
Article:
de Saille, S. (2015) Dis-inviting the Unruly Public. Science as Culture, 24 (1). 99 - 107. ISSN 0950-5431

https://doi.org/10.1080/09505431.2014.986323

Dis-inviting the Unruly Public

Stevienna de Saille, University of Sheffield

As Welsh and Wynne (2013) have argued, there seems to be a paradox in policy approaches to public involvement in technoscientific issues. Policy efforts to include the public in meaningful dialogue have been accompanied by a simultaneous anxiety about untrustworthy publics. Social movement actors, in particular, are seen by policymakers as 'anti-scientific' and as a threat to national economic progress. To counter engagement by this 'uninvited' public, the state has imposed increasing levels of control.

One explanation is that, despite a general shift to more reciprocal models of governance, policymakers' response to public resistance -- whether to new technology or to new social policies – is still rooted in a deficit model. Protesters are characterised as ignorant and irrational, even when their arguments (particularly in the area of climate change) rely on scientific evidence. Public engagement events are therefore designed to supply technical information so that the public 'can make better choices', but without offering meaningful opportunities for intervention in policies already pre-determined by consultation with more powerful stakeholders within agendas for economic growth. Thus, as Nowotny (2014) argues, engagement becomes the performance through which a deficit of scientific legitimacy is addressed by invoking a specific political imaginary of 'the public' as the beneficiary of science.

Jasanoff and Kim (2009: 120) define a 'sociotechnical imaginary' as the 'collectively imagined forms of social life and social order reflected in the design and fulfilment of nation-specific scientific and/or technological projects.' Although they use the term in a nation-building context, it is also applicable at the level of the European Union, as operationalised through the Lisbon Treaty, which set out a socio-technical imaginary of the EU as 'the most dynamic and competitive knowledge economy in the world' (EC 2005). This was to be achieved through the creation of a well-funded common knowledge market which could attract private investment to bridge the gap between excellent science and bringing innovative goods, products and services to the market to meet the 'grand challenges' facing the world today.

More recently, this has been accompanied by a discussion of Responsible Research and Innovation. Through Horizon 2020, RRI seeks to direct public research funding towards technologies meant to serve the 'public good' (von Schomberg 2014), and to include the public and its largely non-technical concerns in the governance of emerging technologies through upstream engagement. As a vision for democratic governance of technoscience, RRI could be conceptualised as more than a discourse or a science policy framework. On national as well as European levels, it is quickly emerging as a powerful technoscientific imaginary for scientists, industry, academics, enlightened policymakers and informed citizens to work together to shape innovation towards socially desirable goals (Owen et al. 2012).

In addition to asking how 'the public' has been normatively imagined by the European Commission with regard to who is or is not invited to engage, it is worth considering which 'forms of social life and social order' are advanced by the EU's new sociotechnical imaginary of responsible innovation, and how this corresponds to those forms seen in public imaginaries of science. In what follows, I will discuss these questions with reference to Welsh and Wynne's (2013: 546) call for 'a turn to participant-action research to reconfigure the STS relationship with SMS in ways that are also meaningful to activists'. This analysis draws on my present research with a UK group of activists who are wrestling with similar questions of democratic governance of science and technology.

Scientific or political legitimacy?

Although the Eurobarometer is a problematic instrument for indicating public opinion (Eden 2014), the recent poll on Responsible Research and Innovation (Eurobarometer 2013) does show some clear trends. These support the principles behind RRI and undermine the prevalent view that the public trusts neither science nor scientists.

According to this poll, 66% of Europeans feel that publicly-funded scientists (university and government) are in fact the best qualified to explain not just scientific facts, but also the 'impact of scientific and technological developments on society'. An overwhelming 82% believe that scientists behave mainly (35%) or at least somewhat (47%) responsibly in terms of paying attention to the impact of their activities, while 9% felt they mostly did not, and only 2% not at all.

Conversely, very few thought either politicians (4%) or government representatives (6%) were qualified to explain the impacts of science. Perhaps most instructive here is the fact that both of these numbers have halved since 2010. As regards government officials acting responsibly about impacts, almost half (49%) the respondents felt that they either did not really (33%), or did not at all (16%).

Despite a general belief in the beneficial impact of science (averaging about 66% across the different questions asked), large numbers were also concerned that technology was moving too fast (62%), that it could have harmful side effects (74%) and that there was significant dual-use potential for terrorists (77%). There was a strong belief that a commitment to ethics and rights would guarantee that technology met public expectation (70%), that the EU should address the ethical risks of new technologies (74%) and promote European ethical values to the world (80%), and that European funding should not go to third countries for research on technologies that are banned in the EU (74%).

It appears, therefore, that the public's unease is less about science and technology than about the political inadequacy of its governance. As Nowotny (2014) argues, this may be a failure of the political establishment to adequately grasp the nature of public concern. But it may also reflect what she calls STS's black-boxing of policymakers' engagement with science, a problem which also characterises approaches to technological protest movements within Social Movement Studies (SMS). Consequently, the STS scholarship which has provided much of the basis of a shift

from deficit to ‘more democratic’ forms of governance tends to reinforce separation of these two academic fields.

This may open up questions of the collective *political* imaginaries embedded within RRI’s innovation-driven frameworks, including competing interpretations of ‘democracy’ which shape the consultative architecture within which RRI will be carried out. For the most part, consultation has followed the representative model in which civil society organisations (CSOs) are invited to represent ‘the public’. This can include non-governmental organisations (NGOs) representing activist counter-publics, along with more traditional CSOs such as trade unions, churches, and civic organisations. However, invitation is generally limited to formal organisations with hierarchical management structures, funding streams, and spokespeople versed in the rules of elite political engagement. Generally excluded are grassroots organisations representing local issues, or international street-level movements such as Occupy, Uncut or Frack Off. Such publics – e.g., direct action protestors, bloggers, alternative journalists, etc. – wish to engage with science *on their own terms*, and therefore become enrolled in state imaginaries as the ‘unruly public’ whose unpredictable response must be contained.

The concept ‘unruly public’ helps to clarify how SMS might help investigate the paradox posed by Welsh and Wynne, namely that state-supported moves towards greater inclusion of ‘the public’ in technoscientific decision-making is occurring simultaneously with efforts to subject ‘uninvited’ publics to ever greater measures of state control (2013: 541). Although the term has general relevance, it also has a central role within a neoliberal sociotechnical imaginary, and has not been adequately explored as a type of public discussed within STS. As I suggest here, the ‘unruly public’ effectively functions within these sociotechnical-political imaginaries to *disinvite* some, while simultaneously appearing to encourage participation of the whole.

Imaginaries of and from an unruly, disinvited public

Writing on the right-wing Cato Institute’s blog, former intelligence analyst Martin Gurri (2014) has claimed that the explosion of information available via the internet has created ‘a new voice: that of the amateur, of the educated non-elites, of a disaffected and unruly public.’ It is true that the internet has reconfigured the elite’s ability to restrict access to information, and has created new platforms for discussion (albeit some with a very low signal-to-noise ratio), and new modes of surveillance (both by and of the political classes). Nevertheless, educated non-elites have been vocalising their disaffection at least since the student uprisings of the 1960s. More interesting is the deep unease which Gurri’s post reveals about how our increasingly complex world looks from the top-down vantage point of the elite, which perceives unruly, bottom-up forms of knowledge practice as threatening authority’s ‘monopoly’ and the 'pleasure' of an ‘I-talk-you-listen’ mode of information.

This unruly public must be somehow engaged in order to legitimate science and political decision-making, particularly at EU level. It has been implicated by STS in the early ‘I-talk-you-listen phase’ of public understanding of science, through to the more open concepts of lay expertise and two-way public engagement – albeit

according to rules set by the engagers. We should analyse this as *disinvitation*, whereby a public response is rejected when diverging from expectations. This rejection happens through various means, e.g. dismissing dissent as 'irrational', or vetting questions so that the most contentious cannot be asked, or screening out participants with prior opinions as 'biased', as well as suppressing protest.

Likewise unruliness can take many forms, from using open-ended answer boxes in public surveys to critique the underlying assumptions, to physically obstructing the proceedings. It can also take the form of gathering, developing, and disseminating knowledge about technoscience to and from multiple sources, including activist scientists, and asking what democratic control of technoscience might look like from the ground up. To address this question, I draw on preliminary data from a participatory ethnography that I am currently undertaking as part of the Leverhulme Trust Research Programme, *Making Science Public.*

As a social movement organisation, the group in my project is presently in a period of emergence, having been partially shaped by monthly meetings which eventually led to a four-day national gathering in spring 2014. (The gathering and its organising group have been asked not to be named.) Using knowledge derived from the various interests and campaigns with which the participants are involved, the gathering aimed to develop an analysis of the politics of technology informed by the present economic crisis. Attendees ranged from concerned scientists, to 'ordinary' people who simply wanted to 'know more' (in the words of several interviewees), to those who are presently engaged in the forms of direct action and symbolic protest more commonly associated with the word 'activist'. A loose network is now coalescing around the idea of 'theorising' as a form of political action, illustrating some of the difficulties of reconciling SMS with a grassroots activism which is intellectually radical (as in attempting to articulate a from-the-roots re-imagining of the global political economy), but not focussed on physical mobilisation.

This group is still in the process of determining its own self-definition, as well as the terms and focus of its engagement as a collective entity which uses knowledge derived from STS literature to ground its resistance to normative assumptions about science as unbiased, neutral facts. Although often dismissed as 'anti-technological', the more accurate description might be 'technosceptic', i.e. questioning the grandiose claims made on behalf of technological fixes. In general, the group attempts to develop public knowledge about the intended and unintended social, psychological and environmental impact of systemic uptake of controversial technologies.

My participant observation has so far suggested three things: First, that a sophisticated discourse around technoscience based upon acquaintance with constructivist analyses from STS exists within, but also beyond this group. This is the 'diffuse collectivity' (Oliver 1989) of concerned individuals who frequently attend Science Cafes and similar public engagement or outreach events, as well as those who organise informal reading/discussion groups for themselves. While they would like to better understand the scientific basis of the current trajectory of research, they are also hungry for the kinds of knowledge possessed by those who of us who study technoscience, rather than do or regulate it.

Second, while some members perceive themselves as actively 'disinvited', i.e., as discouraged from submitting responses to public consultations through requirements for technical language, others with similar opinions had been able to submit written responses according to the rules dictated. However, all professed a deep scepticism about value of such efforts, which also functioned as a passive disinvitation to participate in a process which, even when non-technical discussion is allowed, was largely seen as going through the motions required for legitimacy, rather than actively taking the public's concerns into account.

Third, only the few activists involved with NGOs had heard the term 'responsible innovation', suggesting this discourse has not yet filtered down to the general public. When asked what they thought 'responsible innovation' might mean, the responses included 'ordinary people having the opportunity to have input, maybe even some measure of control about the rate at which technological development proceeds' (non-activist); the 'potential to say no' (NGO); the advice that 'multiple viewpoints are needed to give you information you never even knew existed' (grassroots); and that innovation should not be 'so risk averse that something of genuine benefit to humanity gets drowned in bureaucracy… [but we should always ask] are you actually solving a real problem…or is it only a problem in the terms of, we have a problem we're not making enough money' (grassroots).

This collectively imagined form of social life and social order, in fact, corresponds closely with formulations of responsible innovation put forward by some early proponents. They have called for genuine responsiveness to democratic governance processes and investigating motivation, as well as positive and negative impact beyond technical risk (Stilgoe et al., 2013), and ensuring that publicly funded research results in public goods which are aimed at solving problems beyond jobs and growth (von Schomberg 2014).

RRI as a new sociotechnical imaginary?

The series of projects commissioned under the last call of Framework Programme 7 and the first of its successor (Horizon 2020) shows that the future imagined by RRI itself is changing. It was originally described as both process and outcome geared towards socially acceptable technologies (Sutcliffe 2011). More recently, the newly-launched RRI Tools project envisions RRI as the creation of a European 'community of practice', which will explicitly involve CSOs and individual citizens in the governance of innovation (RRI Tools 2014). However, the production of inclusive governance for the purposes of promoting responsible innovation will depend on also listening to 'unruly' publics and the unexpected questions they may ask.

As Wynne (1992) argued long ago, public responses to science may be determined by public trust in scientists. However, according to the recent Eurobarometer on Responsible Research and Innovation, distrust in scientists may no longer be the key problem, if it ever truly was. Rather, the figures suggest an alarming distrust in the political establishment to honestly communicate the scientific basis of its technological decision-making, or to use the available science to make good decisions, particularly about the social and ethical implications of technoscientific innovation, despite being vehemently touted as 'for the public good'. The results seem

to suggest that it is indeed policymakers, not scientists, who need to employ 'technologies of humility' (Jasanoff 2003) which can systematically make sense of the knowledge and skills of non-qualified citizens in order to better incorporate the valid concerns of the unruly public into the decision-making process.

I have suggested an addition to Welsh and Wynne's distinction between invited and uninvited publics, namely the '*dis*invited public'. This may be more accurately described as an 'unruly' public whose insistence on engaging with science on its own terms is vehemently discouraged by policymakers, variously complicating or supporting the sociotechnical imaginary of 'responsible innovation'. However, it is also a public which is not only receptive to, but deeply engaged with, ideas from STS as the basis for creating its own sociotechnical imaginaries of another possible world. While it is not always useful for social scientists to become involved in the messy field of social movements, it is still possible to listen to the concerns of the unruly public in developing our own research, and to seek meaningful ways in which to make our knowledge accessible and useful to those who are keen to engage in public debate.

Acknowledgements

This work was supported by the Leverhulme Trust under Grant RP2011-SP-013.

References

EC (2005) Communication to the spring European Council: Working together for growth and jobs, a new start for the Lisbon Strategy (Luxembourg: Office for Official Publications of the European Communities).

EC (2009) Preparing Europe for a New Renaissance: A Strategic View of the European Research Area: First Report of the European Research Area Board. Brussels: European Commission.

Eden, G. (2014) 'Special Eurobarometer 401: Survey Summary on Responsible Research and Innovation, Science and Technology'. *Journal of Responsible Innovation* 1(1), pp.129-145.

Eurobarometer (2013) *Special Eurobarometer 401: Responsible Research and Innovation (RRI), Science and Technology (Summary)*. Available from: http://ec.europa.eu/public_opinion/index_en.htm, [Accessed Feb 2014]

Gurri, M. (2014) 'How a Tsunami of Information Inspired the Revolt of the Public' at *Libertarianism.org*. Available from: http://www.libertarianism.org/publications/essays/how-tsunami-information-inspired-revolt-public [Accessed Sep 2014].

Jasanoff, S. (2003) 'Technologies of humility: citizen participation in governing science'. *Minerva* 41(3), pp.223-244.

Jasanoff, S. and Kim, S.-H. (2009) 'Containing the atom: sociotechnical imaginaries and nuclear power in the United States and South Korea'. *Minerva* 47(2), pp.119-146.

Nowotny, H. (2014) 'Engaging with the political imaginaries of science: near misses and future targets'. *Public Understanding of Science* 23(1): 16-20.

Oliver, P. (1989) Bringing the crowd back in: the nonorganizational elements of social movements, *Research in Social Movements, Conflicts and Change* 11(1), pp.1-30.

Owen, R., Macnaghten, P. and Stilgoe, J. (2012) 'Responsible Research and Innovation: From Science in Society to Science for Society, with Society'. *Science and Public Policy* **39**(6), pp.751-760.
RRI Tools (2014) 'RRI Tools: Building a Better Relationship between Science and Society' at *RRI Tools Project*. Available from: http://www.rri-tools.eu/project-description [Accessed Oct 2014].
Stilgoe, J., Owen, R. and Macnaghten, P. (2013) 'Developing a Framework for Responsible Innovation'. *Research Policy* 42(9), pp.1568-1580.
Sutcliffe, H. (2011) *A Report on Responsible Research & Innovation*. London: MATTER Business Group.
Von Schomberg, R. (2013) A vision of responsible innovation, in R. Owen, M. Heintz, et al. (eds) *Responsible Innovation: Managing the Responsible Emergence of Science and Innovation in Society*. London: John Wiley, pp.51-74.
Von Schomberg, R. (2014) The quest for the 'right' impacts of science and technology: a framework for Responsible Research and Innovation, in J.v.d. Hoven, N. Doorn, et al. (eds), *Responsible Innovation 1: Innovative Solutions for Global Issues.* Dordrecht: Springer, pp.33-50.
Welsh, I. and Wynne, B. (2013) 'Science, scientism and imaginaries of publics in the UK: Passive objects, incipient threats, *Science as Culture* 22(4): 540-566.
Wynne, B. (1992) Misunderstood misunderstanding: social identities and public uptake of science, *Public Understanding of Science* 1(3): 281-304.

Biographical Note

Stevienna de Saille is a Postdoctoral Research Fellow on the Leverhulme Trust Research Programme *Making Science Public*. She is based in the Department of Sociological Studies, University of Sheffield.