Experts and the Environment—The UK Royal Commission on Environmental Pollution 1970–2011

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Abstract

The UK Royal Commission on Environmental Pollution, first appointed in 1970 and abolished in 2011, has been credited with important developments in environmental policy and legislation. This article examines the Commission’s influence in the context of wider questions about expertise and policy formation in modern democratic societies. After presenting a brief biography of the Commission, it sets out four different ways in which the role of expert advisory bodies has been conceptualised. It then examines the circumstances in which the Commission exerted influence and identifies the practices and characteristics that helped build its reputation and enabled it to have effect. Especially significant were its composition as a ‘committee of experts’, its autonomy, its positioning within networks, and its endurance over four, formative decades for environmental policy. The analysis suggests that influence might be best thought of in terms of a continuum of different effects, that advisory bodies can simultaneously perform multiple roles, and that relations between expertise and policy are necessarily both complex and contingent. Finally, some thoughts are offered on the Commission’s demise and on the tensions that have to be negotiated in considering the future of expert advice.

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1. Origins and Endings

On 11 December 1969, the British Prime Minister, Harold Wilson, announced in the House of Commons that the Queen had agreed to the appointment of a new, standing Royal Commission on Environmental Pollution. At the close of a decade in which the environment had emerged as a distinct category of public and political concern, there was a general feeling within government that something would have to be done. Stanley Johnson captures the sentiment nicely in his description of the 'short but vigorous' debate (possibly the first on the environment) that followed Wilson's announcement:

Neither Socialists nor Tories believed that the 'environment issue' would be crucial to the forthcoming election. But there was an outside possibility that it might. Like the Rann of Kutch, it seemed a flat and unpromising land but if one side was there, the other had to be there too.

In many countries, the appointment of high-level advisory bodies was part of the institutional response to environmental concerns, as was a degree of administrative reorganisation. In his statement, Wilson also announced the formation of a new Central Scientific Unit on Pollution, intended to coordinate action within government; the role of the Unit was seen as distinct from that of the Royal Commission, with the latter providing 'that outside focus of inquiry and information, and that outside stimulus to government' for which a need was urgently felt. The Commission's terms of reference, set out in its Royal Warrant, were:

...to advise on matters, both national and international, concerning the pollution of the environment; on the adequacy of research in this field; and the future possibilities of danger to the environment.

Some 40 years later, soon after the General Election of May 2010, an announcement of a very different kind was made. The new government, a Conservative–Liberal Democrat coalition, had embarked enthusiastically on a cull of 'quangos', and in a Parliamentary written statement issued on 22 July, the Secretary of State for Environment, Food and Rural Affairs revealed plans

3 The Central Scientific Unit was absorbed (as the Central Unit on Environmental Pollution) into the Department of the Environment (DoE) when that, too, was established later in 1970. Its staff furnished the Secretariat of the early Royal Commission.
4 Lord Kennet, Controlling our Environment, Fabian Research Series 283 (The Fabian Society 1970) 12, emphasis added.
to abolish 30 ‘Defra bodies’, including the Royal Commission on Environmental Pollution. She expressed appreciation for the Commission’s work but implied that it had become somewhat anachronistic:

When the RCEP was set up in 1970, there was very little awareness of environmental issues, with few organizations capable of offering relevant advice. The situation now is very different, and the Government have many such sources of expert, independent advice and challenge. Protecting the environment remains a key Government aim, and DEFRA intends to draw on the full range of expertise available…I pay tribute to the work of the Royal Commission and its current chair, Sir John Lawton. Over the last 40 years the commissioners have made a significant contribution to raising the profile of environmental issues in the UK.6

During the four decades that separated these two announcements, the Royal Commission had indeed made a significant contribution, but it was one that went considerably beyond ‘raising the profile’ of environmental issues in the UK. From the outset, the Commission influenced the content, even the fundamental tenets, of policies affecting the environment, with a reach that often extended into the wider international arena. It seems timely, in the aftermath of its abolition, to provide an account of the Commission’s influence, and to explore (with a view to the future) the characteristics and practices that enabled it (for the most part) to offer challenging and effective advice.7

The biography of this particular body makes for an interesting story in itself, but it has a wider significance because important questions have arisen about the place of expertise and independent counsel in modern democratic societies. With these questions in mind, the Commission’s work and influence will also be assessed against different conceptualisations of the role of advisory bodies. Before turning to these issues, however, it is helpful to provide a brief account of the origins and constitution of the Commission, and of its practices and products over the lengthy period since the need for such a body was first conceived.

5 The environment portfolio in British government has been combined in various ways over time with other responsibilities. At the time of writing, it lies primarily with Defra, the Department of Environment, Food and Rural Affairs, created in 2001, though some aspects transferred to the Department of Energy and Climate Change (DECC) in 2008. This article refers to ‘the environment department’ when discussing the Commission’s interactions with Whitehall. The Commission was not a ‘Defra body’—a point discussed later in this article.

6 HC Parliamentary Written Statement on Departmental Arm’s Length Bodies by the Secretary of State for Environment, Food and Rural Affairs Deb 22 July 2010, vol 514, col 32WS.

7 The article is based on research involving in-depth interviews, archival work and the author’s own experience as a member of the Commission, 1998–2008. An initial study (1995–97) was supported by grants from the Leverhulme Trust and the Commission itself. The author gratefully acknowledges this support and the assistance of Tim Rayner in this phase of the research. The views expressed in this article do not necessarily reflect those of the Commission.
2. The Royal Commission: A Brief Biography

The impetus to create a standing royal commission to deal with environmental matters seems to have come from several different sources. Among the proponents were Lord Kennet, Parliamentary Under Secretary in the Ministry of Housing and Local Government, and the then Chief Scientific Advisor, Sir Solly (later Lord) Zuckerman. Conscious of the rapidly developing political agenda, Kennet had prompted his Secretary of State to write to the Prime Minister suggesting the establishment of a committee or commission to review existing arrangements for pollution control.8 Zuckerman, for his part, brought the issue of environmental pollution before the Central Council for Science and Technology, and this committee (which he chaired) had made a similar recommendation.9 It was the Prime Minister’s own idea that the new advisory body should be set up as a royal commission—an institutional form to which Wilson was particularly inclined.10

The Commission’s inaugural meeting took place in London on 25 February 1970. Marking the significance of the occasion, it was attended by the recently appointed Secretary of State for Local Government and Regional Planning, Anthony Crosland, whose ministerial responsibilities included coordination of the disparate environmental and pollution control functions across Whitehall.11 With a distinguished botanist, Sir Eric (later Lord) Ashby, in the Chair and Zuckerman himself among the members, the early Commission included two further natural scientists, an economist, a broadcaster, an industrialist, a retired permanent secretary and a bishop.12 This mix of disciplines and backgrounds established a pattern that was to endure throughout the Commission’s lifetime: although all eight of its Chairs were Fellows of the Royal Society,13 it was never a purely ‘scientific’ body in the normally understood sense of the term. The initially small membership was expanded in 1973 to include (as one commentator noted with approval) ‘a physicist, a lawyer, professors of medicine and planning and a woman’,14 and numbers eventually

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8 The letter was sent by Anthony Greenwood towards the end of 1968. See M Holdgate, Penguins and Mandarins (The Memoir Club 2003); W Kennet, Preservation (Temple Smith 1972); also makes interesting comments on the establishment of the Royal Commission.
10 Zuckerman, ibid; see also P Hennessy, Whitehall (Secker & Warburg 1989).
11 Wilson had moved Crosland from his position as President of the Board of Trade to his new ministerial appointment in 1969 (HC Deb 13 October 1969, vol 788, col 33).
12 Ashby was a well-known author on pollution and Master of Clare College, Cambridge. Zuckerman was a zoologist. The other members were Wilfred Beckerman, economist; Aubrey Buxton, Director of Anglia Television and co-founder of the World Wildlife Fund; Frank Fraser Darling, ecologist and conservationist; Neil Iliff, Deputy Chairman and Managing Director of Shell Chemicals UK; The Right Reverend Launcelot Scott, Lord Bishop of Norwich; Sir John Winnifrith, retired Permanent Secretary of the Ministry of Agriculture; and Vero Wynne-Edwards, a zoologist.
13 The UK’s prestigious Academy of Sciences.
14 P Lowe, ‘The Royal Commission on Environmental Pollution’ (1975) 46 Political Quarterly 87, 91. The first female member was the Marchioness of Anglesey, who served until 1979.
stabilised at around 12–14. All members were appointed formally by the Queen, on the advice of the Prime Minister.\textsuperscript{15} In practice, appointments were largely the preserve of the Chair and the Secretary of the Commission, working closely with ministers and senior civil servants, until the late 1990s. After that, reflecting a new drive towards accountability and transparency in public life, the process was opened up to involve advertisement of vacancies and interviews of shortlisted candidates; terms of service (which had previously been somewhat elastic) also became more explicitly time-limited at this point.

Once established, the Commission’s working practices remained remarkably stable over time. The full Commission met monthly, usually over two days in London, where its permanent Secretariat was based.\textsuperscript{16} Between meetings, individuals or smaller groups would often be involved in discussions with interested parties and dissemination of findings and recommendations. The tangible product of all this work also changed very little: throughout its life, the Commission’s \textit{leitmotif} was the in-depth study of a topic that it had normally chosen for itself,\textsuperscript{17} culminating in a report. Its investigations drew upon published material, the experience and expertise of its members, and extensive written and oral evidence; there would also be seminars, visits and (occasionally) public meetings. The major studies normally overlapped, and at various times more specifically focused, ‘short’ studies were undertaken in parallel with the primary investigation. These working practices led to the production of 33 reports (one every 15 months on average), which included overviews of pollution and regulatory arrangements, analyses of specific problems, and scrutiny of the environmental implications of emergent technologies or even whole policy sectors. Periodically, too, the Commission concerned itself with the institutional and philosophical underpinnings of environmental regulation. It often took an unusually long-term view. Reports were normally laid before Parliament by command of Her Majesty the Queen; in almost all cases, they elicited a formal government response.\textsuperscript{18}

The length of service of the Royal Commission, and the nature and extent of its activities within a dynamic policy arena, make it something of a

\textsuperscript{15} After devolution, the advice of the devolved administrations in Northern Ireland, Scotland and Wales would also have been sought.

\textsuperscript{16} Two-day meetings at the beginning of each month became normal practice in the early 1980s, before which one day seemed to suffice. One or two of the meetings each year were usually held in other parts of the UK.

\textsuperscript{17} The Royal Warrant allowed ministers to request studies but this happened on only three occasions (leading to the reports: \textit{Air Pollution Control: An Integrated Approach}, Fifth Report, (Cm 6371, 1976); \textit{Oil Pollution of the Sea}, Eighth Report (Cm 8358, 1981); \textit{Crop Spraying and the Health of Residents and Bystanders} (Special Report RCEP 2005). The environment department and other ministries, and latterly a wider range of interested parties, were consulted, however, about shortlists of possible topics.

\textsuperscript{18} Four reports (the products of ‘short’ studies) were not produced as Command papers. Latterly, the devolved administrations, as well as the UK Government, received reports and sometimes responded separately.
treasure-trove for scholars of advisory and policy processes. Though we must be cautious about causality in complex policy-political systems, a careful analysis of the Commission’s practices and impacts promises to tell us something of significance about relations among expertise, policy-making and politics. To provide a conceptual framework within which to examine the particular case, the following section identifies four ways in which the role of expert advisory bodies has more generally been conceived.

3. Knowledge, Advice and Policy

There are many forms of expert advice, and almost as many characterisations of its role. It is possible, nevertheless, to distil from these numerous accounts a small number of models (in the sense of representations), each of which captures a distinctive way of thinking about advisors and their interactions with the political sphere. Four are presented here, in which advisory bodies are conceived of, in turn, as rational analysts, political symbols, cognitive agents and boundary workers. The first two are the most familiar, not least because of their frequent invocation in popular and political discourse. The third and fourth are more complex, embodying elements of the rational analytic and symbolic roles, and overlapping to some extent with one another.

One of the most enduring models of relations between expertise and policy portrays advisors as rational analysts, furnishing authoritative, dispassionate advice for the benefit of those in power. It tends to be associated with conceptions of policy formation as a linear-rational process in which decision-makers are ‘informed’ at appropriate points by scientific advice and other relevant expertise. Importantly, it envisages a ‘separation of powers’, whereby the objective analysis—the facts—provided by the advisors can be delineated from political considerations, which decision makers must take into account. Although much criticised as a representation of reality (and even as an ideal), this model has proved resilient and is readily identifiable in a great deal of contemporary discourse on evidence and policy. It also embodies one of the oldest, ideal-type representations of royal commissions, in which their


21 One set of challenges derives primarily from political science and organisational theory, another from Science and Technology Studies (STS). The former tends to focus on the assumed linearity and rationality of the policy process (for an overview see C Ham and M Hill, *The Policy Process in the Modern Capitalist State* (2nd edn, Harvester Wheatsheaf 1993) ch 5. The latter questions the possibility of expert neutrality and fact/value separation. There has been a surprisingly limited conversation between these traditions.
purpose is to unearth the facts, analyse problems and provide clear and impartial advice.

In contrast to their portrayal as neutral analysts in a rational policy process, expert advisors have been represented, almost as frequently, as instruments of political rationality, whose epistemic authority is used primarily as legitimising discourse in policy conflicts and decisions. In this second model, the dynamics of policy processes have less to do with dispassionate analysis than with the interplay of interests, institutions and power. Perhaps more than the first, it is a model deriving from long observation of real political actors: establishing committees and commissions is a time-honoured way of being ‘seen to be busy’, and selective use of their findings a familiar device when policies require justification. Yet this model, too, has been criticised. It seems hardly to allow for the fact that policy makers sometimes genuinely feel the need for advice; and it treats knowledge as an ‘epiphenomenal expression of material interests’, consigning analysis and expertise to a symbolic realm in which they have little independent significance.

There is a third and more nuanced way of thinking about advisory bodies, in which their role in policy-making is viewed neither as purely technical nor as merely symbolic. While they might perform elements of both of these functions, they are also understood as cognitive or discursive agents, whose advice and ideas might have real effect, though without the simple linearity of the first model outlined above. This third representation aligns with theories of the policy process in which knowledge (in its various forms) is afforded a quasi-independent significance, ‘policy learning’ becomes a powerful mechanism for change, and processes such as ‘framing’ condition what is thinkable

22 For a useful discussion, see A Weale, The New Politics of Pollution (Manchester University Press, 1992).
23 Facing agitation about air pollution when Prime Minister in the 1950s, Harold Macmillan said: ‘I would suggest that we form a Committee... We cannot do very much but we can seem to be very busy – that is half the battle nowadays’ (Cabinet Office Minutes: CAB 129/64, C(53) 322, 18 November 1953, cited in R Hyam, Britain’s Declining Empire: The Road to Decolonisation, 1918-1968 (CUP 2006) 241).
in particular circumstances at particular times. Advisors, in this model, act as producers and brokers of knowledge, and can help to effect learning of both a simple and a ‘conceptual’ kind. Interestingly, these ideas resonate with earlier observations of royal commissions, which have long been thought capable of going ‘where ministers and their officials might hesitate to tread,’ and attributed with a slow-burning ‘educative function’ even when their recommendations have initially been sidelined or ignored.

The fourth and final perspective on advisory bodies derives primarily from Science and Technology Studies (STS). In this perspective, the boundaries around science and politics are not given, but are inherently difficult to define, so that they stand in stark contrast to the firm dividing lines of the technical rational model. Therefore, in order to maintain some distinction between the ‘scientific’ and the ‘political’, scientists, policy makers and advisors alike engage in the construction and defence of boundaries—a process that Thomas Gieryn first characterised as ‘boundary work.’ Advisory bodies might be thought of, in consequence, as agents of technocracy (in which

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27 Framing involves ways of looking at and talking about the world in which certain knowledge claims, problem definitions and policy options are brought to the fore; frames are often tacit, but can also involve a conscious discursive strategy. See M Rein and D Schön, ‘Frame-reflective Policy Discourse’ in P Wagner, C Weiss, B Wittrock and H Wolman (eds), Social Sciences and Modern States (CUP 1991) 262; D Schön and M Rein, Frame Reflection: Toward the Resolution of Intractable Policy Controversies (Basic Books 1994). For analyses focusing on the significance of discourse in environmental policy-making, see B Flyvbjerg, Rationality and Power: Democracy in Practice (University of Chicago Press 1998); M Hajer, The Politics of Environmental Discourse: Ecological Modernisation and the Policy Process (OUP 1995); Littfin (n 25).


29 TJ Cartwright, Royal Commissions and Departmental Committees in Britain: A Case-Study in Institutional Adaptiveness and Public Participation in Government ( Hodder and Stoughton 1975) 217; see also R A Chapman (ed), The Role of Commissions in Policy-Making (George Allen and Unwin Ltd 1973).


political issues masquerade as technical ones), though more often their role as boundary workers is regarded in a positive light. Sheila Jasanoff, for example, has shown how skilful boundary work by scientific advisory committees can help to achieve ‘a political accommodation among science, society and the state.’ Such work is especially significant in the complex controversies of ‘regulatory science’, where high stakes co-exist with deep uncertainties, and facts and values are notoriously difficult to tease apart.

It hardly needs to be said that the four models outlined above are neither tidy nor mutually exclusive. Though they have been abstracted and presented here as separate entities, in practice (in both their theoretical and their real world manifestations) they merge, overlap and even draw upon one another for credibility. The point is made, however, that policy advisory roles have been conceptualised in a variety of different ways, and it is surprising, in this respect, that there have been relatively few empirical studies of the kind that might help us to evaluate the different models. It is to one such study—an in-depth, longitudinal analysis of the work of the Royal Commission on Environmental Pollution—that the following section will now turn.

4. The Circumstances of Influence

One of the most intriguing puzzles about expert advice is what conditions its reception—why, on some occasions, are the recommendations of advisory bodies accepted and implemented with alacrity while at other times they are sidelined, buried or wilfully ignored? The answer may have something to do with the perceived function of such bodies; if advisors are seen as symbols, for example, then it feels unsurprising if their counsel is only accepted when it

32 Jasanoff (n 31) 250.
33 Jasanoff (n 31) uses the term ‘regulatory science’ to mean science deployed in complex regulatory issues in the public sphere, such as those relating to health and the environment; others use ‘post-normal science’ (S Funtowicz and J Ravetz, ‘Three Kinds of Risk Assessment: A Methodological Analysis’ in C Whipple and V Covello (eds), Risk Analysis in the Private Sector (Plenum Press 1985) 217; ‘Science for the Post-normal Age’ (1993) 25 Futures 739).
35 Exceptions include WE Bijker, R Bal and R Hendriks, The Paradox of Scientific Authority: The Role of Scientific Advice in Democracies (MIT Press 2009); RH Clarke and J Valentin, A History of the International Commission on Radiological Protection’ (1990) 88 Health Physics 407; Jasanoff (n 31). Many authors have called for more detailed empirical research to illuminate relations between knowledge and policy (eg CJ Bennett and M Howlett, ‘The Lessons of Learning: Reconciling Theories of Policy Learning and Policy Change’ (1992) 25 Policy Sciences 275; Hall (n 26); Litfin (n 25); Pielke (n 19)).
suits. More prosaically, costs and practicalities are always likely to enter the equation. In the more nuanced of the accounts outlined above, however, the most important considerations revolve around the authority of the advice and its interplay with interests, institutions and power. While interrelationships among these variables are complex, and outcomes unpredictable, it may be possible, with sufficient evidence, to identify some regularities over time. In the case of the Royal Commission there are rich data: the Commission’s 33 reports, and its many thousands of recommendations over the years, met every possible kind of response from rapid uptake to rejection and obscurity, with multiple variations in between. However, as discussed below, even when advice apparently scores a ‘direct hit’, there is usually a subtle combination of knowledge and politics at play.

During the Commission’s lifetime, there were many instances of recommendations being accepted soon after (or even before) publication of a report and implemented without undue delay: three examples drawn from different periods must suffice to illustrate here. The early reports were certainly influential, with the government of the day finding it possible to adopt ‘a very large proportion of the recommendations in their entirety’. Whether or not there were elements of pacification in setting up the Royal Commission, it fulfilled a genuine need in a newly politicised field and arguably performed something close to a rational analytical role. In its second decade, the Commission’s most prominent ‘direct hit’ was the immediate acceptance of the key recommendation of its ninth report—that lead additives should be phased out of petrol at the earliest opportunity. This intervention enabled a beleaguered government to change a recently adopted (but less stringent) policy, which was rapidly becoming an electoral liability. In other words, the Commission’s authority legitimised a ‘U-turn’, though to conclude that its advice was ‘merely’ symbolic would be to underestimate the breadth and depth of its analysis and its skilful (re)frameing of the problem and potential solutions in this case.

Some 20 years later, another apparently direct impact was the acceptance of a radical recommendation that UK carbon dioxide emissions should be reduced by 60% by 2050. The rapid take-up of this proposal surprised many, including the Commission itself. It can be attributed to an intricate intertwining of

36 DoE, Central Unit on Environmental Pollution, Controlling Pollution, Pollution Paper No. 4 (HMSO 1975), 2. This was a collective response to four reports: RCEP First Report (Cmd 4585, 1971); RCEP (Second Report), Three Issues in Industrial Pollution (Cmd 4894, 1972); RCEP (Third Report) Pollution in Some British Estuaries and Coastal Waters (Cmd 5054, 1972); RCEP (Fourth Report) Pollution Control: Progress and Problems (Cmd 5780, 1974).
38 The report side-stepped the controversy over lead and children’s health by arguing that lead-free petrol could be introduced without unacceptable costs to industry or to motorists. It also framed lead as an eco-toxin whose rate of accumulation in the environment should be reduced as a matter of precaution.
39 RCEP (Twenty Second Report), Energy: The Changing Climate (Cmd 4749, 2000). See also: PIU (Cabinet Office Performance and Innovation Unit), The Energy Review (Performance and
epistemic and political factors, including the build up of evidence in climate science, the ecomodernist promise of green technologies, a strategic need for the state to re-engage with the energy sector, and a desire, in the run up to the Iraq war, to show that some policies of international importance could be pursued in the UK independently of the Bush administration.40

A common factor in all of the above cases was some conjunction of authoritative counsel with external circumstances and political will. Without such convergence, recommendations that threatened established institutional structures or challenged dominant beliefs were more likely to meet with inertia, or even with organised opposition. Some of the Commission’s ideas then faded away,41 but others survived an initially hostile environment and came to have influence years later, when the political kaleidoscope had dropped into a new formation. Over time, ministers and governments come and go, priorities change, solutions become attached to new problems,42 and ‘events’, as Macmillan once famously observed, are notoriously unpredictable. If we look, for example, at the Environmental Protection Act (EPA) 1990, we find legislation that embraces Royal Commission recommendations of widely differing vintage. Those with the longest gestation were proposals for a system of Integrated Pollution Control (IPC), first advanced by the Commission in 1976,43 rejected by the government (after much internal wrangling and delay) in 1982,44 taken up again from the mid-1980s, and finally given a legislative basis in the EPA 14 years after the original report. There were multiple factors at play in the evolution of this policy, but it was significant that by the late 1980s a unified pollution inspectorate could be presented as an efficiency gain, and IPC as a progressive development which conveniently promoted British pragmatism within Europe.45 Also featuring in the EPA, after a shorter interval of five years, was the Commission’s proposal that the ‘duty of care’ be adopted as a guiding principle in waste management; the recommendation had in fact been accepted soon after publication of the report in 1985,46 and in this case the modest delay can be attributed to inertia in the legislative

41 Some proposals, it has to be said, were simply not well thought through, and were never going to be practicable propositions.
43 RCEP (Fifth Report), Air Pollution: An Integrated Approach (Cmd 6371, 1976).
44 DoE, Central Directorate on Environmental Pollution, Air Pollution Control: The Government Response to the Fifth Report of the Royal Commission on Environmental Pollution, Pollution Paper no 18 (HMSO 1982).
45 Subsequently, the UK was influential in the drafting of the European Directive on Integrated Pollution Prevention and Control, an example of the Commission’s indirect, international influence.
system rather than any embedded resistance to the idea. More akin to a ‘direct hit’ were the Act’s provisions for the release of genetically modified organisms (GMOs) into the environment, reflecting a Royal Commission report on this subject, upon which the ink was barely dry. Here the Commission’s proposals had been evolving almost in tandem with those of the government, helping to fill a policy vacuum in the governance of an emergent technology.47

If causality is difficult to ascertain even when influence seems immediate and direct, then the difficulties are compounded when there is a significant lapse of time between report and action. It is telling, therefore, that both integrated pollution control and the duty of care retained the stamp of the Royal Commission (continuing to be linked to it in Parliamentary debates for example), in spite of the delayed effects and the fact that environmental policy was moving more generally in these directions in the 1980s. Such a ‘direct line’ of influence, as one civil servant described it,48 was not always so apparent, and an interesting example of a more diffuse process is provided by the Commission’s work on agriculture. In the 1970s, when policy core beliefs in this sector could best be summed up by the title of the 1975 White Paper, *Food from Our Own Resources*,49 a report focusing on pesticides, nitrogen fertilisers and farm wastes50 was less than welcome; according to one former Chair, its recommendations were ‘pretty well rubbished’ by the Ministry of Agriculture, Fisheries and Food, which was largely responsible for drafting the government’s response.51 But over the next decade or so, as the primacy of food production began to wane, many of the measures proposed by the Commission were gradually put into place. One was the shift from a voluntary to a statutory system of pesticides control, deemed unnecessary in the initial response but eventually effected in the Food and Environment Protection Act 1985. Likewise, the Commission’s call for tighter controls on intensive livestock units was rejected at first (as was its bold re-framing of such units as ‘industrial enterprises’52); it was not until the end of the 1980s, following further politicisation of the issue

47 RCEP (Thirteenth Report), *The Release of Genetically Engineered Organisms to the Environment* (Cmd 720, 1989). Some environmental organisations were active both in giving evidence to the Commission and in lobbying Parliament during drafting of the Bill—a good example of the importance of networks discussed further in Section 5. One environmentalist described how they had ‘developed a whole lobbying agenda [on GMOs] … A lot of [the issues] were prompted by things the Royal Commission was saying, and that all went into the briefings …’ (see n 48).

48 Unless otherwise attributed, quotes are from interviews conducted for the study described above (n 7). All officials and ministers cited had served at some point in the environment department. Interviewees remain anonymous, though their relation to the Commission is indicated.

49 Ministry of Agriculture, Fisheries and Food (MAFF), *Food from Our Own Resources* (Cmd 6020, 1975).

50 RCEP (Seventh Report), *Agriculture and Pollution* (Cmd 7644, 1979).


52 RCEP (n 50) para 8.30.
and criticism from the House of Commons Environment Committee,\textsuperscript{53} that a more interventionist regulatory system began to be rolled out.\textsuperscript{54} The Royal Commission, in such cases, might be seen as one significant source of ‘enlightenment’, whereby knowledge and ideas percolate gradually into policy over time.\textsuperscript{55} Describing what happened with pesticides, one civil servant expressed it as follows: ‘the . . . Commission pushed on that door and it gradually swung open . . . I think they had a big influence on that area, although . . . unless you are an insider you probably wouldn’t recognise it’.

Attributing change to any particular body becomes even more challenging as enlightenment shades into the diffuse, distributed effects of knowledge and ideas that have been described as ‘atmospheric’ influence.\textsuperscript{56} Yet, the connections might still be significant. Perhaps the best examples in the case of the Commission lie in its promotion of fundamental principles of environmental regulation like those of precaution and transparency. These were not ideas that it ‘owned’ (in the sense that might be claimed for IPC); rather, they were emergent in a broader stream of cultural and political change, and were absorbed, developed and actively promoted through the Commission’s activities and reports. The theme of precaution, for example, runs through the Commission’s work from its very earliest studies, and during the 1980s it became part of an advocacy coalition urging regulators to place less reliance on the assimilative capacities of the environment.\textsuperscript{57} In the case of emergent technologies, too, it tended to reject hubris and urge caution, as can be seen in widely separated reports on nuclear power, GMOs and nanotechnologies.\textsuperscript{58}

Similarly, the causes of openness and access to environmental information


\textsuperscript{54} The period 1989–91 saw the introduction of new Farm Waste Regulations, a Farm and Conservation Grant Scheme, a revised and more accessible code of practice for water protection, and a tougher approach to prosecution (yet another measure in the Environmental Protection Act 1990). For details, see P Lowe and others, \textit{Moralizing the Environment: Countryside Change, Farming and Pollution} (UCL Press 1997).


\textsuperscript{57} See S Owens, ‘Risk and Precaution: Changing Perspectives from the Royal Commission on Environmental Pollution’ (2006) 63 Science in Parliament 16. Ideas about precaution were developed through reports on specific aspects of pollution (eg RCEP (Third Report) (n 36); RCEP (Ninth Report) (n 37); RCEP (Sixteenth Report) \textit{Freshwater Quality} (Cmd 1966, 1992); RCEP (Twenty Fourth Report), \textit{Chemicals in Products—Safeguarding the Environment and Human Health} (Cmd 5827, 2003); RCEP 2005 (n 17)) and also through the Commission’s periodic overviews and ‘philosophical’ studies (eg RCEP (Second Report) (n 36); RCEP (Tenth Report) \textit{Tackling Pollution – Experience and Prospects} (Cmd 9149, 1984); RCEP (Twelfth Report), \textit{Best Practicable Environmental Option} (Cmd 310, 1988)).

\textsuperscript{58} RCEP (Sixth Report), \textit{Nuclear Power and the Environment} (Cmd 6618, 1976); RCEP (n 47); RCEP (Twenty Seventh Report), \textit{Novel Materials in the Environment: The Case of Nanotechnology} (Cm 7468, 2008).
were picked up and championed by the Commission, beginning with a powerful plea for transparency in its second report and evolving into calls for much wider public engagement with policy and regulatory processes. In lending its authority to precaution, transparency and other ecologically modern policy paradigms, the Commission performed important roles as knowledge broker and policy entrepreneur. Arguably, too, it helped bring about a process of 'conceptual learning', through which the very norms and objectives of environmental policy came to be challenged and redefined.

The cases outlined above demonstrate that the Commission’s impacts could, in different circumstances, be rapid or slow, direct or diffuse, readily attributable or difficult to disentangle from other forces. There is evidence, nevertheless, that it was an important presence in environmental policy communities and that it helped over time to bring about significant development and change. This influence, and the Commission’s survival for 41 years across governments of widely differing political persuasions, implies that overall it must have been doing something as an advisory body that worked. At a time when expertise and policy advice are increasingly under scrutiny, it is worth reflecting in more detail on the characteristics and practices of the Commission that enabled it to have effect.

5. An Anatomy of ‘Good Advice’

It has often been said that the Commission was influential because it was an authoritative, autonomous and trustworthy advisory body. But none of these desirable attributes is simply given. To understand the Commission's influence, we need to see how authority, autonomy and trust were constructed and reinforced, both by the Commission itself and by others with whom it engaged. Four attributes seem to have been especially significant in this respect: the Commission’s expert and broadly based membership; its functional independence; its positioning within a range of significant networks; and its continuity as an institution throughout a long and formative period for environmental

59 RCEP Second Report (n 36). The call for better access to information was reiterated in numerous reports after the second: wider engagement was urged from the late 1990s onwards (see RCEP (Twenty First Report), Setting Environmental Standards (Cmd 4053, 1998); RCEP (Twenty Fourth Report) (n 57) and RCEP (Twenty Seventh Report) (n 58)).

60 Litfin (n 25) 4, uses the term ‘knowledge brokers’ to mean ‘intermediaries between the original researchers, or the producers of knowledge, and the policy-makers who consume that knowledge but lack the time and training necessary to absorb the original research.’ ‘Policy entrepreneurs,’ according to Kingdon (n 42) 179, are persistent advocates willing to invest time and energy into pushing their pet proposals. See also S Owens and T Rayner, ‘“When Knowledge Matters”: The Role and Influence of the Royal Commission on Environmental Pollution’ (1999) 1 Journal of Environmental Policy and Planning 7.
policy. Most importantly, these attributes interacted with and reinforced one another, helping to build the Commission’s legitimacy and reputation.

One way of establishing the Commission’s authority was to appoint chairs and members of high standing, as conventionally reflected in professional achievements and other established forms of recognition—in short, to seek to ensure that appointees would be ‘people who [knew] what they were talking about’. Equally important, however, was a perception that members really were appointed for their expertise, and not for some other reason—an impression closely connected to the issues of autonomy and trust discussed in more detail below. It helped to portray the Commission as a ‘scientific’ committee and (in spite of its actual composition) it was often thought of as such: one civil servant commented, for example, that it was located in the ‘hard science box’ of the environment department’s ‘mental map’. Interestingly, the Commission itself was an active agent of boundary work, not only in cultivating its own authority and autonomy (as will be discussed below) but in seeking, for many years, to maintain a clear distinction ‘between facts, scientific deductions, and conclusions which depend on value judgements’. A further important factor was the tendency, especially in the first two decades, for the Commission’s visible influence to enhance its perceived authority and vice versa: its numerous ‘direct hits’, and the respect with which it was treated by governments (even when they disagreed with its findings), confirmed its standing as an authoritative body whose views were not lightly to be set aside.

Most interestingly, perhaps, while the Commission benefited from its ‘scientific’ label, in practice it derived considerable authority from its actual composition (and conscious self-representation) as a ‘committee of experts’. The very breadth of its membership conditioned its approach to its subjects, making for ‘a degree of good and common sense that is rare amongst a scientific committee’ and for much mutual learning during the ‘evolutionary process’ of writing reports. By and large, members respected the expertise of their colleagues,

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61 As expressed by a former Chair.
62 A broader view was taken by a former environment minister, who described the Commission as ‘scientific in a rather…ancient sense of…people trying to assess argumentation and not regarding themselves as representative’.
63 RCEP Twelfth Report (n 57) para 2.30. Although the Commission was never guilty of the naïve assumption that difficult issues could be settled by science alone, for much of its life it regarded the technical and the political as separable (see also RCEP (Twenty First Report), (n 59)). In its last decade, however, most notably in reports on chemicals (Twenty Fourth Report (n 57)), crop spraying (2005 (n 17)) and nanotechnologies (Twenty Seventh Report (n 58)), it became increasingly conscious of what Jasanoff calls the ‘hybrid normative-cognitive character of regulatory science’ (S Jasanoff, ‘Quality Control and Peer Review in Advisory Science’ in Lentsch and Weingart (n 31) 28). The broader social scientific presence on the Commission by this stage almost certainly influenced this shift.
64 Quotes from members who served during the 1980s and 1990s. Although the Commission did not have ‘lay members’ as such, distinguished individuals often claimed this status in the context of particular studies.
but were not afraid to ask ‘the idiot question’ or to challenge disciplinary pre-
sumptions.\textsuperscript{65} One result was a distinctive form of interdisciplinary deliberation,
which produced a certain robustness in the reports; another was the
Commission’s capacity for ‘frame reflection’,\textsuperscript{66} enabling it to construct its argu-
ments in unexpected and unconventional ways. Both processes helped build
the Commission’s reputation as an authoritative body, with an ability to ‘get to
the bottom’ of the issue at hand but also to see it in ways that transcended its
familiar parameters.

Although the standing of its members was important to the Commission,
towards the end of the 20th century expertise in itself became less likely to
be a guarantee of trust or legitimacy. At least as significant in these respects
was a strong and enduring sense of the Commission’s autonomy: it was rarely
suspected of being ‘an arm of government’\textsuperscript{67} or an advocate for particular co-
alitions of interest. This perception of autonomy cannot be explained wholly
in constitutional terms; although formally independent, royal commissions re-
ceive their funding via government, and might be influenced through their
terms of reference or by making ‘safe’ appointments.\textsuperscript{68} Two features of this
Commission, however, made it relatively difficult to control: first its Royal
Warrant gave it considerable freedom to choose its own subjects for investiga-
tion; and second, as a standing body it was capable of outlasting particular
administrations. Furthermore, the Commission was not afraid to take up polit-
ically sensitive topics (including, at their respective times, agriculture, water,
transport and planning\textsuperscript{69}), or to present findings, when it thought them appro-
ropriate, that were about as welcome ‘as a rattlesnake in a lucky dip’.\textsuperscript{70} Such
fearlessness helped to build an impression that the Commission was free not
only from overt interference, but also from more subtle and passive forms of
discipline. The Commission cultivated this image by emphasising its own au-
tonomy and defending it when the need arose.\textsuperscript{71} It also benefited, for many

\textsuperscript{65} Comments to this effect were offered by many interviewees. Inevitably, on some occasions,
there were vigorous disagreements, disciplinary fault lines and clashes of personality.
However, there was only ever one minority report, arising from a disagreement about the
practicability and likely efficacy of economic instruments in pollution control (RCEP (Third
Report) (n 36)).

\textsuperscript{66} In frame reflection, the presumptions of a dominant frame become subject to examination
and critique. See Rein and Schön, Schön and Rein (n 27).

\textsuperscript{67} The term was used by a civil servant.

\textsuperscript{68} Hennessy (n 10).

\textsuperscript{69} RCEP 1979 (n 50); RCEP (Sixteenth Report) (n 57); RCEP (Eighteenth Report), Transport and the
Environment (Cmd 2674, 1994); RCEP (Twenty Third Report), Environmental Planning (Cmd
5459, 2002).

\textsuperscript{70} H Morris, ‘Study Says What the Government Left Out’ (March 2002) Planning 11. Morris refers
to the Commission’s twenty-third report (RCEP 2002, ibid), which argued for an integrated
system of land use and environmental planning at a time when the government was bent
on ‘streamlining’ the planning process. Not surprisingly, although the report won plaudits in
some quarters, it had relatively little impact on policy.

\textsuperscript{71} For example, ‘[m]isgivings’ were expressed by members about ministerial direction of the
Commission’s study of air pollution control in the 1970s (minutes, RCEP fourth meeting
years, from a particular view within Whitehall which conceived of critical scrutiny as useful and of this utility as closely connected to the autonomy of the body concerned. A senior official expressed it more succinctly: ‘...part of the point would be lost if [the Commission] appeared to be part of “us”’.

The lack of any obvious capture by special interests also requires explanation, since members inevitably came to the Commission with commitments of various kinds. Individuals certainly had what Geoffrey Podger calls ‘intellectual interests’, with a propensity to think about the world in certain ways.72

In addition, some members were expected to bring their experience in industry, agriculture, local government or trade unions to the table, and it is not always easy to draw a firm line between useful perspectives and interests.73 Three factors tempered any tendency towards undue influence, however. One was the Commission’s structure as a ‘committee of experts’, which meant that members who might have defended sectoral interests were always in a minority. Another, which mattered at least as much as numerical weight, was the style of the Commission’s deliberations: when even tacit norms had to be justified, explicit special pleading was very unlikely to succeed. (The same, it should be said, was true of the Commission’s treatment of evidence.) A third factor was that the members themselves by no means always took ‘predictable’ stances. During the study of lead in the environment, for example, the Campaign for Lead Free Air complained that the loyalties of several members (including one from the petroleum industry) would bias the Commission against the removal of lead from petrol74 but in fact the members concerned did not dissent from the key recommendation of the ninth report. Similarly, certain ‘industrial’ members were among the keenest advocates of access to environmental information. It is worth noting that some inside Whitehall did think of the Commission as an ‘environmental body’, but as a function of its remit and not because they saw it as unduly influenced by lobbying.

Overall then, in spite of its obvious ties to government, the Commission maintained a reputation for strong-minded independence of the ‘scholarly’

1974, 6 June [quote from minute 22]). In 1981, when financial responsibility for the Commission passed from central departments to the environment department, the Chair sought reassurance from the Prime Minister that this would not weaken the Commission’s independence (letter from Professor Sir Hans Kornberg to the Rt Hon Margaret Thatcher, 11.11.80; PM’s response, 28.11.80).

72 G Podger, ‘Quality control and the Link Between Science and Regulation from a National and EU Administrator’s Perspective’ in Lentsch and Weingart (n 31) 229, 232. The Secretariat, many of whom were drawn from (and often returned to) the environment department might also have been thought to espouse particular worldviews.

73 Some members might even have been ‘placed’: one civil servant suggested, for example, that in the Commission’s first few decades ‘MAFF always...made sure that they had someone on it’ (emphasis added).

74 D Wilson, The Lead Scandal (Heinemann Educational 1983).
and ‘functional’ kind, and it was not normally seen as susceptible to special interests, even environmental ones. Yet at the same time, its connections into Parliament, Whitehall, academia and other communities were of considerable importance in ensuring that its ideas exerted influence. Within Parliament, relations with the House of Lords were particularly strong during the Commission’s first two or three decades. Until 1998, the Commission itself always included at least one peer, and ‘good old boys’ could usually be relied upon to press its case and cultivate common ground with influential Select Committees in the Lords. There were links, too, with the House of Commons (though not, in this case, shared membership), and with Whitehall, where the Secretariat in particular had extensive professional connections. In different spheres, members and chairs were active participants in academic (or industrial, or other) communities, where they not only absorbed (and indeed generated) new knowledge, but also tested the Commission’s ideas and disseminated its key messages. It is useful, perhaps, to think of the Commission as occupying a special niche at the intersection of these different communities, but also as an active member of wider networks, which coalesced around particular issues or policies. Through such networks advisory bodies can be ‘integrated into the policy-making process’, and social learning becomes a vital component of policy evolution and change.

To summarise so far, the widely perceived authority and autonomy of the Commission, and its position within a variety of networks, all contributed to its ability to generate advice and exert influence. But an additional, important factor in the Commission’s effectiveness was its existence over an unusually

75 Diane Stone, in a discussion of think tanks, notes that such bodies can enjoy ‘scholarly’ independence—the ability to pursue particular interests relatively unhindered—even if they are in resource-dependent relations with government (‘Introduction: Think Tanks, Policy Advice and Governments’ in D Stone and A Denham (eds), Think Tank Traditions: Policy Research and the Politics of Ideas (Manchester University Press 2004) 3). The term ‘functional independence’ was used in the letter from the Chair to the Prime Minister referred to in n 71. Kornberg wrote, ‘...very much hope that the Commission’s functional independence will continue to be publicly asserted, whatever new financial arrangements may be envisaged ...’

76 The term was coined by an interviewee who had been a member of both the House of Lords and the Royal Commission.

77 A case in point would be the way in which the former Chairs, Lord Ashby and Lord Flowers, pressed for the implementation of integrated pollution control (see eg debates on The Environment: HL Deb 23 March 1983, vol 440, col 1204–22, and Environmental Pollution: Air Pollution - Reports: HL Deb 29 October 1984, vol 456, cols 354–404). Another would be Lord Nathan’s membership of the Select Committee on the European Communities while serving on the Commission (1979–89).

78 Stone makes this point about think tanks (n 75) 13. Following Heclo (n 26), many scholars have argued that policy is influenced by learning within and between networks. For useful discussions, see Bennett and Howlett (n 35); M Jachtenfuchs (n 28); P May (n28) 331; EA Parson and WC Clark, ‘Sustainable Development as Social Learning: Theoretical Perspectives and Practical Challenges for the Design of a Research Program’ in LH Gunderson, CS Holling and SS Light (eds), Barriers and Bridges to the Renewal of Ecosystems and Institutions (Columbia University Press 1997) 428. On networks and policy-making more generally, see H de Bruijn and E ten Heuvelhof, Networks and Decision Making (Lemma 2000); D Marsh and R Rhodes, Policy Networks in British Government (Clarendon Press 1992).
long period, with a ‘rolling’ membership and strong continuities of form and practice. This longevity had a number of significant effects. It amplified the other positive attributes of the Commission, providing time for its authority and its influence to reinforce one another, and limiting the opportunities for political interference and direction. It also encouraged the development of a collective identity and an institutional memory, so that the Commission acquired a purpose as a Commission, and an agency that could endure over time. Thus, its arguments and recommendations could be pursued and pressed even if they had been advanced, originally, by a different set of members working under a different chair. Implementation of Part II of the Control of Pollution Act 1974, creation of a unified pollution inspectorate, and the Transport Act 2000 might all be seen as products of the Commission’s ability to ‘keep banging on’. More subtly, the Commission’s longevity and continuity facilitated its long-standing support (and significant refinement) of principles such as precaution and access to environmental information.

6. Conclusions and Thoughts for the Future

In this final section, key findings about the Royal Commission’s role and influence are drawn together and some of their wider implications discussed. As noted earlier, the Commission’s lengthy existence offered a valuable opportunity to illuminate relations between expertise and policy, and it seems legitimate to seek to do this for three reasons. One is that, while the Commission was in some senses unique, its basic practices (gathering evidence, reporting, making recommendations to government) were similar to those of many other high level advisory bodies. A second is that its delivery of 33 reports means that we have, in effect, a series of case studies of advice and its impacts over an extended period of time. A third reason, endorsed by many commentators, is that in-depth empirical investigations of particular advisory bodies have much to contribute in building a theory of policy advice.

Before developing these ideas, it should be emphasised that it would be wrong to eulogise the Commission, or to imply that all of its work had lasting impact. Many recommendations, and some reports, have faded into obscurity, and the Commission had its critics, too, some of whom regarded it as elitist and overly academic in its structure and modes of operation. Overall, however, the analysis suggests that the Commission gave challenging and effective

79 As expressed by a former Secretary. In the case of transport, the Commission’s eighteenth report (n 69) was followed by another, when it considered the government to be taking insufficient action (RCEP (Twentieth Report), Transport and the Environment - Developments Since 1994 (Cmd 3752, 1997)).
80 See eg Defra, Review of the Royal Commission on Environmental Pollution: Final Report (prepared for Defra by PricewaterhouseCoopers) (Defra 2007).
advice, in that it influenced governments and helped to change environmental policy for the better. Others have drawn similar conclusions. Looking back over 30 years of policy development, for example, the respected monthly publication, ENDS, described the Commission as an ‘intellectual powerhouse’ and included it among the ‘key organizations’ responsible for positive environmental change. Such effectiveness, as we have seen, was aided by the Commission’s capacity for vigorous interdisciplinary deliberation, by its reputation for authority and independence, and by a reach into important networks, which enabled it to facilitate policy learning. Its ability to outlive particular administrations was also a considerable asset, given that the most transformative advice is often the least welcome in the short term.

The circumstances of influence, outlined in Section 4, suggest that the impacts of advice might usefully be thought of in terms of a spectrum, or continuum, along which they range from ‘direct hits’ through delayed and diffuse effects to no discernible influence at all—‘the dogs that didn’t bark’. The analysis further suggests that no simple, single characterisation of the Commission’s role can provide an adequate account of its agency. Certainly, its investigations over the years informed the development of environmental policy and regulation, but there were symbolic elements, too, in the selective and strategic use of its recommendations at various times. Almost always the Commission was acting, whether consciously or not, as an agent of policy learning, and some of its most notable contributions had important discursive dimensions. In all of this, it was able to be effective, in part, because it was both a subject and an agent of boundary work, through which its advice could be portrayed as authoritative, autonomous and ‘scientific’.

These arguments point to complexity and contingency in relations among expertise, policy-making and politics. They suggest, in addition, that it is possible for an advisory body to display elements of all four representations outlined in Section 3, sometimes in a hybrid fashion. This very possibility, however, would seem to favour some combination of the third and fourth models, since these embody aspects of, but cannot be reduced to, the simple representations of technical and political rationality in models one and two. The varied outcomes of the Commission’s work lend support, for example, to cognitive models of the policy process, which allow for a multiplicity of possible interactions among knowledge, power, interests, institutions and events. But our understanding of these relations is enriched if we ask not only how knowledge impinges upon policy, but also how advisory bodies like the Commission come to be regarded as authoritative; in this respect the work of STS scholars offers particularly valuable insights.

81 ENDS at 30, Special Anniversary Issue, Environmental Data Services (May 2008), 28.
82 I am grateful to Albert Weale, Professor of Political Theory and Public Policy, University College London, for putting it to me in this way.
Whatever the Commission’s achievements, the fact remains that in the end it was somewhat peremptorily abolished. It is worth reflecting in this final section on the likely causes of its demise. The simplest explanation might be that an incoming government was committed to a ‘bonfire of the quangos’ at a time of austerity, and the Royal Commission was swept up rather carelessly in its initial enthusiasm to act. But to understand why this was possible in 2011, when the Commission had emerged unscathed from similar circumstances before, we need to look to more general changes affecting the wider policy environment, the expectations of advisory bodies, and the Royal Commission itself.

Certainly, the environmental arena in which the Commission was operating had become immeasurably more complex since 1970: institutions had been transformed, advisory bodies had proliferated and the dominant environmental issues had changed substantially in scope and scale. In consequence, the Commission increasingly had to direct its messages towards Europe and the wider international arena, whilst at the same time (after devolution) taking account of four different policy contexts within the UK. All of these changes made it more difficult to identify manageable topics, circumscribe existing knowledge and find a compelling and distinctive focus for the reports. At the risk of simplification, we might say that it was easier to identify remedies for the depredations of gross pollution in the 20th century than to apprehend the subtle and ubiquitous environmental problems of the 21st.

Substantial changes had also affected the Commission itself and its relations with policy communities. By the end, it was no longer as well networked as it once had been, having lost its members in the House of Lords, and perhaps also the informal, personal connections into high levels of government that had been apparent in an earlier era. In addition, it had become subject to quinquennial reviews of its performance, which, even if broadly positive, served to emphasise the limitations of its independence. The last of these reviews, which proposed that the Commission become less academic and increase its productivity, led to some tensions over financing and a move,

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83 Several interviewees suggested that the Commission had been vulnerable during the early 1990s, when its investigation of freshwater quality was seen by some within Whitehall as ‘insensitive and unhelpful’ in the run-up to water privatisation. There were also concerns about its productivity. One civil servant thought, however, that it would have been politically impossible to ‘kill’ the Commission at this time, perhaps (as a former member suggested) because of ‘the uproar that there would [have been] in the Lords’.

84 One consequence was that reports grew significantly in size. The extreme cases are the second report (RCEP 1972 (n 36)), extending to a mere nine A5 pages, and the twenty-fifth (RCEP (Twenty Fifth Report), Turning the Tide: Addressing the Impacts of Fisheries on the Marine Environment (Cmd 6392, 2004)), a 377-page, A4-sized tome. Concerned that its findings should be accessible, the Commission took to producing summary reports from the late 1990s onwards.

85 At least two of the Chairs in the 1970s and 1980s had good, informal relations with ministers, enabling them to discuss issues of mutual concern ‘offline’.

86 Defra (n 80).
after many years of resistance, into environment department accommodation. There is also a sense in which, in its last decade or so, the Commission was edged out of the 'scientific' section of the Department's mental map; in a controversy over crop spraying, for example, the Department clearly preferred the advice of its expert scientific committee, while some reports, such as those on environmental planning and the urban environment, had relatively little in the way of scientific content. A reading of formal responses to earlier and later reports suggests that governments had come to regard the Commission with less awe.

Clearly, no institution can survive forever, and it is perhaps appropriate that much of the discussion in the aftermath of the Commission's demise focused not on its possible resuscitation, but on the ways in which, in future, policy advice on environmental matters might be provided. This article has identified a number of critical characteristics that enabled the Commission to make a positive, sometimes transformative, contribution in this field. It might be tempting, therefore, to conclude that the best advice would come from an autonomous, well-connected and resilient body with considerable depth and breadth of expertise. But the abolition of a body that arguably already had these qualities exposes some important tensions. Independence and perceived independence are vital if an advisory body is to be trusted, yet such bodies must be resourced and accountable, and must therefore inevitably be subject to some control. Investigations may be most effective if they are clearly focused, but somebody, somewhere, needs to think about the bigger picture and the longer term. Recommendations ought to be directed towards those who have the power to act, but how, when environmental governance is increasingly distributed among different institutions and scales? And while advice must be meaningful in an existing policy domain, the best ideas will contribute to the shifting of policy paradigms over extended periods of time. If there is still a willingness to seek 'that outside stimulus to government' which is likely to produce the most effective and challenging advice, the means of negotiating such dilemmas surely merit sustained attention and debate.