

End of Award Report

Contesting Environmental Science: Business and Environmentalist NGOs

Summary

This research project sought to examine how NGOs (non-governmental organisations) commission, communicate and contest environmental science in order to influence public debate. We focused on business and environmentalist NGOs because they are often directly in opposition over the meanings and policy implications of environmental science but are rarely analysed together. This is because previous work has usually considered environmental NGOs or business influence but rarely *both* comparatively and rarely in connection with *science*.

There were three original **objectives**:

1. To directly compare how business and environmentalist NGOs commission, communicate and contest science;
2. To illustrate this particularly with new empirical evidence from the specific environmental field of waste;
3. To evaluate theoretical and methodological approaches to symmetrically analysing different and opposing groups in the environmental debate, especially to inform a future, larger research programme on a wider range of international policy issues.

To address these objectives, we used three **methods**:

Primary data from interviews

We conducted semi-structured, indepth qualitative interviews with representatives from a range of NGOs, both business and environmentalist (meeting objective 1), using a sampling strategy focused upon NGOs in the field of waste (meeting objective 2). Twenty-one interviews were conducted with participants from a wide range of environmentalist and business NGOs: the Green Alliance, Greenpeace UK, the Women's Environmental Network, Environment Council, WasteWatch, SWAP, Forum for the Future, the Environmental Services Association, the Chartered Institute for Wastes Management, Business in the Environment, Friends of the Earth, the National Society for Clean Air, the Industry Council for Packaging and the Environment (Incpen), the Paper Federation, Resource Recovery Forum and the Environmental Industries Commission.

Q Methodology

We asked our interviewees to complete a statement-sorting exercise as part of an approach called Q Methodology, to assess its usefulness in analysing NGOs (part of objective 3). Sixteen participants completed this exercise, the results of which were quantitatively analysed through specialist software in order to quantitatively measure the patterns of shared themes.

Secondary data

We analysed secondary data, mainly textual, produced by NGOs through their own websites, press releases, leaflets and reports, to build up profiles of each NGO and to contrast these with the viewpoints being presented during interviews.

In terms of **findings**, we are still working on the theoretical interpretation and preparing papers, but provide some preliminary analysis focused upon two areas.

Production and consumption of science

Our interviewees had considerable difficulty in defining the concept of 'science' in the abstract but talked in detail about how they produced, used and judged science in their everyday work. Most of our interviewees from both types of NGO had some scientific background, with first and often second degrees in scientific subjects, often those with environmental relevance. Most NGOs produced science themselves, but often in limited form and frequently through commissioning work by outside researchers, rather than through in-house analysis. Although academics were sometimes used for this, the role of consultants as information providers, brokers and clearing-houses came out strongly from our research to a degree we had not anticipated. Again, both types of NGOs worked with consultancies, often chosen through reputation or familiarity, and frequently developed a relationship of trust and collaboration. Although they did not often produce science directly, our interviewees were heavy consumers of science, from journals, websites and email lists, and identified much of their everyday work as marshalling and reviewing this information for their own purposes.

Scientific authority and boundary-work

We particularly explored the usefulness of 'boundary-work' as a theoretical approach to compare the different NGOs (part of objective 3). This looks at how the boundary between 'science' and 'non-science' is rhetorically built and maintained by different groups, so that they can monopolise the political resources associated with being 'scientific' - such as authority, expertise, prestige and influence in policy-making. Our interviewees were emphatic about the importance of being scientifically credible and thus authoritative and influential. However, some of the business groups also emphasised the need for practical and realistic approaches and some of the environmentalist groups focused upon the moral and ethical questions which need to be weighed against the scientific ones. Overall, however, we found fewer and less hostilely defended boundaries between NGOs than we had expected, suggesting that there are strong similarities between the ways in which different groups use and understand science.

These findings were reinforced in the Q Methodology data. Two main factors were identified which quantitatively differentiated between the viewpoints of interviewees in environmentalist NGOs and business-oriented NGOs. However, these factors also shared many features, particularly in recognising the need for science to be honest about uncertainties and to be open to critical questioning and the roles of independence and objectivity as keys to scientific credibility. This suggests that recent scientific controversies and policy failures in the UK in the 1990s have generated a consensus, rather than the more divergent viewpoints and antagonism that might have been expected previously. The differences between the factors mainly reflected positive views of NGOs' own 'side' rather than fundamental differences in how science was viewed. For example, the environmentalist NGOs agreed more with statements such as '*Environmental campaigners are often labelled as anti-science when in fact they are concerned about risk*' whereas business NGOs disagreed with statements such as

'Information and research produced by business should rarely be trusted or taken at face value'.

We have now built the experience of this exploratory project into a larger project, awarded within the Science in Society Programme, to begin in March 2004 (final part of objective 3) which will consider how science is contested and communicated by NGOs and business through international product chains.