# Representing GM Nation?<sup>1</sup>

Larry Reynolds and Bronislaw Szerszynski\* *Lancaster University, United Kingdom* 

\* Centre for the Study of Environmental Change
Department of Sociology
Furness College
Lancaster University
LA1 4YG
United Kingdom
bron@lancaster.ac.uk

#### **Abstract**

In 2003, GM Nation, an official nationwide public dialogue on the commercial cultivation of GM crops, took place in the UK, and itself became the subject of some controversy. The main controversy concerned whether a representative general public had in fact participated, or whether those already critical towards GM crops had in some sense 'captured' the process. In this paper we suggest that the latter argument depend upon the construction of a 'general public', defined by its disengagement and distance from the GM issue and by its 'neo-Hobbesian' atomised relationship to the nation-state. By contrast, we argue that GM Nation? revealed the existence of important multiple and specialised 'publics of GM', which, unlike this atomised 'general public', are constituted as such precisely by their relation to the GM issue. Rather than simply measure GM Nation against either an idealised model of deliberative participatory processes, or against the abstract and static general public of the quantitative survey, the 2003 UK debates can be understood in an historical mode, as revealing how the living body politic, with its various mediating organs of civil society, social movements and class fractions, actually received GM crops. Within this, multiple publics can be detected that are engaged around a particular issue rather than exclusively defined as the population of a nation state. These publics are concrete and specific rather than abstract and general; are articulated rather than atomised; and are intertwined within sociomaterial networks rather than reified into a purely social realm. The official UK public dialogue around GM also reveals a complex process which attempted to manage these multiple and embedded publics by creating separate spaces for scientific and public discourses.

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#### Introduction

GM Nation?, the 2003 UK public participation exercise on agricultural biotechnology, was described by the steering board as 'an unprecedented event – a special public debate before a potentially far-reaching change in public policy' (GM Nation Public Debate Steering Board, 2003). However, already an outcome of a longer process of social conflict over the new technology, GM Nation itself quickly became the subject of some controversy, especially over questions of its 'representativeness'. These questions revolved around whether a representative 'general public' had in fact participated, or whether those already critical towards GM crops had in some sense 'captured' the process. That this latter had indeed happened was a claim made, in various degrees, by the biotechnology industry, by the government and by the official academic evaluators of GM Nation?

In this paper we explore the question of how GM Nation? should be understood. Should it be measured against a quantitative survey – in terms of how accurately its participants and their opinions mirror the composition of a wider 'general public'? Should it be measured against a deliberative ideal - in terms of how much the procedures approximate a Habermasian 'ideal speech situation' (Habermas, 1990), and how much the participants approach the topics discussed with an 'open mind'? Or do these frames obscure other important dimensions of what happened during GM Nation? and depend crucially on certain constructions of the public. In addressing such questions we argue that, rather than comparing it to such abstract ideals, GM Nation? should be understood in its own terms, in an historical mode, as a unique, concrete constellation of social forces which is highly revealing about the living body politic of the UK and its response to new technologies. In particular, we suggest, GM Nation? revealed multiple, specialised publics, constituted through their concrete relation to the GM issue - and around them a complex process of 'ontological politics' (Mol, 1999), involving the policing of 'nature' and 'society' into separate, manageable realms.

# Science, public values and the legitimation crisis over GM

In 1996, when GM food products and crops first arrived across the Atlantic, the UK along with the rest of the EU had a regulatory system for the new agrifood biotechnologies in place. According to this system, established in 1990 with reference to the Deliberate Release Directive, and Part VI of the UK Environmental Protection Act (1990), the assessment of each new GM crop in the UK is carried out by the Advisory Committee on Releases into the Environment (ACRE). However, conflict and controversy over the planned commercial cultivation of GM crops were soon to plunge this science-based regulatory system into crisis.

The pattern of regulation and conflict would be different in the UK compared to many other EU countries. Whereas in the late 1990s Austria, Greece, Germany, Luxembourg and France all imposed national bans on varieties of GM crops invoking Article 16 of the 1990 Deliberate Release Directive, the UK did not follow this route. Instead the UK government and bioindustry agreed to voluntary moratoria on commercial GM cultivation, based upon improvising an extensive programme of giant experimental farmscale trials (FSE'S). However, beyond this technocratic manoeuvre, the UK government then found itself having to develop yet more fora – the Agriculture and Environment Biotechnology Commission and then 'GM Nation' itself, in an attempt to address the wider strategic and social concerns.

This points to a central theme at play in UK GM crops governance – that of which, or what combination of, the twin forms of modern authority, science or politics –

should be used to legitimate decision making on this issue. When the technocratic science based forms of authority of ACRE and the FSEs failed to grant this legitimacy, a gesture towards addressing questions of public values seemed necessary. But what exactly should be the relationship between these two? Furthermore, as we shall see, this raises a further question of which 'public'? GM Nation? revealed a process whereby a particular public was constructed that would fit into a bifurcated structure, with its constitutional separations of science and public value.

All this happened in response to an intensifying UK GM conflict which became played out in unruly arenas of domestic civil society. A heterogeneous array of networks and discourses around agriculture, biodiversity, food, and health became drawn into the controversy. These would articulate diverse worldviews and values and help form or transform a range of newly politicised arenas and spaces, from supermarkets to fields and laboratories. For by 1998 opposition in the UK had reached a crescendo across many sectors of society: (a) amongst the wildlife scientific policy community (RSPB etc.), with the government statutory body English Nature calling publicly for a moratorium; (b) within the environmental movement, particularly with launch in July of the GenetiX Snowball campaign of direct action; (c) amongst consumers, with whom environmentalists started organising 'supermarket actions'; (d) in the supermarket sector, with many chains deciding to withdraw GM products from their shelves; and (e) in the media, with Prince Charles in particular mounting a vociferous campaign against GM agriculture.

At the same time, within government and policy networks, questions concerning the effects of the herbicide use associated with genetically modified herbicide resistant (GMHR) crops on farmland biodiversity started to increase in legitimacy. The Environment Minister started to hold meetings with environmental NGOs, statutory wildlife bodies, etc. on these questions. ACRE, after criticism, agreed to incorporate more elements of the wildlife/ecology scientific community amongst its membership, and widened its remit to deal with biodiversity issues. And on 5 November 1998 the government announced a voluntary agreement with the industry body SCIMAC (Supply Chain Initiative on Modified Agricultural Crops) for a moratorium on commercial GM plantings and a programme of Farm Scale Evaluations (FSEs) of four GM crops, which would be compared with non-GM crops for their effects on wildlife biodiversity. For the government, the FSEs served the function of buying time and taking the heat out of the issue, creating a period to wait and observe further EU developments, and providing a scientific rationale for this politically needed moratorium.

However, public hostility continued to grow, with the FSEs providing a new focus for this opposition and new political spaces for informal participation around the issue. The FSEs trials provoked a whole new set of political critiques and interventions in a number of registers: of science – that the inevitably reductionist nature of the FSEs would not produce valid knowledge about the GM socio-ecological complex; of democracy – that the FSEs were being foisted on local populations without their consent; and of risk – that the FSEs were in themselves a form of pollution. A pattern of public participation began to emerge around the FSEs, ranging from village meetings, picnics and trespasses on the sites, to 'crop-trashings'. The court cases of those arrested for crop trashing would often themselves become high profile trials of the GM crops rather than the activist defendants. From the late 1990s the anti-GM environmental and consumer social movements also began to stage 'supermarket actions'. Giant cobs of corn and paper-maché cows danced in shopping malls and supermarket aisles. Packed with consumable symbols of family,

naturalness and health, these would suddenly provide a potent and newly politicised terrain for the contest over GM.

Against this turbulent background, the public review of the biotechnology regulatory system that had been initiated in 1998 was published (Cabinet Office/Office of Science and Technology, 1999). The report argued that the current advisory and regulatory structure was, amongst other things, not sufficiently forward looking and strategic in its thinking to keep pace with such a rapidly developing technology and also did not 'properly reflect the broader ethical and environmental questions and views of potential stakeholders'. Thus three new bodies were to be established; The Food Standards Agency, the Human Genetics Commission and Agriculture and Environment Biotechnology Commission (AEBC). The AEBC's power was to be much less clearly defined than that of ACRE - as 'stakeholder forum' and provider of 'strategic advice' on the direction of the technology as a whole. However, while having no statutory power, it would hold a considerable moral power, occupying a discursive space that made it hard for the government to ignore. And in their first report, Crops on Trial (2001), the AEBC argued that the FSEs 'were not enough to form the basis for a decision on commercialisation, and needed to be complemented by an open and inclusive process of decision-making about the commercialisation of GM crops'.

Thus the purely science-based authority around ACRE had formed too narrow and reductionist a foundation to provide the necessary political legitimacy for the GM project. From then on, the government had begun to attempt to draw more legitimacy from the *other* side of the science-politics dichotomy, attempting to draw wider layers of society into the GM legitimation process. The first step after 1998 was to widen participation within the official scientific advisory system by involving previously excluded networks around wildlife, agricultural biodiversity and ecology. These new layers were included both within ACRE and in the management of the FSEs. The second step was to respond to the pressure to find some sort of official spaces for much broader social perspectives and voices — constituted as 'stakeholder interests' and 'the general public'. This took the form of the establishment of the AEBC and the *GM Nation?* public debate respectively.

# **GM Nation?** and its critics

As a public participation exercise, *GM Nation?* could be described as 'baroque' in structure, having it as it did multiple layers, with different kinds of event, convening different publics, and involving them in different processes of discussion. In November 2002, nine Foundation Discussion Workshops were held with demographically selected members of the public, in order to help shape the stimulus material to be used in the open meetings, and thirteen questions which were used in the 'feedback forms' and in the Narrow-But-Deep discussions later on in the process. The public debate itself took place over seven weeks in June and July 2003. The six 'Tier 1', regional and national meetings – facilitated round-table discussions based on the stimulus material – were attended by over 1,000 people. These were followed by around 40 'Tier 2' meetings, at county level, often including expert witnesses and debates around a motion, and about 629 local 'Tier 3' meetings, largely organized by town councils and civil society groups.

Over the same period the Steering Board also commissioned a series of Narrow-But-Deep focus group discussions, following a topic guide based on the thirteen questions from the Foundation Discussion Workshops, and using a sample of the general public selected to have no immediate connection or interest in the issue to act as a 'control'. The organisers also received over 1200 letters or emails, and a

total of 36,557 'feedback forms' – questionnaires containing a combination of closed and open questions and demographic data, which were available at all the open meetings, Narrow-But-Deep discussions, and on the website.

Criticisms of the process started from even before the launch of the public debate, and came from all sides: from anti-GM groups, the biotechnology industry, the independent evaluation team from the Universities of East Anglia and Cardiff – and even from the membership of the AEBC itself. Criticisms included:

- that there had been not enough time and money for there to be a thorough debate:
- that the credibility of the exercise was undermined by government statements;
- that the stimulus material had been 'bland', and had presented the arguments for and against GM crops without attributing the statements to particular actors;
- that the events had been in the wrong format for genuine deliberation and argumentation – for example some tier two and three events taking the form of an expert panel being asked questions, or being dominated by 'polemics' from people with fixed positions;
- and, crucially for our argument, that the open nature of most of the meetings had allowed the process to be 'captured' by anti-GM networks.

Many of these criticisms are persuasive in their own terms; however, the last two in particular depend on comparing *GM Nation?* with various ideal models of how deliberative fora ought to be conducted. So, for example, in their official evaluation Horlick-Jones et al. (2004) firstly contrast the attitudes of those attending *GM Nation* with a set of results from another quantitative social scientific survey, to show that the attitudes of the *GM Nation* attendees were not truly representative of the nation at large. Secondly, they contrast the *GM Nation* events with a set of evaluative criteria established from the literature on participatory and deliberative processes, in order to claim that *GM Nation* fell short of being an ideal example of such processes.

However, comparison with such theoretical ideals is a mode of criticism that can only get us so far in understanding *GM Nation?* By focusing on what it was *not*, there is a danger of missing what it actually *was*, of obscuring the role that it performed in the wider cultural dynamics over GM. The politics of GM started as a hybrid mixture of science and politics; indeed, it could be said that the very hybridity of this politics is as problematic to the government as the dominance of an anti-GM position. Against this background, *GM Nation?* can be seen as an element within a complex process of purification and recombination, an attempt to purify 'nature' and 'society' – the two elements in what Bruno Latour calls 'the modern constitution' – into separate spaces and discourses, with the final right to recombine them reserved for the apex of central government, in its qualified green light to the commercial planting of GM crops in March 2004. From the point of view of the state, then, *GM Nation?* can be seen as an attempt to canalise debate and contestation, to create a purified, 'uneventful' political space (Lezaun and Soneryd, 2006), one in which only society, and not nature, would be represented.

Against this background, arguments over whether the 'real' public were present at *GM Nation?* can be seen as particular moves within a wider ontological politics (Mol, 1999). For example, the UEA/Cardiff evaluation of *GM Nation?* (Horlick-Jones et al., 2004) was published in February 2004, just a month before the Government's decision on the commercialisation of GM crops, and their conclusions taken up by industry and politicians to weaken the political impact of *GM Nation*. As we shall suggest in the next section, the ambivalent 'silent majority' that were accessed via

the representative, quantitative survey were deployed as political ballast against the critical, socio-materially entangled 'publics of GM' that were articulated by the meetings of *GM Nation*.

# The multiple publics of GM

The publics that contested the planned commercial cultivation of genetically modified crops in Great Britain consisted largely of a range of cultural or subpolitical networks around questions of food, health or countryside biodiversity. Rather than a 'general public', these had emerged as particular publics constituted through their relationship with the GM issue. Some of these publics emerged in terms of a widely shared relationship to GM such as 'consumers', whereas others formed more specific clusters such as organic or conventional farmers, allotment holders, beekeepers, allergy sufferers, amateur ornithologists, naturalists. While the main mode of interpellation was through discourses of scientific cause and effect, other interpellative modes including alternative cosmologies and worldviews drew in actors ranging from the 'natural law party', anthroposophists, eco-feminists, and assorted anti-reductionists. However, these 'publics of GM' were more than simply the purely social 'corporations' of Hegel's civil society (Hegel, 1942); they were rather part of heterogeneous networks, composed of both human and non-human actors (Irwin and Michael, 2003). For example, the networks around agricultural biodiversity may involve collectives of ornithologists interwoven with the corn buntings, linnets and skylarks that appear threatened by the herbicide resistant GM crop regimes. Alternatively the networks around food and health may involve selfhelp groups of allergy sufferers, who connect to the GM issue through carefully constructed repertoires involving complex categorisations of foods and their own bodily experiences. The 'publics of GM' were not purely 'social' publics, but were brought into the GM energy field entangled within and articulated through these socio-material assemblages and hybrid spaces.

Once the government accepted the AEBC's advice that public concerns had to be allowed an official space within the regulatory decision making process, the resulting debate 'became an occasion for producing the very public to whom the state could hold itself accountable' (Jasanoff, 2005: 282). Thus a new controversy opened up as to exactly how this public was to be constructed or represented. A key dilemma seems to have been how to find a 'pure' public, a general public unsullied by having been previously drawn into the 'public energy field' around the GMO issue. This theme runs through all the documents that feature in the preparation and evaluation of the debate, from the initial advice of the AEBC, to the statements by the government, the planning and execution of the exercise by the steering board and the Central Office of Information, to the post-event evaluations and framings by academics, government and industry.

For example the AEBC and the public debate steering board had built into *GM Nation* a series of 'Narrow-But-Deep' focus groups to create a representation of a pure, disinterested public to act as a 'control' to balance against capture by stakeholder networks. Part of the criteria for being selected for these was to have had no prior interest or engagement with the issue. Thus a conception of a 'general public' was built in to the process, one which defines this public through its distance from and ignorance of the issue.

As the official academic evaluation team put it:

the intent was to have a debate that was not dominated by significant pressure groups, but to access the 'quiet majority'. We interpret this to

entail representative sampling of the population, as opposed to biased sampling of particular cliques. Representativeness may be ascertained in several ways: it may be determined according to the socio-economic and demographic profiles of the sample (in comparison to that of the general public), or by the attitudinal similarity of sample to population (Horlick-Jones et al., 2004: 22).

The evaluation team contrast those who participated in *GM Nation* with a 'general public', one which they later proceeded to access via a conventional quantitative social scientific survey of opinion on GM (Poortinga and Pidgeon, 2004). Those who attended *GM Nation* are seen on this basis as being unrepresentative, in terms of the intensity of their interest and opinion, but also in terms of demographics. The UEA/Cardiff team argue that the engaged minorities are part of relatively privileged and educated elites, in contrast to the social status of the more ambivalent 'general public'. This latter are said to be excluded from both the *GM Nation* debate and from the educational and other privileges said to characterise most *GM Nation* participants.

Thus both quantitative and qualitative methodologies were used in an attempt to look beyond the publics of GM as manifest in the *GM Nation* debates, to find a pure public, stripped bare of civil society mediation, to stand naked before the state and the social scientist. Furthermore, in the very act of being constituted as such a public, they are also stripped bare of these associations with nature, technology or the material (see Latour, 2004). Rather than as knowing and embedded actors, brought into awareness of GM through these hybrid assemblages, the 'general public' are constructed thorough their ignorance and lack of connection to the issue. And both the *GM Nation* Report and the UEA/Cardiff evaluation argue that their versions of the mediated 'pure public' are less opposed to the technology than the self-selecting and participating minority.

However, the political uses to which each study was put differ significantly. In the case of the UEA/Cardiff study (Horlick-Jones et al., 2004), published in February 2004 (crucially a month before the Government's decision and therefore very much part of the political process), its conclusions were taken up by industry and politicians to weaken the political impact of *GM Nation*. The ambivalent 'silent majority' accessed via the representative, quantitative survey were deployed as political ballast against the critical 'publics of GM' articulated by the meetings of *GM Nation*. On the other hand the disinterested 'general public' articulated by the 'narrow but deep' groups of *GM Nation* were found to point towards a rather different conclusion: 'The more people engage in the issues, the harder their attitudes and more intense their concerns' (GM Nation Public Debate Steering Board, 2003: 51). Thus the disinterested are transformed via their engagement. The pure, disinterested public vanish as they pass through the focus group process, becoming instead engaged, focused and potentially mobilised participants (Lezaun and Soneryd, 2006).

### Conclusion

GM Nation?, for all its flaws – indeed, partly, because of its flaws, when measured up against ideals of representativeness and deliberation – was revelatory in and of itself. What it revealed was both the hybridity involved in the politics of GM in the United Kingdom, and the stake that the state had in purifying and thereby seeking to make politically manageable that hybridity. If the publics of GM were largely multiple, specialised publics entangled in hybrid networks, the battle over GM in the UK was in part a battle to turn that 'multitude' (Hardt and Negri, 2004) into a more

manageable 'people' – and one that was only partially successful. When placed in the wider cultural and historical context of the ontological politics taking place over GM, the complex performance that was *GM Nation?* can be seen as a contingent convergence of particular historical forces. The collapse of legitimacy suffered by the science-based GM regulatory system in the late 1990s left an 'institutional void' (Hajer, 2003), a lack of any legitimate, commonly agreed ways to formulate policy, into which space was pulled a heterogeneous set of networks and epistemic communities. *GM Nation?* was at once part of an attempt to remove such multiple publics from the policy process, and a space which allowed their articulation. As such, it raises the question of how such engaged, knowledgeable, specialised publics might be allowed to play a legitimate role in policymaking.

#### References

- Agriculture and Environment Biotechnology Commission, 2001. Crops on Trial. AEBC, London.
- Cabinet Office/Office of Science and Technology, 1999. The Advisory and Regulatory Framework for Biotechnology: Report from the Government's Review. Cabinet Office, Office of Science and Technology, London.
- GM Nation Public Debate Steering Board, 2003. GM Nation? The findings of a public debate. London: GM Nation Public Debate Steering Board.
- Habermas, J., 1990. Moral Consciousness and Communicative Action. Polity, Cambridge.
- Hajer, M., 2003. Policy without Polity? Policy analysis and the institutional void. Policy Sciences, 36:175-195.
- Hardt, M. and Negri, A., 2004. Multitude: War and Democracy in the Age of Empire. Penguin Books, London.
- Hegel, G.W.F., 1942. Philosophy of Right. Oxford University Press, London.
- Horlick-Jones, T., Walls, J., Rowe, G., Pidgeon, N., Poortinga, W. and O'Riordan, T., 2004. A Deliberative Future? An Independent Evaluation of the GM Nation? Public Debate about the Possible Commercialisation of Transgenic Crops in Britain, 2003, Understanding Risk Working Paper 04-02. Centre for Environmental Risk, University of East Anglia, Norwich.
- Irwin, A. and Michael, M., 2003. Science, Social Theory and Public Knowledge. Open University Press, Maidenhead.
- Jasanoff, S., 2005. Designs on Nature: Science and Democracy in Europe and the United States. Princeton University Press, Princeton, NJ.
- Latour, B., 2004. Whose Cosmos, Which Cosmopolitics? Comments on the Peace Terms of Ulrich Beck. Common Knowledge, 10:450-62.
- Lezaun, J. and Soneryd, L., 2006. Government by Elicitation: Engaging Stakeholders or Listening to the Idiots? Discussion Paper No. 34. CARR, London School of Economics, London.
- Mol, A., 1999. Ontological politics. A word and some questions. In: J. Law and J. Hassard (Editors), Actor Network Theory and After Blackwell/Sociological Review, Oxford, pp. 74-89.
- Poortinga, W. and Pidgeon, N., 2004. Public Perceptions of Genetically Modified Food and Crops, and the GM Nation? Public Debate on the Commercialisation of Agricultural Biotechnology in the UK Main Findings of a British Survey, Understanding Risk Working Paper 04-01. Centre for Environmental Risk, University of East Anglia, Norwich.