (Bergson, 1911
13 [1907]), how attention to the past affects our understanding of the present (Bloch, 1986
14 [1959]), the path-branching nature of evolutionary change, and the constitution of spatio-
15 temporality itself. With respect to at least the last two, complex dynamical systems theory is a
16 boundary object that intrigues scholars from across the domain of geographical thinking
17 (indeed, across the physical and human sciences). Complex dynamical systems capture the
18 uncertainty and contingency of temporal change, embrace out-of-equilibrium dynamics,
19 bifurcations and paths not taken (and forgotten), and the enduring effect of minor events (e.g.,
20 the well-known “butterfly effect”: Lorenz, 1969). They are consistent with dialectical ways of
21 making sense of the world (focusing on relations shaping entities, rather than entities as stable
22 categories; Harvey, 1996), they are amenable to mathematical modeling, and they align with
23 the assemblage-theoretical approach recently popular among cultural geographers exploring
24 the new materialism (Anderson & McFarlane, 2011; DeLanda, 2006; Sheppard, 2008). Further,
25 replicating a core principle of spatial theory, complex dynamical systems are co-constitutive of
26 the spatio-temporal domains structuring their operation (Prigogine, 1996)--a spatio-temporal
27 dialectic (cf. Soja, 1980).⁴
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33 **Priority 2: Advancing macro-geographies**

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35 Jamie Peck (2016) has called for more attention to macroeconomic geographies within
36 geographical political economy. Grasping the present global conjuncture requires extending this
37 to the entire scope of thinking geographically. Such global research already exists, of course, in
38 both human and physical geography. Further, there has been substantial multi-scalar
39 scholarship connecting the global with the local across the discipline. There is greater
40 appreciation for how geographical scales are not *a priori* categories, but (like spatio-
41 temporality) are regularly (re)constituted through the socio-ecological processes operating
42 within and across them. It is also increasingly appreciated that scale is relational: processes
43 operating at different scales shape one another, with finer scale processes affecting broader
44 scales as well as being shaped by them (Leitner & Miller, 2007; Sheppard & McMaster, 2004).
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48 Yet there is a tendency to treat these constituted scales as homogeneous units of
49 analysis (e.g., *the global*), with causal analysis emphasizing vertical rather than horizontal
50 causality. For example, much case study research in critical human geography has adopted
51 what Michael Burawoy (1998) dubbed the extended case method: locally examined events are
52 contextualized by paying attention to the broader arena structuring them. For example, what
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56 ⁴ In the spirit of Soja (1980), this would exemplify a socio-spatiotemporal dialectic.
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happens in a city is best understood by incorporating the influence of such broader-scale processes as neoliberalism--often represented as an undifferentiated global phenomenon.

The macro-geographic analysis I have in mind would be much more nuanced. For example, our global conjuncture is spatially heterogeneous and multi-scalar. Locally differentiated manifestations of global processes create distinct localized conjunctures that also shape global-scale processes. Second, what happens locally is shaped by its horizontal connections with other places, not just inter-scalar relations. Methodologically, Peck and Theodore (2012) gloss this as distended case analysis. Third, as discussed above, what happens now is also shaped by long-standing processes connecting the present with events long ago.

Some physical geographers are part of an earth science community that devotes much effort to macro-geographies, such as computer-generated models of the historical geographic evolution of climate change. Human geographers tend to prioritize more local scales, but can learn from a long and distinguished tradition of macro-scale analysis in History and Sociology, ranging from the dependency theoretic and world-systems scholarship of historical sociology (e.g., Amin, 1974; Arrighi, 2010; Frank, 1978; Timberlake, 1987; Wallerstein, 1979) to the recent explosion of research on the history of capitalism--emphasizing both political economy and race (e.g., Anievas & Nişancıoğlu, 2018; Beckert, 2014; Bose, 2009; Johnson, 2013). Human geographers are eminently capable of contributing to such analysis but have had remarkably little to say. Geographers can bring a geographical sensitivity to such scholarship, extending it to incorporate nature-society relations (Moore, 2015), bringing spatial theory to bear on understanding the uneven geographies of these processes, and avoiding the top-down structural tendency in some of this scholarship by teasing out how local events have global ramifications. Physical geographers undertaking macro-geographical research are positioned to incorporate human actions and their geographically differentiated impacts on the more-than-human world into what remain largely earth science models (at times leavened by problematically reductionist economic models of behavior).

Priority 3: Transcending the human-physical divide

There has been much bemoaning over the past three decades about a persistent physical/human divide in geographical thinking. These complaints emphasize what are presented as fundamentally different philosophical (positivist vs. post-positivist), methodological (quantitative vs. qualitative), and substantive (biophysical vs. societal) inclinations. This is supplemented by the observation that many physical geographers see little merit in publishing in Geography journals, attending Geography conferences or even working in Geography departments. Significant scholarship seeks to bridge this artificial divide, of course: The human-environment (*aka* nature-society) tradition has always been central to geographical thinking (Billie L. Turner, 2003), including a new peer review journal *Progress in Environmental Geography*. Yet even scholarship engaging with this boundary object tends to divide along the above lines. Political ecology and nature-society scholarship exemplifies critical human geographic approaches, emphasizing post-positivist and qualitative research that prioritizes political, cultural and economic questions. Human-environment research tends toward physical

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3 geographic inclinations: more quantitative and empiricist, often prioritizing biophysical
4 processes.
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6 Geography as a discipline has little original to offer if we cannot engage constructively
7 across this apparent divide. But we can (Massey, 1999): It reflects disciplinary cultural divides
8 produced by the particular trajectory of Anglophone Geography as a discipline, not some
9 immutable binary. We know that the logical empiricist claim that objective knowledge through
10 value-free empirical observation is a chimera (Sheppard, 2014). It is all too evident that
11 'science', even as narrowly conceived in Anglophone scholarship, is shaped by societal forces
12 ranging from the macro to the micro (Hacking, 1999; Haraway, 1988; Harding, 1991; Kuhn,
13 1962; Latour, 1987; Livingstone, 2000; Pickering, 1995). It suffices to reflect on controversies
14 characterizing the present conjuncture that surround climate science and epidemiology. We are
15 now beyond the science wars. Political ecologists and cultural geographers increasingly
16 acknowledge the importance of biophysical processes, *aka* materiality (Braun, 2009; Robbins,
17 2004; Whatmore, 2006). Within the physical geography community there is some active
18 engagement (particularly by geomorphologists) with epistemological questions also of interest
19 to human geographers (Carey, Jackson, Antonello, & Rushing, 2016; Harrison & Dunham, 1998;
20 Inkpen & Wilson, 2013): see also Brierley et al., this issue. A new subfield of geographical
21 scholarship also is crystallizing, critical physical geography, that brings human geographic
22 epistemological inclinations to bear on biophysical processes (Lave, Biermann, & Lane, 2018),
23 but see Rhoads, this issue.
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29 Our challenge is creating engaged pluralist spaces where mutual learning is prioritized
30 across this cultural divide. For geographical thinking to approach its potential, those from the
31 human side need to familiarize themselves with the role of biophysical processes whereas
32 those from the physical side need to familiarize themselves with how societal processes (both
33 political-economic and cultural-representational-performative) are integral to the biophysical
34 phenomena they study. Imagine a team of quantitative-physical and qualitative-human and
35 nature-society geographers working together on a substantive boundary object of common
36 interest, enriching individual and collective understanding as they learn from one another.
37 There are examples of such collaboration, but they remain too rare.
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41 **Priority 4: Transcending the quantitative-qualitative divide**

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43 This methodological divide is another disciplinary cultural construct that reflects particularities
44 in the evolution of Anglophone geography. In the 1970s, human geographers--increasingly
45 critical of the capitalist status quo--came to reject quantitative methodologies that they
46 equated with pro-capitalist neoclassical economics and location theory in economic geography
47 (Massey, 1973; Sayer, 1976; Sheppard, 1995). David Harvey's (1969, 1982) Damascene
48 epistemological and methodological conversion is Exhibit A. Physical geographers--seeing their
49 methodological preferences rejected by human colleagues--moved in the opposite direction to
50 equate quantification with value-free science. The GIS version of the science wars that roiled
51 1990s Anglophone Geography relitigated this divide: quantitative researchers alleged that GIS
52 could solve all manner of social problems (Dobson, 1983; Openshaw, 1991), whereas
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3 qualitatively inclined critical human geographers feared GIS as the Dracula-like return of a naïve
4 spatial science (Pickles, 1995; Smith, 1992; Taylor, 1990).
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6 This conflict was the context for a three-day meeting convened between GIS
7 researchers and critical human geographers in Friday Harbor, Washington (USA) in 1995, during
8 which initial suspicious and defensive confrontation matured into cautious collaboration
9 (Schuurman, 2000). Such collaboration, initially under the GIS and Society label (Poiker &
10 Sheppard, 1995), reframed as critical GIS (Thatcher et al., 2016; Wilson, 2017), provides as
11 strong evidence as any I know of in our discipline that our methodological divides are as
12 artificial as they are counterproductive. Friday Harbor knocked down some panels in the Berlin
13 Wall that had been constructed between qualitative and quantitative geographers, and a new
14 generation of scholars poured through to transcend the scholarly limits that this had imposed.
15 An emergent generation of digital geographers, equally adept in coding, post-structuralism and
16 feminism, is obliterating this divide at least within the GIS community (Ash, Kitchin, &
17 Leszczynski, 2018; Bergmann & Holmberg, 2016; Bergmann & Lally, 2020; Schwanen, 2017;
18 Thatcher et al., 2016). Considering the qualitative turn that has dominated critical economic
19 geography, it is simply erroneous to equate quantitative methods with naïve empiricism
20 (Sheppard, 2001). William Bunge, pioneer of quantitative geography (Bunge, 1966, 1971). Marx was fascinated by
21 mathematics and there is a strong tradition of mathematical Marxism--tellingly, largely outside
22 geography (but see Sheppard & Barnes, 1990; Webber & Rigby, 1996). Quantitative modeling of
23 complex dynamical systems is consistent with both dialectical thinking and assemblage theory
24 (Sheppard, 2008) and spatial analysis can be feminist (Elwood & Leszczynski, 2018; Kwan,
25 2002).
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32 Realizing the potential of geographical thinking will mean training coming generations to
33 appreciate and perform quantitative, qualitative and mixed methods. Some of this cross-
34 training can now be found in 'land change science', which is expanding beyond its analytical,
35 quantitative and science-led roots (e.g., Kinnebrew, Shoffner, Farah-Pérez, Mills-Novoa, &
36 Siegel, 2021; Turner & Robbins, 2008).
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40 **Priority 5: Multiplying geographical voices**

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42 Feminist philosopher Helen Longino (2002), considering empirical scholarship, makes a
43 powerful case that the proliferation of voices must be central to reliable knowledge production
44 (science, but in the sense of Wissenschaften rather than its narrow Anglophone meaning).
45 Priorities 3 and 4 exemplify the importance and benefits of such engaged pluralism, but
46 proliferations is also about inclusion across diverse socio-spatial positionalities. Anglophone
47 human geography has begun to take more seriously the importance to geographical thinking of
48 creating more space for, and appreciation of, differently positioned voices and their expertise.
49 The emergence of feminist geography provides strong evidence of how including other social
50 positionalities strengthen geographical thinking and scholarship (Mohammad, 2017; Nelson &
51 Seager, 2005). Finally, we also are now seeing substantial bodies of recognized Anglophone
52 scholarship in Black, Latinx and indigenous geographies (Howitt, this issue) and geographies of
53 sexuality and disability, also exploring their complex intersectionalities (Oswin, 2019). Yet there
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3 remains much to be done to dismantle existing gender and racial hierarchies in Anglophone
4 geographical thinking.
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6 As geographers, we should be particularly attentive to spatial exclusions: the danger of
7 marginalizing southern and non-Anglophone scholarship and non-academic expertise even as
8 we work to diversify Anglophone geography's internal makeup. Putting it bluntly, decolonizing
9 geographical thinking means challenging the presumption that Anglophone scholarship is the
10 go-to place for cutting-edge thought. Even Black geographies can inadvertently contribute to
11 this if North American experiences of race are universalized. One important aspect--explicitly
12 spatial--is the emergence of scholarship that takes seriously the perspectives of those located in
13 the global south, and east (Connell, 2007; Müller, 2020). Second, it is vital to transcend the
14 spatial divide between gown and town: Breaking down barriers that confine expertise to those
15 trained in and certified by academic institutions. There is now considerable scholarship, ranging
16 from human (particularly feminist) to physical geography and GIS, demonstrating that the
17 inclusion of expertise from beyond the academy produces less hierarchical and more reliable
18 knowledge (Heiman, 1997; Kindon, Pain, & Kesby, 2007; Sui, Elwood, & Goodchild, 2012;
19 Whitman, Pain, & Milledge, 2015, Brierley et al. this issue). It is becoming particularly important
20 to integrate the knowledge and expertise of those located outside the academy, with
21 universities across the world now playing a diminished role as spaces for counter-hegemonic
22 thinking.
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27 A third, implicitly spatial exclusion is the narrowness that ensues from pragmatically
28 resorting to English as the *lingua franca* for global scholarship. We need to pay more attention
29 to how different languages reflect different understandings of the world (Nettle & Romaine,
30 2002), whose even unwitting exclusion from geographic scholarship narrows our
31 understandings to those propagated through Anglophone global dominance. I do not deny the
32 legitimacy of Anglophone expertise (without denying my own), but it impoverishes us all to
33 presume that this should be the monist source of expertise (Longino, 2008).
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37 **Shifting geographical practice**

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39 It is one thing to talk this talk, but quite another to walk the walk: How can such shifts be
40 realized in an academic environment that prioritizes specialization and competition over
41 innovative collaboration, short term publication and funding metrics over long-term
42 experimentation, ivory tower scholarship over community engagement (Waterstone, this
43 issue), income generation over ideas, and research over teaching? Concluding, I suggest some
44 possible strategies.
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47 First, reconsider teaching practice as a space for such experimentation. Courses that are co-
48 taught by scholars from very different intellectual and personal backgrounds and philosophical
49 and methodological inclinations could produce less narrow and specialized knowledge, arguably
50 more relevant for students struggling with the current conjuncture. This would not work if
51 these instructors practice a division of labor that divides the course into their individual sub-
52 modules. They should be co-present in the classroom, actively debating with one another and
53 thereby exposing students to knowledge production as a work in progress rather than settled
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3 findings to be rehearsed in examinations. While an anathema to administrators seeking to
4 maximize revenue generation, it would incentivize colleagues to engage with one another
5 across our self-constructed boundaries. It would also push students, including future
6 generations of scholars, to think more eclectically--preparing them to push back against our
7 taken-for-granted nostrums and blockages.
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10 Second, substantial inter-scalar institutional effort--across research groups, departments and
11 academic associations--should be devoted to bringing diverse voices, open to learning from one
12 another, around the same table to engage across their diverse perspectives on and knowledge
13 about a particular boundary object. Perhaps this sounds too utopian. How do you persuade
14 people to participate in intellectual exchanges that do not serve to advance their immediate
15 agendas and interests? How do you manage pre-existing power differences between
16 participants that enable the more powerful to deploy coercion and consent that enforces a
17 monist consensus? With respect to the former, the key is restricting the exchange to
18 participants who actively want to learn from one another (Longino, 2002). With respect to the
19 latter, it is vital that such engaged pluralism explicitly empowers marginalized positionalities
20 and makes space for agonistic pluralism (Barnes & Sheppard, 2010; Mouffe, 1999; Young,
21 1990). Geographical, financial and other constraints undermining the ability of marginalized
22 voices to participate also would need to be redressed. Such exchanges should actively include
23 graduate and undergraduate students: The next generation. The lesson from Friday Harbor was
24 that graduate students interested in GIS were feeling blocked by the border their elders had
25 created between GIS and critical geography. Elders' collaboration across this border legitimated
26 research combining geospatial technologies and critical approaches, releasing this next
27 generation to pursue the exciting scholarship culminating in digital geographies.
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32 Third, we must pro-actively push back against university institutional structures that undermine
33 the conditions of possibility for counter-hegemonic practices and policies (Liu et al. this issue).
34 Across the globe, the freedom to think differently is being constrained by a combination of the
35 neoliberalization of university governance, right-wing critiques, and state-led expectations that
36 the societal role of universities is to produce employable students. University academics
37 complain daily about these developments but grumbling makes no difference. If universities are
38 to retain or regain their reputation as spaces where counter-hegemonic thinking can flourish,
39 their employees (importantly including those who have successfully gamed the current
40 incentive structure) must be proactive. We must exert collective pressure to decenter
41 neoliberal performance metrics, support slow and experimental scholarship, value community-
42 engaged scholarship as highly as policy-oriented scholarship, further diversify voices that are
43 valued in the academy, and promote north-south reciprocal collaboration. Failing this we
44 should be willing to abandon the ivory tower as a space of privilege, relocating elsewhere the
45 research and teaching needed to pull Earth out of this current dangerous conjuncture, in the
46 name of empowering those people, ecosystems and places most at risk.
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For Review Only

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