## Data ethics: Pluralism, replication, conflicts of interest, and standards in *Political Geography*

The Editorial Essay (1982) that launched this journal both lauded the pluralism that characterized political geography's renaissance and promised to adhere to that spirit in selecting articles for publication. As the field has changed and expanded its range of interests, Political Geography has reflected these changes whilst also nudging authors and readers to consider new topics that have appeared on the political map and new perspectives that have permeated the broader disciplines of geography and allied provinces of political science. We have restated that 1982 catholic editorial policy (O'Loughlin et al 2011, 2013) to publish 'innovative, high-quality insights into the complex relationship between space and power' but we have never debated or specified the extent to which individual articles meet this requirement for breadth and diversity. Although we frequently confer, each editor acts autonomously in making publication decisions. In the end, each volume is essentially the sum of several independently assembled parts. Unlike some other journals, we neither have a hierarchical policy (where the Editor-in-Chief is ultimately responsible for the choice of content) nor do we have collective editorial meetings to decide on content. The result is a range of topics, methods, epistemologies, regions, scales and political positions that fall within a broadly defined sub-disciplinary field. Unlike many niche journals, our approach is indeed 'pluralist'.

Pluralism does not mean loose standards nor shifting goalposts but it does mean that we cannot impose a simple publication standard for all papers. One key standard that has become widely accepted over the past decade in the social sciences is the 'replication standard', the requirement that the author(s) must deposit their data in an accessible readable format at a website that is maintained and supported, and that the methods are transparent enough that others can check on the results and conclusions. The standard was gradually imported from the physical and biological sciences, evident in their disciplinary outlets and in the general science journals (e.g. Nature, Science, Proceedings of the National Academy of Sciences). In qualitative social science, it is presented more in terms of good scholarly practice and data sharing. In political science, almost all major journals now require data and code deposition either at a reliable site or more usually at Dataverse Network (thedata.org) whose aim, following King's (1995) proposal on replication, is to be "A repository for research data that takes care of long term preservation and good archival practices, while researchers can share, keep control of and get recognition for their data... [It] supports the sharing of research data with a persistent data citation, and enables reproducible research."

The obvious advantages of such depositories are that they allow statistical meta-analyses of varied data from multiple studies to recognize patterns or lack of coherence across them. Common in the bio-medical fields, the careful choice of data for comparison is critical, especially of data that have passed close scrutiny and were collected on the basis

of ethical and standard laboratory procedures. Attempts to extend these approaches into the social scientific realm have been greeted with some skepticism because of the lack of agreed and careful data collection measures that are meticulously reported. For instance, the admixture of data derived from different scales - from the individual to the country level - in an attempt to certify and quantify the effects of rising temperatures on a range of violent human behaviors (Hsiang, Burke and Miguel, 2013) has been challenged by an international group of social scientists (including the first author of this editorial) as improper meta-analysis (Buhaug et al 2014) that reflects a shallow understanding of conflict dynamics (Gleditsch & Nordas, 2014) and as barely-disguised environmental determinism (Raleigh, Linke and O'Loughlin 2014). In fact, other data indicate that some climate changes may *dampen* conflicts (Devlin & Hendrix, 2014). Either way, care must be taken in choosing data to re-examine, results to replicate and studies to reproduce and extend.

There is a further reason to promote a replication standard. While not fool-proof, a requirement that quantitative material be publicly deposited and that other material be made as accessible as possible raises the bar for openness and transparency in research and publication. A decade ago, O'Loughlin (2005) criticized the author (Beck 2003) of a paper in The Professional Geographer on the search for Osama bin Laden for refusing to reveal his data and methods since he was trying to assist the US military in the search. *Political Geography* has seen heated debate about the intersections between the military, informed consent and scholar-activist divides (Steinberg, 2010 and the four Guest Editorials that follow it). As editors, we know of two papers that were published in this journal with the support of intelligence agencies - though we only found out long after publication. In the 1000+ papers published since the journal's inception, there are undoubtedly other articles with similar funding that was not reported at the time. For several years, the journal has had a requirement that authors reveal all of their funding sources at the time of submission but we have few ways to check if this self-reporting is accurate. Ethics or, more usually, the lack of ethics in scientific publication has received welcome attention in recent years and we hope that graduate training will continue to target this important topic for future scholars. We believe that research ethics includes not only relationships with informants (the usual focus of university institutional review/ethics boards) but also ethics and honesty around funding and writing.

We understand and accept that qualitative information often cannot be shared due to privacy concerns and the idiosyncratic non-standardized nature of observation and interaction with subjects. However, there is no valid reason why qualitative researchers should not be subjected to the same rigorous scrutiny as those who use quantitative data and statistical methods. Removal and redaction of identifying information from transcripts would allow such checks. Funding agencies such as the Economic and Social Research Council in the UK now expect researchers to share their data collected on the grant. The U.S. National Science Foundation, which also supports many qualitative projects, does not exclude qualitative information from this expectation: "Investigators are expected to share ... at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials" (NSF 2014). All NSF proposals now require a data management plan that elaborates this

dissemination and sharing of data. In a political environment where government social scientific funding is questioned by politicians and where qualitative work is subject to even more intense scrutiny (Mervis 2014), a clear indication of the informational basis for conclusions can help reduce skepticism about the validity of the work.

Revealing sources of funding and transparency of research findings are only the most evident of expectations for scholars in the new tightened funding environment with more government oversight of spending and research. A more visible public outreach effort is now expected and academic standards are no longer the only marks of quality. "Impact" is the new catch-all phrase. Although "impact scores" and h-indexes continue to attract attention, the word increasingly refers to what the NSF calls 'broader impact', or to what in the UK is simply known as 'impact': influence beyond academia. Academics are now expected to demonstrate their value to the public and governments. As a consequence, the lines between scholarship, advocacy, policy-making, journalism and media-output are more blurred than ever. Policy-advocates create news by maintaining an active media presence that reports their own work and others of a similar perspective. Science journals, including Elsevier's, promote their articles by press releases and Twitter feeds. Many political geographers maintain blogs that comment on news developments and link to relevant work in their specialty. Along the way, the gap between opinion and evidence has been eroded and this journal has seen a rise in the submission of works that are barely distinguishable from blog entries. Most never proceed beyond desk rejection stage. We do have a forum however, via guest editorials, for opinion pieces that link to contemporary research in political geography. These now feature in every issue.

Elsevier, like most science publishers, has a "conflict of interest" (COI) standard, an expectation that "authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations ... that could inappropriately influence, or be perceived to influence, their work" (see also http://www.elsevier.com/conflictsofinterest). These standards are typically robust for bio-medical journals to which research funded by pharmaceutical firms is often submitted, but a standard is rarely expected or implemented in social science journals. While financial support in the form of payments, consulting fees, free supplies, stocks, and royalties is well-defined, what about travel grants or rent-free accommodations or staff support in the form of hourly help, data provision, translation or chauffeur services? We believe that many *Political Geography* authors have availed of such help but it remains mostly unreported. Authors typically thank those who have assisted in their fieldwork but the level to which assistance must rise before it should force the researcher to declare a COI is rarely discussed or agreed. We have not required authors to disclose a COI at the submission stage but a close reading of many published papers should produce a sense of discomfort about the cavalier manner that political geographers assume in their research practices. Working closely with non-governmental organizations (NGOs) is a common practice in our discipline and often conclusions of the research coincide with the preferred policies of the NGO. It seems past the time to consider a broader definition of a COI that would include any relationship that is close enough to either influence OR appear to influence the work and the conclusions. Such is

the expectation of service on panels that judge proposals for funding and it seems inconsistent not to extend the standard to the completed projects. For this reason, we are implementing a 'conflict of interest' box on new submissions to *Political Geography* in which we ask authors to indicate any such conflict. We will not reject papers on the basis of this disclosure but we might ask authors to place the statement after the usual acknowledgements if the overlap of interest merits it. The AAG (2009) ethics guidelines state that "Ethical issues are particularly likely to be encountered when seeking government support for research or undertaking a government-sponsored project." While agreeing with this perspective, we are advocating its careful extension to *all* supported projects.

As researchers who engage in field work in often-difficult and controlled locations with vulnerable populations, we are well-aware of the balance required between full disclosure of sources, information, and assistance against protection of such persons. By instituting small changes to the author submission procedures of the journal, we are not advocating replacing ethical expectations or human subjects protection. Instead, we are enacting greater transparency of research practices, data collection and deposition, results replication, and possible conflicts of interest. Scholarly ethics include but transcend protection.

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