

Material Participation: Technology, The Environment and Everyday Publics

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There has been a lot of talk in the social sciences in recent years about the need to better account for material agencies in our understanding social practice. Much of this discussion rests on foundational empirical work that focused either on the practices of scientists and their engagements with substances and scientific apparatus in the making of scientific knowledge (e.g. Latour and Woolgar 1986), or the actions of technology and the capacity of artefacts to shape social worlds in both intended and unintended ways (e.g. Winner 1986, Bijker et al 1987). These studies helped to demonstrate how mundane objects could be said to have a politics, wrenching things from the condition of context and ascribing them a liveliness and agency that allowed them to become actors in accounts of social life. The striking move that Marres makes in this fascinating study of material participation is to turn this focus around to ask not just what are the politics of objects, but rather what are the objects and materials of contemporary politics? Specifically, Marres focuses on the political affordances of certain material artefacts in order to rethink what 'the public' is and the role that such publics play in political life.

Marres is tutored in an interdisciplinary mix of sociology, political theory and science and technology studies, a combination of influences that she uses to excellent effect in this book. The opening two chapters offer something of a treatise for the analytical benefits that might be gained by returning to the American pragmatists of the early

20th century, primarily the work of John Dewey and Walter Lippman. Drawing on Dewey and Lippman, Marres sets out a theory of the public that sees it not as a collection of subjects, nor a discursively constituted social imaginary, but something that both emerges in response to specific issues, and which works to constitute those issues *qua* issues. Moreover publics are characterised, for Marres, by a particular relationship to these issues: namely that publics are too involved in a problem to be outside it, and yet too outside it to have access to the resources needed to deal with it. It is this dual character of being both inside and outside the issues that they seek to address and work to constitute that characterises the current modes of public participation available to people and which provides a frame for understanding the role that material artefacts play in allowing people to generate forms of participation that are appropriate to such a public.

Marres proceeds to elaborate this proposition through the study of three forms of material participation in environmental politics: everyday carbon accounting; experiments in sustainable living; and eco show-homes. Her analysis of everyday carbon accounting focuses on objects that have been designed explicitly as devices that are able to enact and enable political participation. An example of this is the ecological kettle, which glows red when the grid is overloaded and green when there is spare capacity. This allows individuals to make an informed decision about when is the most ecologically sustainable time to make a cup of tea. Marres argues that these kinds of devices are usually understood to be a means of mobilising a latent public into action by providing a pragmatic and easy way for people to 'do' environmental politics. However, focusing both on the empirical claims being made by these technologies that aim to measure people's entanglements in distributed socio-

technical systems, and on the frequent failure of such technologies to achieve their ecological ambitions, Marres argues that these devices in fact force both social scientists and users of these devices to rethink where political action might be located. The result of this re-imagination is that the public then becomes something that is distributed across assemblages of people, technologies and systems.

The next chapter focuses on experiments in sustainable living and looks in particular at a number of blogs set up by people in the UK to describe their attempts at living a sustainable life. What these blogs highlight is the way in which politics becomes enacted in the mundane *minutiae* of everyday practice – turning off lights, washing with different soap, not driving a car, using a thermos flask. The term ‘enactment’ is particularly important here, for these are not, Marres argues, just accounts of privatised social practices, but examples of the way in which the domestic sphere is itself performed as a space of public participation.

Just how these performative practices have become a matter of public participation is the focus of chapter five. Marres suggests that material practices of sustainable living should be understood as political because of the way in which the objects at play are analysed, both by social scientists and by the people engaged in these experiments, as part of an ‘assemblage of further entities that enable the explication of their normative capacities’ (p107). Focusing here on the object of the eco show-home, Marres demonstrates how the publicisation of an object like a house depends on what she calls a ‘politics of co-articulation’ (p120). Eco Show Homes, like the other objects that Marres considers in the book, publicly perform political engagement by linking up in new ways questions of participation, innovation and social change. At the same

time they also raise questions about the limits of material engagement to truly enact a politics of public responsibility. Can insulation really be political? Ultimately for Marres, it is the undecidability or indetermination of whether materials have the capacity to enable a robust response to pressing political issues that keeps alive the experimental promise of these forays into alternative modes of living and in the process enables the on-going performance of public engagement.

This is a fascinating and ultimately convincing account of the difference that a sensitivity to material entanglements makes to our understanding of politics and the performance of the public. Marres uses her empirical examples to good effect to reinforce Dewey's point that publics are problematically entangled with issues, and that the nature of this entanglement is necessarily socio-material. Nonetheless there remains something of a missed opportunity in some of the examples that Marres analyses throughout the book, for whilst the cases she presents support Dewey they also hint towards some fascinating issues that might well be the grounds for updating Dewey's understanding of the public for contemporary times. One example is the discussion of empirical technologies at the end of chapter three. Empirical technologies are those devices like the ecological kettle that set out to measure and describe public participation. Marres suggests that these technologies support Dewey's understanding of the public, demonstrating how material artefacts become the means by which people enact participation in the issue of environmental politics. But is it possible they do more than this? Empirical technologies which build on open-source technologies such as Arduino also seem to raise the possibility that publics are becoming not only recipients of such technologies but also their designers and producers. What happens to the public, when these empirical technologies enable

them to generate resources to deal directly with issues that affect them? If publics now have the means to directly tackle issues that affect them, then are they still publics, in Dewey's terms? And if they are not, then what are they?

Material Participation may not answer such questions but it establishes a solid ground from which such questions might be asked. Providing both a compelling re-theorisation of the public and a highly original account of political technologies and their effects, this book should be essential reading for anyone who is interested in the crucially important intersection between politics, technology and environment.

References

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