

Comment

ENGAGEMENT TOOLS FOR SCIENTIFIC GOVERNANCE

More scientists and less surrogates

Interview by Davide Ludovisi

Frank Burnet

ABSTRACT: Frank Burnet, now an independent consultant, was the director of the unit of Science Communication at the University of the West of England, and his work and research experience has mainly focused on the communication relation between science and society. In addition, Frank contributed to the development of the project “Meet the Gene Machine”, a discussion format concerning topical science issues. The positive aspect of participation games is the increase in the participants’ awareness of important issues, provided that the game experience is followed by structured discussion. In this case a fundamental role is played not only by the mediator, but also by the scientist. The presence of an expert, and not so much of a communicator, is crucial if you really want to create a contact between scientific world and civil society. An unsolved issue is what the ideal place for effective formal discussion on scientific topics among adults would be: indeed, science centres appear to be heavily associated with the academic establishment on the one hand, and with children entertainment places on the other. Furthermore, real channels for connection and communication exchange with decision makers are still lacking.

1. *Have you ever used discussion games? Where, why and which ones?*

Yes, the Science Communication Unit (<http://www.scu.uwe.ac.uk/#>) developed a number of discussion events, for example Meet the Gene Machine (<http://scu.uwe.ac.uk/index.php?q=node/130>). It’s not a game like Decide (<http://www.playdecide.eu/>), it uses a short piece of drama to trigger discussion.

2. *Can you tell us what the main pros and cons in using these tools are, in your experience?*

The Pros are that discussion games can increase the awareness of an issue among a targeted group. For example, Meet the Gene Machine aims to make young adults aware of the issues that might be raised for them by technologies that allowed rapid genetic profiling of individuals. Decide is also a means of raising awareness of issues, but in addition it seeks to explore what policies the public would like to see adopted in relation to a specific issue or innovation. About cons: it can be difficult to find channels that take the opinions expressed by participants in events to the people who might find them useful in formulating policy.

3. *Have you have experienced discussion game sessions in which researchers, policy-makers, stakeholders, citizens and/or special groups were sitting at the same table? Do you think games help building a shared ground for discussion or not? How did the different groups react?*

No, actually I never had that kind of experience. We have sometimes involved, for example, genetic counsellors, or genetic scientists in discussion, but not policy makers. The only example I could think of, in relation to my own experience, is something quite popular in UK: vision conferences, which are for young people. It’s about getting them to give their views

about the future of a subject. For example, one I facilitated in London was focused on how robots should be used in the future. The event was hosted by the Royal Academy of Engineering in London (<http://www.raeng.org.uk/>), and they then reported the views of young people to policy makers. But the policy makers were not themselves present at the event.

4. *Have you ever noticed differences in the reactions of participants that can be clearly ascribed to factors such as age, social and economic groups, or nationality?*

That's interesting. Meet the Genes Machines has been performed in many countries, and actually with a quite range of age groups. The issue with age groups is that younger people have limited life experience and therefore a limited context in which to consider an issue. You tend to get more sophisticated discussion when you are talking to adults or older children. I think myself these kind of games are probably most effective with people over the age of 14.

5. *What were some of the most interesting comments from the participants about their experience?*

Full evaluation of Robots Thought and Meet the Gene Machine are available to download from the Science Communication Unit website (<http://www.scu.uwe.ac.uk/index.php?q=node/155>). There are comments from teachers, students, experts and facilitators.

6. *Are science centres and science museums good locations to host these events? The impression so far is that discussion games are used in a very irregular way, in comparison with science demonstrations or didactic laboratories. What are the obstacles that prevent a more continuous, structural use?*

The front line staff in Science Centres are mainly trained to explain phenomena and show people around. They are not necessarily trained to facilitate discussion. I think that is an issue in many science centres. I worked on the DOTIK project (<http://www.dotik.eu/>) with explainers and they got very enthusiastic about, for example, devising their own dramatic triggers for discussion, but I do not know the extent to which they subsequently integrated what they learned and devised into their everyday practice.

Science centres can suffer from the problem that the public see them mainly as a way of entertaining young children. I also think it's important to think through what might be the best venues in which to hold discussions about science. Should it be in places which are seen as owned by science, like scientific institutions or universities and science centres? Or should it be in spaces owned by the public like cafes and shopping malls? My own view would be that it is important to avoid using venues which are labelled very heavily as being owned by science. Whether science centres are seen in this way is often argued about by science communicators. My guess is that the public may well see them as more scientific venues.

7. *If you are aware of their use in museums and science centres, how may these institutions exploit (or not) the information collected during the events?*

I actually don't know. I think in many cases and many countries there is no channel where the information can go into the legislative process. However, the Danes do have a channel in the Danish Board of Technology, but there aren't many such direct and open channels in other countries. There are maybe circumstances where information is channelled in other ways. Also science centres may use the information in terms of developing their own exhibitions and events, which is good too. But I'm not certain how much of that happens.

8. *What do you think about the role of the mediator? What about the presence of scientists or researchers during the debates?*

I think that's incredibly important. I think that a major purpose of this kind of events, is to

address the issue of trust by creating circumstances in which the public meet scientists face to face. It's my view that the public absolutely don't want to talk to people who are talking on behalf of scientists like science communicators or journalists. I think science communicators are best placed to run science events where the audience is not expecting to meet a scientist, the younger audience, for example. But if the discussion is for the adult audience, I think that the scientist should be there.

9. *In your experience, is the impact of these games limited to the event itself and its participants, or are there relevant, tangible follow-ups: the emerging of a group of interest or a local network, an influence on policy-making, or other results? Can you explain why yes or why not?*

Of course this kind of tools could have an influence on policy making. Decide, but also Meet the Gene Machine, consensus conferences, citizen jury, etc., do exactly that: there's a public audience, or public representatives, that is briefed by scientists, to who ask questions, and then the opinions raised during the discussion are fed into some sort of policy making process. But, as I said, I know just one country where there is an established solid channel for the transfer of these views to policy makers: Denmark.

10. *What other methods are you currently considering to implement, in order to enhance and improve the direct dialogue among citizens, policy-makers, stakeholders and scientists?*

I think that coming up with more templates for discussion would be crucial increasing the extent to which you get this sort of interaction between science and society. But also, I think, this issue about channels of communication for policy makers is crucial. You're only going to get large numbers of people involved in this process if they know that their view is being transmitted to someone in a position to influence policy.

Author

An independent consultant since 2009, Frank Burnet was the first Professor of Science Communication appointed in the UK. The unit he directed until December 2008 is based at the University of the West of England and specialises in finding new ways of taking science to people, particularly hard to reach audiences. He was awarded the MBE for his work in 2000. He has worked extensively overseas, particularly in Latvia, Portugal and Croatia. He founded and for five years co-directed the Cheltenham Science Festival and is now its International Director establishing Cheltenham-style Science Festivals overseas. He was one of the architects of the bid that resulted in Bristol becoming the National Coordinating Centre for Public Engagement. He has given similar training courses for scientists before.
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