

What to do with politicized science?

A review of *Science in Democracy, Expertise, Institutions, and Representation*, by Mark B. Brown, Cambridge, MA, London: MIT Press

The difficulties met by much of the efforts to deploy scientific knowledge in democratic societies, and their relative failure to bring about effective public engagement with science, most notably in relation to such recent issue as climate change, often serve as a springboard to proponents of a reactivation of the Enlightenment project. Centred on such moral values as objectivity, rationality, and trust in the scientific method as the surest way to truth, this latter view conceives of sound expert advice to those in power as the foundation of democracy (Oreskes and Conway, 2010). Critics have repeatedly pointed out that such an advocacy of science's independence from society might do more harm than good, and is misconceived. More than two decades ago, science students suggested that exposition and discussion of scientific knowledge in public is a necessary step in the production of knowledge, for it is the moment when uncertainty is dealt with and incontrovertible facts are constructed (Bucchi, 2008). In other words, knowledge-making does not end when expert consensus is reached; knowledge claims are stabilised in public forums. Therefore, the project of isolating knowledge-making from society, in the hope of preventing its contamination with politics, is potentially problematic, because it enshrines instability within knowledge claims, thus paving the way for the instability of social order (Nowotny et al, 2001). The challenge, however, is to find ways to 'institutionalize polycentric, interactive, and multipartite processes of knowledge-making within institutions that have worked for decades at keeping expert knowledge away from the vagaries of populism and politics.' (Jasanoff, 2003:235). It is also to invent means to accommodate for the multiplicity of social perspectives involved in the politics of science. Mark Brown's *Science in Democracy* takes up this challenge. Bringing forward a conception of 'democracy as an institutionally differentiated system of

collective representation' (p.xiii), it suggests that existing institutions should be transformed and new ones invented, to multiply the sites and modes of representation available to experts, non-experts, and politicians alike.

At the core of the debate outlined above, Brown identifies a conception of representation understood in rationalist terms. To self-appointed defenders of pure science, on the one hand, scientists produce representations which are mirror images of nature providing unmediated access to reality. Such value-free science, which does not privilege any perspective, is accordingly taken to represent faithfully the public interest. Citizens should thus simply place their trust in science, and let themselves be represented by elite experts with a privileged access to popular will and the public interest, just as scientists are an elite enjoying privileged access to the truth of nature. On the other hand, advocates of participatory democracy tend to conceive political representation as an exact reflection of popular will and common sense. In this view, representation of the people by an elite is ultimately a subversion of the democratic ideal, and lay participation is seen as the antithesis of elite rule.

In contradistinction to this juridical model of representation, which fosters irresolvable controversies, Brown theorises one of 'democratic representation'. Whereas in the juridical model, representation is black-boxed as a synonym for substitution, in the model elaborated here it is conceived as a relation of mediation with a transformative effect on both the representative and the represented. Representation is thus unpacked as a sophisticated composite, whose different parts are aspects of the relationship between constituents and their representatives, namely 'authorization, accountability, participation, deliberation, and resemblance' (p.206). Democratic representation is forwarded as a means of responding to politicized science through institutionalising the politics of science, in a range of institutions that would each provide citizens with access to different modes of representation (Chapters 9 & 10).

In order to work through this model, Brown looks at canonical texts in political and democratic theory (Machiavelli, Hobbes, Dewey, Madison,

Rousseau) through the lens of science and technology studies (S&TS), whilst submitting important texts in the field of S&TS (most notably Bruno Latour's) to symmetrical treatment. This enactment of the principle enunciated in the preface to the book, that it is intended to examine and question the supposed boundary between science and politics, allows Brown to highlight what went into the construction of taken-for-granted ideas and institutions, in relation to the politics of science, and to suggest renewed readings of these authors. For instance, offering an exciting reading of Machiavelli, the first chapter invites us to consider him as the inventor of a rhetoric of expertise made of humility and social distance, and as the advocate of 'the institutional requirements for its successful use' (p.42), thus articulating 'distinct norms and purposes for science advisors and political actors' (p.24), which still resonate today. The other side of Brown's approach is exemplified in the important chapter 7, where Bruno Latour's work is read as one in democratic theory. Given the centrality of the concept of representation in Latour's joint exploration of sociotechnical networks, Brown locates there several themes previously identified in Machiavelli, Hobbes or Dewey, and which he himself uses when theorising democratic representation. Yet, he remarks that Latour's account of representation is stuck in the common juridical view of representation as substitution, which reduces representation to questions about the absence or presence of the represented, and prevents to understand the necessary institutional differentiation of representation. To Brown this shortcoming originates in Latour's generalised symmetry principle, which obscures asymmetries between science and politics, examined in the following chapter (chapter 8), in an effort to understand the politicization of science and what it means.

Overall, *Science in democracy* is intellectually invigorating and succeeds in putting S&TS in conversation with political sciences. Scholars in both field should profit from this useful contribution to the literature on the relationship between experts and society. However, one is left wondering if a more comparative approach would not have contributed to enlarging the scope of the study, thus enhancing its "power of proposition". Despite a few hints at

examples taken from the United Kingdom or Germany, it remains centred on the institutional landscape as it prevails in the United-States. But this lack of a comparative perspective can also be welcomed, as an invitation to expand on the propositions made in this book.

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