Opening Political Science

Open Minds, Open Methods: Transparency and Inclusion in Pursuit of Better Scholarship

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The idea of "open scholarship" has enjoyed a remarkable career. From discussions around the production, availability, and analysis of data (Moravcsik 2014) to persistent publication biases (Franco, Malhotra, and Simonovits 2014) and the accessibility of research publications (Bull 2014), "openness" has emerged as a unifying concept in discussions about the discipline (Elman, Kapiszewski, and Lupia 2018; Lupia and Elman 2014; Wuttke 2019).

Despite its ubiquity, the meaning of “open science” or “open scholarship” (OS) has been ambiguous and contested to the point where scholars have identified different “schools of thought” (Fecher and Friesike 2014). Our goal in this symposium is to advance an integrated concept of OS. We argue that as an academic reform movement aimed at raising the credibility of political research, the idea of openness is best conceived of as covering two orthogonal dimensions: openness as transparency and openness as inclusion. This conception of OS dovetails with philosophical accounts that locate science’s unique epistemic quality in its social character (e.g., Longino 1990; Oreskes 2019; Solomon 2001). The ineluctably social processes of mutual vetting, cumulative learning, and free exchange of views can only enhance the credibility of our work if we open up the research process and open scholarly discussions to diverse participants. These two components of OS reinforce one another in the credible accumulation of knowledge on a specific topic.

A revelation of the OS movement is that this social process of science is that it uncovers errors and opportunities for improvement. It allows us to achieve more robust insights by making us aware of the triumphs and missteps of others who came before us. Moreover, the social process of scholarly debate, at least in principle, may approximate a consensus that provides credible certainty to interested observers. When, after thorough vetting, a community of scholars agrees on a particular scientific knowledge claim, then it no longer represents a private opinion but rather the best available collective expert knowledge on a specific topic—at least for the time being and within that community.

One of the things that the OS movement aims to achieve is to advance an integrated concept of OS. We argue that as an academic reform movement aimed at raising the credibility of political research, the idea of openness is best conceived of as covering two orthogonal dimensions: openness as transparency and openness as inclusion. This conception of OS dovetails with philosophical accounts that locate science’s unique epistemic quality in its social character (e.g., Longino 1990; Oreskes 2019; Solomon 2001). The ineluctably social processes of mutual vetting, cumulative learning, and free exchange of views can only enhance the credibility of our work if we open up the research process and open scholarly discussions to diverse participants. These two components of OS reinforce one another in the credible accumulation of knowledge on a specific topic. Thus, a key benefit of OS is that it encourages us, the scientific community, to assess whether we are realizing our epistemic potential by posing a simple question: How far open are the doors to our research and did we invite others in?

So, what exactly does openness imply for scholarship and what does the OS movement aim to achieve? To understand its purposes, it helps to revisit a foundational question about the nature of research: Why do we consider scholarly knowledge claims to be credible or at least more credible than knowledge claims from other sources?

An important tradition in the philosophy of social sciences, going back to at least Merton (1973) and taken up recently by Oreskes (2019), argues that science’s epistemic value lies in its social character. In this view, academic knowledge production is distinctive in that scholars constantly review, scrutinize, and evaluate one another’s work. As scholars, we expose our ideas to critique and engage in a process of cumulative—usually incremental—knowledge creation. In doing so, we should not only “stand on the shoulders of giants” but also examine them like a scrupulous orthopedist. The point of the social process of science is that it uncovers errors and opportunities for improvement. It allows us to achieve more robust insights by making us aware of the triumphs and missteps of others who came before us. Moreover, the social process of scholarly debate, at least in principle, may approximate a consensus that provides credible certainty to interested observers. When, after thorough vetting, a community of scholars agrees on a particular scientific knowledge claim, then it no longer represents a private opinion but rather the best available collective expert knowledge on a specific topic—at least for the time being and within that community.

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Critics argue that the OS movement falls woefully short of its own objectives. Specifically, they point out that OS itself is lacking in diversity and that it perpetuates steep hierarchical power structures within the discipline, favoring elite institutions in the northern hemisphere that often focus on quantitative methods (Women’s Caucus for Political Science 2017). We think there is an important point to this critique: it is true that many advances associated with the OS movement focused on making number-crunching more transparent, more socially inclusive.

An integrated conception of OS that centers science’s social character therefore views both propositions—opening up the research process and opening up scholarly debates—as reflecting the same set of principles. In our view, OS consists of both opening the door to one’s research and inviting others in. Only when we satisfy both conditions can we hope to achieve a process of proper collective scrutiny, understanding, and assessment of our work as well as cumulative insight building from it.

In this perspective, the OS movement is all about interrupting the process of “normal science” and critically interrogating it together. Do our established norms, values, incentives, and rules encourage openness and observability of our work? OS is asking this question in an inclusive exercise of promoting self-critique through openness.

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researchers who have not considered themselves to be active proponents of the movement toward OS. It assembles contributions that, as an ensemble, showcase how we can and should address the two dimensions of OS discussed in this introduction: opening up the research process and our discussions about it. We believe that the measures and advice presented in these articles will increase the epistemic value of political research as an inherently social process. The purpose of this symposium is to challenge the discipline to be transparent and inclusive as we strive to understand the political world around us.

Three articles in the symposium discuss openness as transparency. Kapiszewski and Karcher (2020) present various entry points to transparent research for researchers working in qualitative traditions. The article by Rohlfing et al. (2020) demonstrates how transparency can be evaluated and improved in a context-sensitive manner in specific methodological areas. They review the political research literature using Qualitative Comparative Analysis (QCA), not only documenting a problematic lack of reproducibility but also providing a checklist that QCA researchers can use to improve the transparency and reproducibility of their work. Engzell and Rohrer (2020) offer an interdisciplinary perspective on transparency. Their article discusses what political research can learn from psychology’s “replication crisis” and ensuing “credibility revolution.”

Three more articles address openness as inclusion. Lupia (2020) explains why opening up our work to the scholarly and general public is of paramount importance for trust in social science. Janz and Freese (2020) focus on how the core scientific practice of replication can and should be made more inclusive in our discipline. Arguing that the epistemic ends of OS require us to build a cooperative-including rather than a combative-excluding culture, they illustrate how a culture of “fear of replication” has sidelined replication as a key academic practice. In response, Janz and Freese provide actionable recommendations for how we can recenter replication as an inclusive practice. Finally, Breznau (2020) shows how we can advance political research by opening up to a massively inclusive approach to collaboration, even within the confines of a single project. He shows how a wealth of crowdsourced expertise and perspectives can be brought to bear on research of unique utility that would not have been possible in the traditional “one-to-10 authors” paradigm.

**NOTE**
1. Compared to the term “open science,” “open scholarship” encompasses a wider group of referents. We deliberately use the acronym OS throughout this article without specifying it to refer to either term because the presented arguments apply to both open science and open scholarship.

If this spirit of open innovation is coupled with a social-inclusiveness perspective, we expect that OS—in the long run—will flatten, not steepen, hierarchies that permeate our scholarly community.

**REFERENCES**

Bourke, Brian. 2014. “Positionality: Reflecting on the Research Process.” *The Qualitative Report* 19 (33): 1–9.

Breznau, Nate. 2020. "I Saw You in the Crowd: Credibility, Reproducibility, and Meta-Utity." *PS: Political Science & Politics.* doi:10.1017/S1049096520000980.

Bull, Martin J. 2016. “Introduction: Open Access in the Social and Political Sciences: Threat or Opportunity?” *European Political Science* 15 (2): 153–57.

Elman, Colin, Diana Kapiszewski, and Arthur Lupia. 2018. “Transparent Social Inquiry: Implications for Political Science.” *Annual Review of Political Science* 21 (1): 29–47.

Engzell, Per, and Julia M. Rohrer. 2020. “Improving Social Science: Lessons from the Open Science Movement.” *PS: Political Science & Politics.* doi:10.1017/S1049096520000967.

Fecher, Benedikt, and Sascha Friesike. 2014. “Open Science: One Term, Five Schools of Thought.” In *Opening Science: The Evolving Guide on How the Internet Is Changing Research, Collaboration and Scholarly Publishing*, ed. Sönke Bartling and Sascha Friesike, 17–47. Cham, Switzerland: Springer.

Franco, Annie, Neil Malhotra, and Gabor Simonovits. 2014. “Publication Bias in the Social Sciences: Unlocking the File Drawer.” *Science* 345 (6203): 1392–5.

Janz, Nicole, and Jeremy Freese. 2020. "Replicate Others as You Would Like to Be Replicated Yourself." *PS: Political Science & Politics.* doi:10.1017/S1049096520000943.

Kapiszewski, Diana, and Sebastian Karcher. 2020. “Transparency in Practice in Qualitative Research.” *PS: Political Science & Politics.* doi:10.1017/S1049096520000955.

Longino, Helen E. 1990. *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry*. Princeton, NJ: Princeton University Press.

Lupia, Arthur. 2020. “Practical and Ethical Reasons for Pursuing a More Open Science.” *PS: Political Science & Politics.* doi:10.1017/S1049096520000979.

Lupia, Arthur, and Colin Elman. 2014. “Openness in Political Science: Data Access and Research Transparency.” *PS: Political Science & Politics* 47 (1): 19–44.

Merton, Robert K. 1973. "The Normative Structure of Science." In *The Sociology of Science: Theoretical and Empirical Investigations*, ed. Norman W. Storer, 267–78. Chicago: University of Chicago Press.

Moravcsik, Andrew. 2014. "Transparent Science: The Revolution in Qualitative Research." *PS: Political Science & Politics* 47 (1): 48–52.

Oreskes, Naomi. 2019. *Why Trust Science?* Princeton, NJ: Princeton University Press.

Rohlfing, Ingo, Lea Königshofen, Susanne Krenzer, Jan Schwabach, and Ayjerem Bekmuratovna R. 2020. "A Reproduction Analysis of 106 Articles Using Qualitative Comparative Analysis, 2016–2018." *PS: Political Science & Politics.* doi:10.1017/S1049096520001777.

Rose, Gillian. 1997. “Situating Knowledge: Positionality, Reflexivities, and Other Tactics.” *Progress in Human Geography* 21 (3): 355–20.

Solomon, Miriam. 2001. *Social Empiricism*. Cambridge, MA: MIT Press.

Women’s Caucus for Political Science. 2017. "The Women’s Caucus for Political Science 2017 Statement on DA-RT." https://dialoguonardarjob.files.wordpress.com/2017/09/wcps-dart-2017.pdf (accessed June 16, 2020).

Wuttke, Alexander. 2019. “Why Too Many Political Science Findings Cannot Be Trusted and What We Can Do about It: A Review of Meta-Scientific Research and a Call for Academic Reform.” *Politische Vierteljahresschrift* 60 (3): 1–19.
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