
Review

Material Participation – Technology, the Environment and Everyday Publics

Noortje Marres

Palgrave Macmillan, Basingstoke, 2012, (2nd edn. 2014), x+206 pp., ISBN: 978-0230232112

Material Politics – Disputes along the Pipeline

Andrew Barry

Wiley Blackwell, Chichester, 2013, xiv+244 pp., ISBN: 978-1118529126

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Q2 Oil pipes, toasters, sustainable living blogs, corporate information – how are these things made political? This is one of the central questions driving both these books. Their aim is to understand how ordinary things become participants in the conduct of politics and what happens to political analysis when we ‘let things in’, to use Noortje Marres’ term. In different ways both authors continue the lively conversation about the role of materials in political processes. This conversation has been dominated by exchanges between science studies and political theory. Influential collections such as *Making Things Public* (Latour and Weibel, 2005) and *Political Matter* (Braun and Whatmore, 2010) are important instances that have shaped many of the parameters of the debate. Marres and Barry have both made valuable contributions to these texts and to the wider exchange. They are significant political thinkers producing work that is provocative, rigorous and empirically rich. Their latest books maintain this standard and take the debate much further.

In reviewing these books together it seems most productive to explore their common themes and challenges. While a detailed assessment of their individual arguments might be sacrificed, what is gained is the opportunity to put them into conversation, the chance to assess how their understandings of material politics and participation converge and differ. The aim is not to merge them into some monstrous hybrid but rather to examine how they approach a set of core issues that frame the wider intellectual project.

Marres’ *Material Participation – Technology, the Environment and Everyday Publics* was first published in 2012, and a slightly revised paperback edition was released in 2014. Marres’ aim is to place objects at the centre of political



participation. She investigates how participation and public engagement deploy non-human entities, not as mere resources for political action or passive objects of political deliberation but as ‘devices’ that have the capacity to shape and affect actions in specific ways. Including things in political analysis is not a benevolent gesture of inclusion, of extending the boundaries of the polity to entities that have no capacity for language or moral reasoning. For Marres it is a necessary redress to the anthropocentrism of much political thinking and due recognition of the quantity and sheer force of things provoking issues and publics in the contemporary condition.

While the core of the book is structured around empirical analyses of carbon-accounting devices, sustainable living blogs and ecoshowhomes, Marres’ project and methods are also richly theoretical. She has a serious commitment to understanding exactly how things come to matter practically and politically in processes of public engagement, as well as to developing a distinct mode of political analysis. Marres shows how investigations of both the mechanics and normative registers of politics are significantly reconfigured when things are taken seriously. When you finish this book it is impossible to think about citizenship or democracy or demonstrations or smart metres in the same way. This is a major achievement.

The centrepiece of the argument is Marres’ conceptualization of ‘material publics’. These publics emerge in relation to issues and problems – the issue and public are mutually constituted. Publics, then, are a practical achievement, an outcome of diverse processes of becoming affected, feeling implicated or sensing an emerging issue as having relevance. There are significant differences in these various relational dynamics between the articulation of problems and the nature of public engagement. With great precision Marres shows how ‘becoming affected’ is not the same as ‘relevance’. Her key point, however, is that in all these processes publics are a product of a particular type of ‘ontological trouble’ (p. 57). When it comes to disturbing issues and entities publics are not composed of stakeholders whose interests pre-exist the issue and must be represented. Interests and publics are emergent and problematically entangled. The driving question is how to empirically document and evaluate the forms of these entanglements, and the ways in which the problems of the public are distributed across various settings, devices, institutions and more.

Barry’s *Material Politics – Disputes along the Pipeline* is published in the Royal Geographical Society – Institute of British Geographers innovative series ‘Advancing Geography’. It is a detailed analysis of the controversies that surrounded the building of the 1760 km Baku-Tbilisi-Ceyhan oil pipeline. In the period from 2003 to 2006 this pipeline from the Caspian Sea to the Mediterranean was one of the largest construction projects in the world. Envisaged as a new, improved approach to oil extraction and its controversial impacts, the aim was to develop better forms of governance focused on the goals of transparency, corporate social responsibility and best-practice management of social and environmental risks. The unruliness of people and things made these noble objectives difficult to realize. Barry traces the



variety of controversies and disputes that erupted around the project – from the unpredictable behaviour of the metal in the pipeline, to landslides, to angry villagers with numerous grievances about the effects of the construction process on their livelihoods. His project is resolutely empirical and theoretical. Like Marres, Barry wants to challenge the limitations of existing political theory. He does this with a richly detailed account of the emergence of the pipeline, archives, corporate information and more as political objects: that is, things with differing capacities to prompt or transform a proliferation of public controversies. Despite the presence of some very prominent and overcoded political actors in this project, such as global oil companies, NGOs, activists and national governments, Barry's meticulous attention to seemingly minor elements and complex relations displaces any recourse to easy reductionism. The usual suspects become part of a multitude of participants entangled in the project's controversies, and their overt political capacities are often displaced or disabled by the performance of the most mundane things. In this analysis systemic patterns of causation are difficult to identify. Barry maps relational complexity with incredible skill, and the result is a sophisticated account of the contingencies of politics.

Three key arguments drive the book. The first concerns the relationship between materials and information. Barry shows how the circulation of information about materials and their properties now plays a critical role in many aspects of economic and political life. For example, large-scale infrastructural projects depend on predicting and controlling the activity and impacts of materials, while new information about the behaviour of single molecules can prompt global issue networks and consumer activism. Many contemporary disputes are focused on competing forms of information and knowledge about materials, and this means that political analysis has to pay close attention to the various ways in which materials actually become informed. The second argument examines the dynamics of transparency. Barry challenges the assumption that more transparency means fewer conflicts and disputes. Instead, he shows how this ethical ideal is a vast experiment often driven by the logics of visibility and demonstration for its own sake. It is not enough for corporations to claim to be transparent; they have to be seen to be doing this, and this expectation generates specific publics capable of witnessing and holding to account. Finally, *Material Politics – Disputes along the Pipeline* offers powerful insights into the scale and temporality of the political. The focus on local disputes and controversies does not mean that these are bounded events occurring on the sidelines of more universal struggles. Instead, Barry's claim is that controversies are evidence of 'political situations' in which bigger issues are often progressively actualized. In this way the specific can become implicated in the general, and the question of whether or how this is actually the case is often part of the dispute.

In moving now to an assessment of common themes, three are most pertinent. These emerge from the experience of reading the books in close sequence and the sense in which, despite their very different empirical cases, they confront similar challenges. These challenges relate to the ways in which 'letting things in' reconfigures how we



understand the dimensions of politics: the issue is how, and with what effects? The second concerns the dynamics of public emergence and what Barry describes as ‘genres of public formation’. Finally, there is the question of information, publicity and democracy. How does the production and circulation of knowledge interact with political processes?

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Material Participation – Technology, the Environment and Everyday Publics and *Material Politics – Disputes along the Pipeline* both endorse Chantal Mouffe’s agonistic theory of radical democracy. While conflict, contestation and antagonism are at the heart of politics, this is not necessarily resolved in consensus or rational solutions. Instead, persistent disagreement and undecidability have to be recognized as the norm, not the exception, and this reality shapes many dimensions of the political. According to Barry (p. 8), however, agonistic approaches do not adequately account for the lively and increasingly prominent role of materials and objects in animating public knowledge, controversies and disagreements. These controversies often emerge outside mainstream political institutions and can involve complex disputes over material properties, impacts and causes. Whether or not these controversies become ‘political’ and how is the central issue. Controversies can unfold in many different ways – they can be intensely local and bounded or they can generate vectors that animate wider questions and implicate multiple players. This process of interrelationships and connections with other dynamics and events Barry describes as a ‘political situation’: A political situation is not an underlying structure that governs the dynamics of a series of individual controversies. Rather, to call events a political situation is to argue for an expansion of the range of elements that should be considered when analysing a controversy, and seek to analyse the sets of relations that are put in motion by any controversy (p. 11).

For Marres, the challenge Mouffe poses is how to understand agonism as unfolding ‘on the plane of objects’ (p. 14). This resonates with Barry, but Marres takes her concerns in a different direction. She is interested in the turn to participation across numerous domains from science, to the environment, to government and beyond, and the ways in which this shift has transformed understandings and expectations of the public in liberal democracy. ‘The public’ is now an object of consultation, accountability, witness and engagement. And objects and devices have emerged as active elements in this participatory turn, becoming lively and unpredictable actants in the formation of publics. Rather than see ‘participation’ as an abstract political ideal, Marres investigates how it is enacted in everyday settings, how it is a practical achievement. The question is how to assess the specific role of materials and their shifting valuations in generating distinctive forms of public engagement.

These arguments begin from the assumption that politics is about far more than speech acts, competing human interests or the dynamics of representative government. Both Marres and Barry understand the political in implicitly performative terms. This is fundamental to their methodological and analytical commitment to letting objects in. Their point is not that non-human entities are intrinsically political



and therefore need to be included in political analysis in some recuperative gesture. Neither of these authors is promoting a general materialist theory of democracy. Nor are they taking refuge in reductionism and claims that controversies are expressive of systemic structures. Rather, their argument is that entities can acquire political capacities in certain settings and associations, and in coming to matter they help perform specific political realities. Not only does this approach enable recognition of a multiplicity of causes and elements involved in the emergence of political situations, it also foregrounds the diversity of techniques that constitute what Amin and Thrift (2013) refer to as 'the arts of the political'. Whether it is through the eruption of controversy, the micropractices of everyday life, ontological uncertainty or affective disturbance, 'the political' is often a contingent and more than human event.

Both books are interested in the empirical challenge of conducting 'political fieldwork', as Barry calls it. However, their success in documenting the processes whereby materials acquire political agency is variable. This is partially to do with their different objects, but it is also a product of how Barry and Marres understand the very ground of the empirical. In Chapter 7 of *Material Politics – Disputes along the Pipeline* Barry traces how the materiality of the pipeline became implicated in a specific controversy involving the House of Commons in London, the expertise of engineers and the circulation and legitimacy of scientific evidence. Barry outlines the evolution of this controversy with great precision. He shows how the unpredictable behaviour of metal contributed to the transformation of a political situation that was at once local and also, eventually, caught up in developments in London. He offers a wonderfully incisive account of the ways in which a parliamentary subcommittee acted as a modest political witness to the presentation of evidence about the instability of the pipeline. This committee performed the function of representatives of 'the public interest' sitting in judgment on the extent to which cracks in the pipeline were to be considered a matter of concern. Ultimately they weren't, but the attention to close description in this account makes it possible to see the multiplicity of political processes, micro and macro, and the ways in which the pipeline became more and more potent in the unfolding controversy. The pipeline wasn't just an object of political deliberations; through various mediations and spokespersons it became a participant in a shifting political assemblage. Its behaviour mattered in numerous registers: technically, legally and as an impetus for the activism of NGOs. It became a generative source of effects that were emergent and unpredictable. At the end of this analysis it is impossible to understand the political significance of materials in a reductive way. Contingency rules, and one is struck by the realization that the behaviour of the metal could have been largely irrelevant in a different setting and assemblage.

In Chapter 3 of *Material Participation – Technology, the Environment and Everyday Publics* Marres explores various devices for engagement with pressing environmental issues. Her primary example is a tea light that shines green when there is spare capacity on the grid so it is less carbon intensive to make a cup of tea, and red when demand is high. The tea light renders everyday carbon accounting visible and

makes mundane activities a form of political participation. Using this example Marres examines various arguments for the materialization of participation. Her key point is that the tea light is not simply part of the constituent elements of participation, an apparatus for the enactment of participation. Rather, in relation with other elements such as software and public blogs, it 'configures public participation as a form of material action on the environment' (p. 65). The case of the tea light demands a shift from the latent materiality of participation to the co-articulation of participation and its materialization.

This argument is compelling, and in its elaboration Marres develops a very different account of the empirical from Barry's. Rather than carry out political fieldwork her concern is with the ways in which tea lights and other devices produce a new relation to the empirical that has uncertain political effects. Marres is interested in the implications of making environmental problems visible and knowable through the introduction of new socio-technical devices that reconfigure ordinary activities. Empirical modes of representing carbon-accounting stage politics as experiments in the mundane; their aim is to disrupt existing norms and to engage subjects as concerned publics. It is the dynamics of showing, of the empirical at work, that give these devices political and ethical capacities. While these capacities might seem to be a form of technical or moral disciplining of populations Marres resists this interpretation. Her research shows that involvement with socio-technical devices often produces messy and uncertain practices that foreground the experimental and uncertain nature of public engagement.

Marres and Barry have different approaches to letting things into political analysis. For Barry the processes whereby material things become political demands close empirical description of how they perform in specific settings and associations, how they come to generate effects in the unfolding of a political situation. For Marres the functioning of the empirical is the primary object of her analysis. The grounds of the empirical are not so much description but its deployment and social and political effects. This distinction is perhaps too stark; there are also great similarities in their approaches and in their capacity for inventive sociological analysis. Ultimately what they produce are arguments attentive to the participation of things, from pipelines to tea lights, in political processes. They do this without recourse to causal analysis or generalist claims. Both pay close attention to the particularity of the case. Their interest in devices, processes, information and everyday practices generates modest and careful assessments of how the political importance and agency of materials is actualized – or not.

The second issue that both books wrestle with is the formation of publics and the ways in which they are materialized. This is a primary focus in *Material Participation – Technology, the Environment and Everyday Publics* where Marres showcases her long engagement with debates in American pragmatism and STS about the ontological character of publics. Barry also has a significant interest in conceptualizations of the public, specifically, the ways in which this collectivity has been governmentalized, and the diverse processes in which publics are



interpellated (p. 96). Barry argues that not only is the existence of the public used to justify many forms of political activity, the ‘interests’ of the public are expected to be made manifest in democracy. For both Marres and Barry publics are immanent – their existence is realized in the process of calling them into being; the issue is how does this happen. Through what techniques are publics assembled, and how do they come to acquire a common affective capacity? In Chapter 5 Barry traces how an affected public was constituted in relation to the pipeline – how, in order to engage in consultation about its environmental and social impacts, a public had to be brought into being. In other words, the act of ‘consulting the public’ produced its own object. In Chapters 4 and 5 Marres explores numerous examples from ecoshowhomes to issue tagclouds to show the diversity of processes and devices for public formation and participation and their variable political effects.

These accounts significantly advance understandings of the processual and pragmatic nature of publics in two key and related ways. First, by showing how the specific conventions involved in addressing a public assume an audience that recognizes and responds to those conventions. Drawing on literary theory Barry describes this relationship as ‘genres of public-making’ (p. 98). The second advance is in showing how material settings and objects format public action in locations beyond the usual sites of politics. This is Marres’ primary focus, and she uses it to examine how public engagement is ‘normatively ambivalent’ (p. 84). Just because material devices enable public engagement to be extended to people and places often excluded from mainstream political action doesn’t mean that it is automatically effective. It is always necessary to understand the precise ways in which objects and settings become equipped with normative capacities and to assess how they participate in politics and public action.

Excellent and compelling arguments disrupt the idea of publics as a product of human intentionality or voluntarism; publics are defined by their relationship to an emerging object or problem, by the common affective space they share. The notion of the ‘community of the affected’ has a long tradition in political theory, and it underpins many accounts of publics. Marres gives an excellent overview and critique of this intellectual tradition in the opening sections of Chapter 2. Both these books extend this tradition by offering new insights into the nature of ‘affectedness’. Barry shows that affected communities did not pre-exist the pipeline, were not automatically united and did not necessarily share a collective identity. While they were assembled by the pipeline-consultative-process and played a key role in the corporate performance of stakeholder engagement, they had multiple and shifting relations to the pipeline. They were multiplicities with numerous divisions and tensions. This process of public-making was also contested. NGOs challenged the company’s account of who was affected and how knowledge of effects was measured; they disputed how publics and their interests were constituted in relation to the pipeline. Another element in Barry’s account of the dynamics of making a community of the affected is the way in which it created a space for transnational governance beyond the state. The pipeline crossed several countries, which meant that the community of

the affected was defined by diverse material relations to the pipeline corridor rather than by national affiliations. This created a different political order distinct from those structuring the nation state.

This is a rich and generative exploration of the complexities of affectedness. Unlike many accounts of 'affect' that can border on ahistorical mysticism and meaningless generalizations about 'living in a world of affects', Barry shows how the capacity to be affected is realized and modulated in the social. This approach doesn't negate philosophical conceptualizations of affect as incorporeal potential – it gives them empirical substance. It shows how affective capacity in people and things is emergent and vulnerable to regulation and contestation. It also captures the diversity of political orders and relations that communities of the affected can become caught up in and generate.

For Marres, conceptualizations of publics as communities of the affected involve several hazards, hence her turn to the pragmatists. She shows how pragmatic accounts of 'ontological trouble' offer valuable understandings of the processes whereby publics are called into being. In this approach publics are intimately affected by issues but not necessarily involved in the framing or articulation of that issue. They don't seek to have their interests represented, nor can they be considered as predefined stakeholders. They are entangled, and their capacity to be affected is more a result of processes of induction than deliberate intention. 'Entanglement', like affect, is getting somewhat overused in contemporary social and cultural theory. Marres does not flog this term to the point of banality. Instead, her aim is to show how the way issues and objects come to matter inevitably captures dispersed bodies that share a common experience of feeling affected or implicated in some way. But entanglement is more than this. It also involves the various entities, institutions and settings in which the problems of the public are distributed and negotiated as everyday practices of material participation.

As nuanced and theoretically sophisticated as these accounts of publics are they provoke various questions. The main one concerns the relationship between specific controversies and their publics and wider political situations. In what ways do issues and agonistic dissensus connect with macropolitical processes and collectives? This is not a plea for a generalist emancipatory politics or critique. Rather, it is a query about how to analyse the interactions between very situated controversies and politics framed in more institutional or structural terms – what Deleuze describes as the molar or macropolitical. Neither of these books reads issues as indices of 'capitalism', 'the global environmental crisis', 'the neoliberal state' or whatever. They ask open empirical questions and refuse to be prescriptive about what constitutes publics and politics. On the other hand they cannot avoid acknowledging that one of the normative claims about political contexts is that they prompt matters of more general significance in ways that local issues or fleeting controversies may not. In what ways, then, are the publics that gather around pipelines or ecoshowhomes engaged in matters that have wider collective or political resonance?



For Barry this is not an evaluative or moral question; it is an empirical one. His use of the linguistic concept ‘abduction’ offers an interesting account of the technical processes whereby an issue becomes delocalized and framed as having broader political significance and consequences. Abduction points to causal agency; it infers antecedents from consequences. ‘It both turns audiences towards and constitutes the existence of forces beyond the object or event itself’ (p. 84). Abduction isn’t reductionism; it is a process of inference that becomes performative. This analytic move is innovative and compelling. It offers a way to understand how the context of very situated controversies can be transformed and how the emergence of a wider political situation is a technical process.

Marres tackles this question with a complex examination of the concept of relevance in pragmatic political theory and an investigation of the ways in which material participation identifies responsibility for problems. Her aim is to challenge negative assessments of issue publics and everyday participation as too ephemeral or trivial to be considered as legitimate forms of political organization. As the majority of the population is unable to apprehend problems that do not directly affect them, or appreciate harmful effects occurring in spaces and times beyond their reach, wider environmental issues, for example, often have limited relevance. In opposition to this positional account of relevance, neatly captured in the phrase ‘out of sight, out of mind’, Marres argues for a relational and topological account. Perceptions of the relevance of an issue are not a result of positioning but of the sociotechnical and discursive processes that mediate relations between emergent publics and wider problems. Relevance is an achievement, an event that generates a topological political imagination open to the expansive connections between an immediate issue and its reverberations in other times and spaces. Devices can be central in the emergence of relevance; they can help enact it, and they also foreground the ‘artefactual nature of people’s capacities to take environmental issues into account’ (p. 145).

Barry’s account of abduction and Marres’ topological explanation of relevance reframe the relationship between issues, controversies and more general political problems in exciting and important ways. Both show how making publics and issues is an eventful and indeterminate process and how technological artefacts, among other things, can play a key role in opening up indeterminate futures and pasts. Things can also generate social bonds not only between dispersed strangers who share common affective responses but also between humans and non-humans who are find themselves entangled in new ways.

Finally, there is the question of information, publicity and democracy. It is impossible to do justice to the arguments both authors develop in examining the role of information and knowledge production in the enactment of politics. Both are well-versed in debates within science and technology studies about the production of scientific facts and ‘objective’ measures. Both are also familiar with the role of experts within democracy and the ways in which expertise becomes politically potent

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and contested. What is interesting is the way in which they extend these lines of thinking with important conceptual innovations. For Barry, this is most evident in his discussion of metallurgy and the emergence of ‘informed materials’ (p. 141). Drawing on Bensaude-Vincent and Stengers’ argument in *The History of Chemistry* (1996) he shows how the physical properties of metals can never be separated from the forms of knowledge (from scientific research to regulatory frameworks) that also shape them. The informational enrichment of materials is ongoing and does not occur exclusively in laboratories; it is also a product of the multiple settings and contexts in which they circulate. In this way the material, the molecular, and the social are continuous, and the emergence of political situations often involves disputes about *how* the behaviour of materials will be understood and informed.

Marres’ discussion of online publicity devices offers another angle on the relationship between knowledge and politics. Her analysis of tag- or issue-clouds in the conclusion to *Material Participation – Technology, the Environment and Everyday Publics* explores how this software creates a virtual public space. By filtering out all the complex technological mediations that surround an issue and simply capturing and aggregating categories that are used in online discussion, public debate is both visualized and abstracted. Tag-clouds also privilege issues over viewpoints and amplify impact rather than dialogue and deliberation. This analysis of how online devices of publicity mediate participation and public space in very distinct ways is richly suggestive, especially in the way that it challenges the orthodoxy of unmediated dialogue as the most authentic form of political exchange.

Despite their particular objects and methods, Marres and Barry share key assumptions about what counts as politics and the ways in which materials can become politically significant and active. Both books confront the self-evidence of political contexts and practices, and are attentive to the diversity of political settings and techniques, or ‘situations’ as Barry calls them. They also wrestle with similar methodological challenges in seeking to understand exactly how things become implicated in dissensus, controversy and the formation of publics. If I have one criticism to make it would be that perhaps Marres could learn a little about clarity in writing and arguing from Barry. Occasionally her arguments falter under the load of too many theoretical elaborations, making them elliptical and impenetrable. These books make important contributions to the ongoing elaboration of material approaches to politics; they are pioneering and inventive particularly for their explicit engagement with and revitalization of the questions and politics of the public in political theory.

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