

## Comments on Julie Cupples' analysis of "geoscientisation"

**Matthew G. Hannah**

Geographisches Institut, Universität Bayreuth, Bayreuth, Germany

### Correspondence

Matthew G. Hannah, Chair in Cultural Geography, Geographisches Institut, Fakultät II (Bio-Chem-Geo), Universität Bayreuth, 95440 Bayreuth, Germany.

Email: matthew.hannah@uni-bayreuth.de

[The copyright line for this article was changed on 02 April 2020 after original online publication]

Julie Cupples does geographers a great service by naming and analysing the effects of "geoscientisation," a pattern of institutional reorganisation whereby former Departments or Institutes of Geography are brought together in larger academic units with physical science disciplines like geology, earth sciences or environmental sciences (Cupples, MS 1). Geoscientisation, Cupples argues, exacerbates the more general effects of the neoliberalization of higher education of which it is a part, and tends to marginalise, render invisible and/or delegitimate critical human geography in particular. "[A]sserting our right to analyse our working conditions," as Cupples does with this paper, is simultaneously more difficult and more necessary than ever (Cupples, MS 10).

My comments here are based on my own experiences and conversations with colleagues in North America and Europe. Much of the material I draw upon is very "grey": snippets of conversations among others overheard in the hallway, brief comments in faculty meetings, *sotto voce* whisperings during lectures by visiting scholars, and the like. As critical human geographers know, these genres, marginal though they may seem, are the very stuff of what we hypostatize as "institutional culture." And culture is the central question here. A second preliminary note is in order as well: many of the issues discussed below concern attitudes that largely remain latent, simmering beneath the surface of institutional culture. To the credit of many of my physical science colleagues, they only seldom break out into the open in ways that could do concrete harm. Nevertheless, their pervasive presence is in

itself already a burden and a low-level threat that, as Cupples rightly insists, we ignore at our peril.

In Germany, where I now work, it is not so much geoscientisation as a process but rather the condition of being in a geosciences unit that is the problem. Many institutes of geography in Germany have always been closely integrated with physical geosciences. At my university, the impacts of living in the geosciences are compounded by the fact that the geosciences are in turn located within a larger faculty composed also of chemistry and biology. Most importantly, it is at the faculty level that binding decisions on hiring or the awarding of post-graduate degrees are made.

The often quite subtle forms of "epistemic erasure" attendant on geoscientisation are the product of a pervasive "lack of understanding of contemporary human geography" (Cupples, MS 4) on the part of most physical colleagues and of institutional and cultural power structures through which this ignorance is allowed to persist and even flourish. I would supplement the examples Cupples gives with a series of brief observations about this "epistemic erasure" and "lack of understanding." Of course the degree of understanding—and the degree of openness to serious engagement with human-geographic scholarship—varies among colleagues on the natural science side. Nevertheless, beneath individual variation run some cultural issues that can be thought of as facets of a "style of thought" (Fleck, 1981 [1935]).

First, a "lack of understanding of contemporary human geography" by itself is not necessarily a problem. Many human geographers do not understand large

-----  
This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2020 The Author New Zealand Geographer published by John Wiley & Sons Australia, Ltd on behalf of New Zealand Geographical Society

swathes of contemporary physical geography. Yet we do not typically (in my experience, *ever*) challenge the scientific value of physical subdisciplines or the judgement of our physical colleagues on matters within their range of professional competency. In other words, the issue here is whether our physical colleagues assume that human geographic subdisciplines or discourses about which they (often admittedly) know little or nothing are *prima facie* deserving of respect. The danger of having physical scientists involved in hiring decisions, and perhaps even more, decisions on the awarding of doctoral (and in Germany, *Habilitation* or “second doctorate”) degrees in human geography lies not just in the fact that these colleagues “lack the ability to properly evaluate performance” (Cupples, MS 6). It lies also in the fact that some of them *do not believe it is important that they lack this ability*. In this posture, everyday common sense plus untutored opinions are assumed to be an adequate basis at least for broad judgments on work in subfields of human geography. A second, closely related tendency is the dismissal or trivialization of specialised human geographic concepts and theories as “jargon.” Here, too, a surprisingly unscientific attitude holds sway: even where some physical colleagues are willing to admit that they know nothing of a particular debate or discourse, they may still assume that the burden of proof lies with human geographers to justify their specialised vocabularies and theoretical perspectives, not upon those like themselves who have not read a single word of the relevant literatures.

A third point also has to do with insufficient reflexivity. Cupples is entirely right to argue that another, related major negative effect of geoscientisation is the perpetuation of sexist and racist academic cultures. Part of this of course has to do with gendered and crypto-colonial aspects of the discourse of scientific “neutrality” and the “lack of bias” of scientific procedure, as well as with the blinkered notion that scientific communication has nothing to do with power but is reducible merely to the undistorted communication of facts. Additionally, the belief of some natural scientists that their casual impressions about human geographic work are sufficient goes hand in hand with a general attitude of annoyance or open hostility toward the foregrounding of racism, sexism and other forms of oppression as problems. These colleagues, including some women, “mean well” and do not *knowingly* engage in racist or sexist behaviours, and so they believe that they are not part of the problem. Despite most of them not having faced racism, or not necessarily having a stake in recognising the sexism around them, they nevertheless feel competent to pronounce *ex cathedra* that “political correctness” and respectful speech are inappropriate for addressing racism and sexism, and even harmful to scientific freedom. In Germany and some

other European countries, this naïveté is inextricably bound up with the still very prevalent idealised subject-position of The Professor as a quasi-omniscient, rational being able to bracket “normative” or “emotional” factors. The colleagues who follow this pattern display a glaring gap in their understanding when they fancy themselves “objective” and “rational” even while visibly overcome, in exchanges about racism or sexism, by strong affects and emotions ranging from annoyance to outright rage. Much of this can readily be recognised as an expression of white (but also often mainstream masculine) “fragility,” and in Germany is unfortunately not entirely restricted to the physical sciences (DiAngelo, 2018).

Like Cupples and the many colleagues she has consulted, I find dealing with these and other manifestations of cultural difference utterly draining. Despite my own position of compound intersectional privilege, it is a constant fight not to become completely discouraged at the effects of living in the geosciences (and natural sciences more generally). So I can fully appreciate the underlying logic of her argument, which pulls in the direction of advocating a sort of institutional “safe space” for critical human geography, even, if necessary, at the expense of splitting off from physical geography. I often yearn for such a safe space, or at least a space where I and my human geography colleagues can just get on with our research.

Nevertheless, for those of us stuck in situations not likely to be alleviated anytime soon by the kind of favourable changes that have taken place at Macquarie, Monash, Wollongong or St. Andrews (Cupples MS 8–9), an exclusively separatist “politics of refusal” by itself will not solve our problems, and in some circumstances could worsen our institutional situation (Cupples MS 10). Cupples acknowledges the need for establishing some kind of constructive *modus operandi* in her decision to work with physical geography colleagues on specific projects. A more specific downside of too strong a separatist line, in my view, would be a tendency to relegate quantitative methods to the “bad” side of the divide (Cupples MS 3, 9). As Cupples rightly points out, critical human geographers working in a geosciences context are often pressed by physical colleagues to defend their critical stance toward a naïve positivist epistemology long consigned to the dustbin by philosophers of science (Cupples MS 8). But quantification does not equal naïve positivism, as evidenced by an already long tradition in human geography comprising critical quantification (e.g., Brown & Knopp, 2006; Dorling, 2015; Forest, 2012; Mattingly & Falconer-Al Hindi, 1995), “strategic positivism” (Hannah, 2001; Wyly, 2009), critical cartography and visualisation (e.g., Crampton, 2006; Krygiel, 1997; Kwan, 1999) and related areas. Perhaps this is one area, along with, for example, critical approaches to climate change and the anthropocene, in which human

geographers can embark on a more dialectical project of transforming the cultural discourses and practices of the geosciences from within.

## REFERENCES

- Brown, M., & Knopp, L. (2006). Places or polygons? Governmentality, scale, and the census in the gay and lesbian atlas. *Population, Space and Place, 12*, 223–242.
- Crampton, J. (2006). The cartographic calculation of space: Race mapping and the Balkans at the Paris Peace Conference of 1919. *Social & Cultural Geography, 7*(5), 731–752.
- DiAngelo, R. (2018). *White fragility: Why It's so hard for white people to talk about racism*. Boston, MA: Beacon Press.
- Dorling, D. (2015). *Injustice: Why social inequality still persists*. Bristol, England: Policy Press.
- Fleck, L. (1981). *Genesis and development of a scientific fact*. Chicago, IL: University of Chicago Press.
- Forest, B. (2012). Electoral redistricting and minority political representation in Canada and the United States. *The Canadian Geographer/Le Géographe Canadien, 56*(3), 318–338.
- Hannah, M. (2001). Sampling and the politics of representation in US Census 2000. *Environment and Planning D: Society and Space, 19*, 515–534.
- Krygier, J. (1997). Envisioning the American West: Maps, the representational barrage of 19th century expedition reports, and the production of scientific knowledge. *Cartography and Geographic Information Systems, 24*(1), 27–50.
- Kwan, M.-P. (1999). Gender and individual access to urban opportunities: A study using space-time measures. *The Professional Geographer, 51*(2), 210–227.
- Mattingly, D., & Falconer-Al Hindi, K. (1995). Should women count? A context for the debate. *The Professional Geographer, 47*, 427–435.
- Wyly, E. (2009). Strategic positivism. *The Professional Geographer, 61*(3), 310–322.