

Parallel Session 29: Is it a real social participation in GMO discussion?

**THE DEMOCRATISATION OF A 'SCIENTIFIC' DECISION:
THE 'GM NATION?' EXPERIMENT IN THE UK**

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Abstract

This paper takes a critical approach to public participation in technological decision-making. I argue for the separate and concurrent consideration of technical and politico-ethical domains. The “GM Nation?” public debate conducted across the UK in 2003 failed to increase powerful public participation because the policy under scrutiny – the commercialisation of GM crops – could only be determined by science, technocratically. This effectively marginalized alternative citizen framings or understandings of the issue. Observations from 11 GM debates however showed that the majority were adversarial and participants mostly debated propositional and technical matters; but the technical sophistication of citizens was not sophisticated and experts often outmanoeuvred them. It is better that citizens are involved in political and ethical judgement for which they have genuine expertise, whilst technical aspects of a decision are best left to those with certified or experiential expertise. However, unlike regulations as they stand, this technical evaluation should feed into the broader political decision, not be it.

Key words: Expertise; public participation; GM

Text

1. Context and argument

This paper concerns expertise, public participation in real-life decision-making, and the problem of extension (Collins and Evans 2002). The problem of extension refers to determining that point at which participation in technological decision-making can be increased without 'expertise' in itself losing its meaning. The problem arises because of the desire to increase public participation in decisions that would previously have been considered merely technical and for experts. For example various actors and institutions have been pressing for public participation in the case of biotechnologies, including and particularly genetic modification (GM). The call is for a shift in the established and 'natural' policy and decision-making mode, which in the UK has been based on a technocratic rationality. According to the critique, this technical frame effectively disempowers the public from democratic participation. It is easy to see why: Framing is concerned with defining GM as, in the first instance, a certain type of issue or problem. The right to determine problem definition can result

in power, particularly when there are associated policy-making issues, for it entails the terms of reference for that policy. This means determining what questions need to be asked, what form answers would take, and consequently, who holds legitimate contributory knowledge in the decision making process. If the public can be shown to be scientifically and technically unsophisticated or ignorant, then this reflects a deficiency in their democratic capability.

With a concern for democratic principles, that all voices should be heard, and to redress the balance of power more toward 'citizens', social scientists have called for a restructuring of policy making to consider symmetrically, or even primarily, alternative citizen understandings or frames based on the assumption that there is incongruence between citizen frames and those deployed by those in positions of power. This would allow for increased participation in policy-making. "GM Nation? The Public Debate" (GMN), held across the UK in the summer of 2003, was marketed with just these principles in mind: it would be a genuine example of public participation in a policy decision, widely interpreted to be about, more specifically, the possible commercialisation of GM crops. However I wish to show that the context and conduct of the debate meant that it was science that was being democratised: only science mattered for policy, and it was mostly science that the public debated. I then develop a position in support of the concurrent consideration of two separable categories of problem definition – technical and politico-ethical – toward building a more critical approach to public participation.

2. Public participation in a technocracy

The legal structures governing genetically modified organisms (GMO's) in place at the time of GMN had two consequences. First, the space for the UK Government to determine policy on GM crops is formally limited, and in turn, so is the space for public participation. Secondly, the EU legal structure literally defines the problem GM, strictly determining the frame from within which decisions are made. This is how: Under EU Directive 2001/18/EC, GMO's are treated as a 'product', defined as a preparation consisting of, or containing, a GMO or a combination of GMO's placed on the market (e.g. as a food or crop). As such, consent for release is determined only by a technical risk assessment of the risks to human health and the environment. In this way the political, ethical and the technical are fused: the political was the technical and vice versa, effectively excluding alternative framings or understandings of the issue. This legal structure clearly had implications for GMN as a proper participatory exercise.

In the early formulations of GMN, Government committed itself to taking public opinion, expressed through the debate, into consideration in formulating policy on GM crops. A dilemma lay however in offering this commitment whilst at the same time satisfying EU law. Established consent procedures meant that public opinion could not in fact influence a decision either way except, in principle, as it pertained to the technical assessment of specific foods and crops. But could science be so democratised? Recognising the dilemma, the government later attempted to distance the public debate from decisions over crop commercialisation. Despite this shift, the debate still centred on that singular issue. At any rate, Government both before and after the debate constructed the problem GM as only a scientific matter. For example, Prime Minister Tony Blair stated that 'this Government's approach is to make decisions on GM crops on the basis of sound science'¹, and in the face of public

opposition, in March this year the Government risk assessed and passed a GM maize. Again, framing the problem GM as merely a technical matter with a decision to be based on scientific grounds marginalised the public, both in terms of their capacity to participate and the grounds on which GM could be powerfully challenged.

3. Public GM debates

However, GM is contested in part because there is disagreement over the correct problem definition, and previous research suggests that the public construct additional politico-ethical framings for the problem GM. I attended 11 GM meetings to find out what was discussed. Generally, technical and politico-ethical matters were confounded. Table 1 below summarises the frames deployed across 8 meetings for which I have complete transcript data. The first thing to note is that there was a range of frames deployed. However, the frequency column shows that whilst there was a *wider range* of politico-ethical based frames deployed, the most *frequently used* frames were technically based, particularly concerning GM as *risk*. The majority of meetings I attended were adversarial and the public, as far as they were represented at these meetings, frequently argued over propositional and technical matters. This suggests that science was being democratised in a second sense: participants at these debates spent much of the time contending and defending evaluations of technical questions.

4. Public participation and expertise

But analysis of the technical reasoning of participants reveals limitations. For example, it was common to particularise the *technique* of genetic modification and then consider the *products* (foods, crops) as an undifferentiated category. Any claims of risk were therefore attributed to the whole class without a technical appreciation of for example, contextual factors, that different crops breed differently, or that some food products contain no transgenic material. Another common claim was that the technique is unnatural and that therefore it will lead to new risks and hazards. More rarely it was argued that the products are natural and therefore safe. Of course, it is not the naturalness of a crop, food or technique that determines if it is a risk. Categorisation of products and particularisation of the technique leads to powerful political arguments but not especially sophisticated technical one's. For instance, the precautionary principle is a powerful political tool. But it was sometimes claimed that it must be imposed until proof is provided that products are safe.

We should not be surprised at this deficit, but it meant that the few technical experts often out manoeuvred other participants. It is of course the case that there are people with no formal scientific certification with much expertise to offer in the case of GM, and some GMN participants had much knowledge and expertise. Consequently, as Collins and Evans (2002) argue, there are no publics, just groups of people with different levels of expertise relative to a domain or question. In matters such as the commercialisation of GM crops, there clearly are propositional questions that in principle call for empirical investigation and scientific evaluation. Appeal to deep democracy does not talk these questions away. But there are political and ethical questions too. The public would be better served if the grounds on which they are being invited to participate were made clear. It is better that the public is involved in political and ethical judgement for which they have genuine expertise, whilst technical aspects of a decision are best left to those with certified or experiential

expertise. However, unlike regulations as they stand, this technical evaluation should feed into the broader political decision, not be it. The extent to which the *final* decision should be handed to the public depends on one's favoured version of democracy, and getting the public to trust technical experts is of course a different matter.

References

Collins, H. M. and Evans, R (2002) 'The Third Wave of Science Studies: Studies of Expertise and Experience', *Social Studies of Science*, 32 (2), 235-296

Tables and Figures

Table 1: Frames deployed at GM meetings

Frame	Frame type	Total frequency of frame deployment across meetings (n=8)
Risk	Technical	39
Capitalism	Politico-ethical	19
Benefits	Technical	17
Technology	Technical & politico-ethical	17
Developing world	Politico-ethical & technical	15
Choice	Technical & politico-ethical	13
Futures	Politico-ethical & technical	8
Debate	Meta discursive	7
Science as politics	Politico-ethical	5
Legal	Politico-ethical & technical	4
Co-existence	Technical & politico-ethical	4
Uncertainty	Technical	3

The left-hand column of this table shows the range of ways that the problem GM was defined (i.e. framed) across 11 public GM meetings. The right hand column shows the frequency with which these frames were deployed at 8. The central column shows whether that frame concerned almost exclusively ('technical') or mostly ('technical & politico-ethical') propositional and technical questions/domains, or whether that frame concerned exclusively ('politico-ethical') or mostly ('politico-ethical & technical') political and ethical questions/domains.

¹ Prime Ministers Correspondence, 10/11/2003. Available to view at: http://www.parliament.the-stationery-office.co.uk/pa/cm200203/cmhansrd/cm031110/text/31110w04.htm#31110w04.html_sbhd1
Last accessed: 07/05/04.

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Management	Technical & politico-ethical	2
Trust	Politico-ethical	2
Regulations	Politico-ethical	2
Pure ethics	Politico-ethical	2
Interests	Politico-ethical	1