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## THE POLICY RESPONSE TO THE SMOKING AND LUNG CANCER CONNECTION IN THE 1950s AND 1960s\*

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ABSTRACT. A key current concern is how scientific knowledge may inform policy in relation to major environmental and health concerns. There are distinct schools of analysis about this relationship between science and policy. They stress rational relationships; denial and delay; or the role of networks. History is important in modifying such perspectives: smoking policy in the 1950s and 1960s is the case study here. The initial response in the 1950s to the link between smoking and lung cancer was in part conditioned by the role of the tobacco industry and the financial importance of tobacco: the British tobacco industry had closer relationships with government than the American one, and did not rely on public relations. Public health interests worked with the industry. But politicians were concerned also about the fluidity of the epidemiological evidence; the dangers of stirring up further pressure over air pollution; the financial and ideological implications of health education and its location; and the electoral dangers of intervening in a popular mass habit. In the 1960s the British and American medical reports stimulated the growth of a public health 'policy community'. The initial political considerations began to weaken and these years marked the beginning of a new style of public health.

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A key current concern is how scientific knowledge may inform policy in relation to major environmental and health concerns. The demand for 'evidence based medicine', 'evidence based practice', and 'evidence based policy' has its own history. One recent lineage came from the US, Canada, and the Netherlands in

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the 1960s through the rise of clinical epidemiology. In Britain, there has been a different history. The post-war redefinition of the ideas of social medicine had a twin legacy in the 'new public health' on the one hand, and, on the other, in the rise of health services research and the dominance of the randomized controlled trial (RCT) as the gold standard of medical and scientific evidence. The rise of evidence can also be related to the 'customer contractor' changes in government research funding in the 1970s, initiated by the 1972 Rothschild Report.

There are distinct schools of thought about how the relationship between science/evidence and policy or practice operates or should operate. These can be categorized under three main tendencies: evidence based or rational arguments; the journalist school; and science policy/sociology of scientific knowledge (SSK) approaches.<sup>4</sup> The rationalist argument is what has been called the 'engineering' model of research impact on policy. Its proponents argue that all that is needed are technical adjustments to make the relationships work, that improvements in process are what is needed, rather than a more fundamental critique. Underlying this model are positivist models of science, the assumption that knowledge can have an impact in a value-free way.<sup>5</sup> Analogous but more narrowly channelled approaches to the science/policy relationship appear in the *journalist school*. The term 'journalist' means practised by journalists, and embodying a way of looking at the world which often characterizes media agendas on science and policy. Here again, a relationship between science/research and policy is seen as desirable, but perhaps in a more partisan way. When some hiatus occurs in the relationship, the interpretation is in terms of conspiracy. The interruption is seen in terms of 'delay' and blame is attached to key participants. This 'heroes and villains' school of analysis is a conventionally accepted mode, even in academic circles, of looking at the nature of response to public health issues. Some analysis of AIDS provides a recent example, also responses to BSE and developments in alcohol policy.6

The third main school can be broadly categorized as network analysis, but the field is complex and there are different tendencies within it. One such is the SSK which has undergone rapid development over the past twenty or so years. Here

<sup>&</sup>lt;sup>1</sup> J. Daly, Evidence based medicine and the search for a science of clinical care (Berkeley and New York, 2005), pp. 20–48.

<sup>&</sup>lt;sup>2</sup> V. Berridge, D. Christie, and E. M. Tansey, eds., *Public health in the 1980s and 1990s: decline and rise?* (London, 2006).

<sup>&</sup>lt;sup>3</sup> V. Berridge, 'Introduction: making health policy; networks in research and policy after 1945', in V. Berridge, ed., *Making health policy; networks in research and policy after 1945* (Amsterdam, 2005), pp. 5–36.

<sup>&</sup>lt;sup>4</sup> V. Berridge and B. Thom, 'Research and policy: what determines the relationship?', *Policy Studies*, 17 (1996), pp. 23–34; V. Berridge and J. Stanton, 'Science and policy: historical insights', *Social Science and Medicine*, special historical issue, 49 (1999), pp. 1133–8.

<sup>&</sup>lt;sup>5</sup> A. Haines and R. Jones, 'Implementing findings of research', *British Medical Journal (BMJ)*, 308 (1994), pp. 1488–92.

<sup>&</sup>lt;sup>6</sup> For this view of AIDS, see R. Shilts, And the band played on: politics, people and the AIDS epidemic (London, 1988); and alcohol, G. Edwards et al., Alcohol policy and the public good (Oxford, 1994).

the concept of actor networks in science is important. <sup>7</sup> Network theories have also been developed with a great degree of sophistication within science policy analyses. In fact analysing policy networks has become a dominant approach for the study of policy making processes in Britain, Europe, and North America. Such approaches emphasize the interaction and patterns of association between actors in different policy areas. Networks have been one of the most discussed and contested terms in political science.<sup>8</sup> Richardson and Jordan developed the idea of the 'policy community', focusing on what they called 'the government, civil service–pressure group network. The relationship between government departments and external bodies is what matters, in this interpretation; policy formulation takes place in stable subsystems comprising government agencies and outside groups. The whole system is compartmentalized such that relationships between government and external groups vary for each policy area. Marsh and Rhodes, using studies of UK policy making, have differentiated between 'policy communities' and 'issue networks'. 10 The overall view is that policy communities are small, formal, highly focused, and centralized policy groupings, while issue networks are more diffuse, informal, with less power and more diverse interests. So far as health policy is concerned, Wistow has stressed the role of 'professionalized networks', a network dominated by a single profession, in this case medicine. The dominant role of the medical profession is a theme in many health policy analyses, although there is little specifically on public health. 11

How do these schools of analysis manifest themselves for smoking policy? Archival material has been used to help make the 'journalist' case, and the history has been entwined with advocacy for current policy positions. British smoking policy provides examples in Peter Taylor's book, *Smoke ring*, and David Pollock's *Denial and delay: the political history of smoking and health*, 1951–1964: scientists, government and industry as seen in the papers at the Public Records [sic] Office. <sup>12</sup> Pollock's

<sup>&</sup>lt;sup>7</sup> M. Nicolson, 'Heterogeneity, emergence and resistance: recent work in the sociology of laboratory science', in G. Lawrence, ed., *Technologies of modern medicine* (London, 1994), pp. 111–19.

<sup>&</sup>lt;sup>8</sup> K. Dowding, 'Model or metaphor? A critical review of the policy network approach', *Political Studies*, 43 (1995), pp. 136–58; G. Jordan, 'Sub government, policy communities and networks: refilling the old bottles?', *Journal of Theoretical Politics*, 2 (1990), pp. 319–38; R. A. W. Rhodes, 'Policy networks: a British perspective', *Journal of Theoretical Politics*, 2 (1990), pp. 293–317.

<sup>&</sup>lt;sup>9</sup> J. J. Richardson and A. G. Jordan, *Governing under pressure: the policy process in a post-parliamentary democracy* (Oxford, 1979), p. 41; A. G. Jordan and J. J. Richardson, British politics and the policy process (London, 1987).

<sup>&</sup>lt;sup>10</sup> D. Marsh and R. A. W. Rhodes, eds., *Policy networks in British government* (Oxford, 1992); D. Marsh and R. A. W. Rhodes, 'Policy communities and issue networks: beyond typology', in Marsh and Rhodes, eds., *Policy networks*, pp. 249–68.

<sup>&</sup>lt;sup>11</sup> G. Wistow, 'The health service policy community: professionals pre-eminent or under challenge?', in Marsh and Rhodes, eds., *Policy networks*, pp. 51–74: C. Ham, *Health policy in Britain: the politics and organization of the National Health Service* (London, 1992); R. Klein, *The new politics of the National Health Service* (3rd edn, London, 2001).

<sup>&</sup>lt;sup>12</sup> P. Taylor, Smoke ring: the politics of tobacco (London, 1984); D. Pollock, Denial and delay: the political history of smoking and health, 1951–1964: scientists, government and industry as seen in the papers at the Public Records [sic] Office (London, 1999).

book covers the period of this article.<sup>13</sup> The chapter headings for the book present the interpretation of denial and delay. 'Chapter 1. Pressure for a government statement, 1951–1954; Chapter 2. Neutralizing the MRC findings 1954–1957. Chapter 3. Masterly inactivity, 1957–1961', and goes through to 'Chapter 6. The start of modern tobacco control, 1963–1964.' The framework here is one of delay and conspiracy, of heroes and villains, and represents the 'Whig history' of medicine, the assumption of value-free scientific truth, and the notion of progress towards a correct course of action. This is a dominant interpretation of smoking policy overall. In recent years activism in smoking has focused on archival work to a degree which has so far been little appreciated in the British historical profession. <sup>15</sup> Such work, using industry archives, has mainly researched policy making in the 1980s and 1990s in the US, Europe, and Asia and has tended to present a universal, American dominated history, with little appreciation of national policy differences or the changing objectives and strategies of policy over time.

Political scientists have also used the smoking story to illustrate the role of networks in policy making. One of the most extensive discussions of this point of view is in Melvyn Read's Ph.D. thesis and subsequent articles and book on the politics of tobacco. Read segments the smoking story into a case study of a 'producer network' of industry interests with links into allied government departments; and an 'issue network' of anti tobacco organizations and interests also with links into relevant government departments, chiefly health. Read uses an historical approach but proceeds primarily through published documentation and interviews to make the argument. In this analysis the science is taken as a given orthodoxy and the main focus is on the operation of what are seen as rival networks over time, concentrating on the years after 1971 rather than earlier. Other studies of smoking policy also take an 'interest group' approach. To

Historians can have an effect on the debates on evidence and policy through challenging the assumptions made by the political lobbies and refining the models

<sup>&</sup>lt;sup>13</sup> Pollock is the former director of the anti tobacco organization ASH (Action on Smoking and Health) and was commissioned to research and write the history after his departure from the organization. Interview with David Pollock by the author 11 Mar. 1999.

<sup>&</sup>lt;sup>14</sup> Contents page for Pollock, Denial and delay, p. vii.

<sup>&</sup>lt;sup>15</sup> For examples of this strong interest in history and its raw materials, see House of Commons Health Committee, Second Report, *The tobacco industry and the health risks of smoking*, 1: Report and Proceedings of the Committee (London, 1999–2000), 27–1, pp. lxxx–lxxxi; J. Collin, K. Lee, and A. B. Gillmore, 'Unlocking the corporate documents of British American tobacco: an invaluable global resource needs radically improved access', *Lancet*, 363, 29 May 2004, pp. 1746–7.

<sup>&</sup>lt;sup>16</sup> M. Read, 'The politics of tobacco' (Ph.D. thesis, Essex, 1989); M. Read, 'Policy networks and issue networks: the politics of smoking', in Marsh and Rhodes, eds., *Policy networks*; M. Read, *The politics of tobacco: policy networks and the cigarette industry* (Aldershot, 1996).

<sup>&</sup>lt;sup>17</sup> See for example, M. Calnan, 'The politics of health: the case of smoking control', *Journal of Social Policy*, 13 (1984), pp. 279–96; G. T. Popham, 'Government and smoking: policy making and pressure groups', *Policy and Politics*, 9 (1981), pp. 331–47. The most recent historical study, Matthew Hilton's *Smoking in popular British culture*, 1800–2000 (Manchester, 2000) has a brief study of post-1945 policy making. Its focus is mainly on the cultural implications of smoking and the cult of the 'liberal individual', which is discussed below.

through which social scientists present their case. The former operate from the perspective of the present: the models used by the latter fail to take account of complexity and of change over time. The case of smoking policy and its history in the 1950s and 1960s in the UK offers an opportunity to present a case study of such an historical contribution. Indeed it is imperative to do so, given the dominance of archivally based 'journalist' analyses of smoking policy compiled by researcher activists in recent years.

П

The early history of the smoking and lung-cancer connection is well known and has been recounted in a number of different histories. 18 Concern was roused by the gradual increase in the incidence of cancer; a change in the balance of the sexes, towards men; and the increasingly important role of lung cancer. The greatest increase in lung cancer came in males over forty-five, where the incidence increased sixfold between 1930 and 1945. At first it was thought that these changes might be due to improved diagnosis and better recording and registration. But work carried out by Sir Ernest Kennaway in the 1930s and published in 1947, a detailed examination of post mortem certificates, helped eliminate occupational and environmental factors. Kennaway pointed to a connection with cigarette smoking, but his work, based on statistical correlations, carried little weight. Laboratory studies also tended to support the connection. Research had also been undertaken before the war in Nazi Germany and by the American biometrician Raymond Pearl, for the insurance industry. There had been concern about the high incidence of cancer of the lung among workers in tobacco manufacturing. 19 The issue became more urgent post-war and discussions between the Ministry of Health (MH) and the Medical Research Council (MRC) led to the Council convening an informal conference on cancer of the lung in February 1947. The MRC agreed to initiate a large scale statistical study of the past smoking habits of those with cancer of the lung and of two control groups. Who would take the work forward was a matter of discussion: both the Social Medicine Unit under Professor Jerry Morris and Patrick Lawther, who subsequently ran the Air Pollution Unit at St Bartholomew's Hospital, were under consideration.<sup>20</sup> But it was the Statistical Research Unit at the London School of Hygiene and Tropical Medicine (LSHTM) led by Professor Bradford Hill which was chosen to carry out

<sup>&</sup>lt;sup>18</sup> For example, J. Austoker, *A history of the Imperial Cancer Research Fund, 1902–1986* (Oxford, 1988), pp. 186–99; C. Webster, 'Tobacco smoking addiction: a challenge to the National Health Service', *British Journal of Addiction*, 79 (1984), pp. 8–16.

<sup>&</sup>lt;sup>19</sup> G. D. Smith, S. A. Strobele, and M. Egger, 'Smoking and health promotion in Nazi Germany', *Journal of Epidemiology and Community Health*, 48 (1994), pp. 220–3; R. N. Proctor, *The Nazi war on cancer* (Princeton, 1999), pp. 173–247.

<sup>&</sup>lt;sup>20</sup> L. Berlivet, '"Association or causation?" The debate on the scientific status of risk factor epidemiology, 1947–c.1965', in Berridge, ed., *Making health policy*, pp. 39–74: Interview with Pat Lawther by Virginia Berridge and Suzanne Taylor, Feb. 2003.

the work and Dr Richard Doll was employed to work on the study. The results, published in the *British Medical Journal (BMJ)* in 1950, concluded that there was a 'real association' between carcinoma of the lung and smoking and that smoking was a factor, and an important one, in the production of carcinoma of the lung. Work by Wynder and Graham in the US had come to similar conclusions. Later studies carried out by Doll and Bradford Hill and by Cuyler Hammond and Horn in the US implicated cigarette smoking even further.

Charles Webster has shown in detail how the issue fared over the next seven years. 21 A written parliamentary answer from Ian Macleod as minister of health in February 1954 accepted that there was a connection but that it was not a simple one. 22 When the MRC issued its own report on smoking and lung cancer in June 1957 the MH adopted the argument more fully. The parliamentary secretary to the MH for the first time on 27 June 1957 expressed unambiguous support for the conclusions reached by Doll and Hill in 1950. Webster locates this sequence of events in the machinations of the powerful and complex advisory machinery which stood between the MRC and the MH. The main advisory body was the Cancer and Radiotherapy Standing Advisory Committee (SAC), reporting to the Central Health Services Council, which in turn advised the MH. Horace Joules of the Central Middlesex Hospital, a member of both bodies, was the only person within the advisory committee machinery consistently to press the issue. Palladino has recently related his stance to a continuing Christian Socialist tradition.<sup>23</sup> The initial government response focused on an MH circular encouraging local authorities to develop health education campaigns on smoking. Further action under the Labour government of the 1960s saw the banning of cigarette advertisements on television in 1965, and attempts by the Labour minister of health, the GP Kenneth Robinson, to introduce legislation to ban cigarette coupon schemes and to limit other forms of advertising. Health warnings on cigarette packets appeared in 1971. What issues lay behind the nature of the initial response in the 1950s and early 1960s? The response in the 1950s will be discussed separately from that in the 1960s when new factors came into play.

## III

The initial response to the putative link between smoking and lung cancer came at a time of reorientation in post-war public health and in modes of investigation. The medical officer of health in local government, once perceived as the potential linchpin of the coming state-funded health service, had been downgraded by the establishment of the hospital and GP dominated National Health Service (NHS).

<sup>&</sup>lt;sup>21</sup> Webster, 'Tobacco smoking addiction'.

 $<sup>^{22}</sup>$  Hansard, Parliamentary Debates, 12 Feb. 1954, 523, cols. 173–4, written answer from Ian Macleod, minister of health.

 $<sup>^{23}</sup>$  P. Palladino, 'Discourses of smoking, health, and the just society: yesterday, today, and the return of the same?', <code>Social History of Medicine</code>, 14 (2001), pp. 313–35.

At a broader level, the nature of health problems was changing. It was chronic rather than epidemic or infectious disease which was to dominate, and chronic disease epidemiology would emerge as the primary technical tool for the study of such conditions within populations. The social medicine movement, which had been important both before and during the war as a possible 'new avenue' for medical practice, was changing its emphasis in the 1950s to a reliance on chronic disease epidemiology. This epidemiological technique was to become the foundation of a 'new public health' in the 1960s and 1970s when public health practitioners were relocated in health services, moved out of the local authorities where they had established their pre-war empires. <sup>24</sup> Jerry Morris's key text, *Uses of* epidemiology, published in 1957, set the tone for the emergence of the new scientific approach and the new role for public health (to be known as community medicine); the text used smoking extensively as its exemplar.<sup>25</sup> The fluidity of the smoking science was thus embedded in a more general period of reorientation both within public health and in the ideology and the technical tools of the field. The 1950s and 1960s were also a period when science emerged as an international enterprise. The post-war establishment of the World Health Organization (WHO) was important as a mechanism for the cross national transfer of ideas and concepts in health, and for the development of internationalism in science, building, to some degree, on earlier attempts through the pre-war League of Nations. British and American researchers and scientists began to become more aware of each other's work in these years.

The 1950s thus saw a fluid policy situation and the government response was conditioned by a number of factors, not all of them directly smoking related. The nature of the evidence which the epidemiological studies presented in the 1950s has been much discussed by historians in recent years in ways which have drawn on both the science studies and the 'delay and blame' frameworks. Debates over the American response to smoking/lung cancer research illustrate these arguments. In the American context, Allan Brandt and John Burnham have seen the smoking/lung cancer 'discovery' and subsequent events as a watershed in the acceptability of chronic disease epidemiology to provide legitimate forms of scientific explanation; this was a major paradigm shift towards epidemiology and statistical modes of explanation and causation at the expense of laboratory science. He has related the discussions, in the US context, to the politics of the National Institutes of Health in the 1950s and to

<sup>&</sup>lt;sup>24</sup> For discussion of these changes, see J. Lewis, What price community medicine? The philosophy, practice and politics of public health since 1919 (Brighton, 1986); D. Porter, ed., Social medicine and medical sociology in the twentieth century (Amsterdam, 1997); V. Berridge, 'Jerry Morris', International Journal of Epidemiology, 30 (2001), pp. 1141–5.
<sup>25</sup> J. Morris, Uses of epidemiology (Edinburgh, 1957).

<sup>&</sup>lt;sup>26</sup> A. Brandt, 'The cigarette, risk and American culture', *Daedalus*, 119 (1990), pp. 155–76; J. Burnham, 'American physicians and tobacco use: two surgeons general, 1929 and 1964', *Bulletin of the History of Medicine*, 63 (1989), pp. 1–31.

controversy between biostatisticians and epidemiologists.<sup>27</sup> Talley et al. have argued that there was a legitimate scientific controversy over smoking and lung cancer in the 1950s and early 1960s which reached its denouement and codification in the surgeon general's report of 1964.<sup>28</sup> However, these historical positions have been complicated by the involvement of historians in the litigation through which US smoking policy primarily proceeds. Brandt, for example, has modified his position recently to place great stress on the role of the tobacco industry, in legal testimony given on behalf of anti-tobacco interests.<sup>29</sup>

The American story was part of the internationalization of science in the 1950s. In the 1940s Hill and Doll were not aware of the parallel research being carried out by Wynder and Graham, but in the 1950s contacts between British and American epidemiologists developed rapidly. There were national differences in the process of consolidation of the science, for example in terms of opposition to the smoking and lung cancer hypothesis. One key opponent was the statistician Ronald Fisher, who had played a central role in the development of the RCT.<sup>30</sup> Ronald Fisher has been criticized because of his role as adviser to the Tobacco Manufacturers Standing Committee, set up in 1956 to assist research. In addition, his eugenic worldview subsequently became unfashionable as a mode of statistical explanation, although it was a dominant position at the time. Recent evidence has thrown more light on the nature of this controversy. Fisher's opposition arose in part from statistical issues: correlation should not be taken as proof of causation. But it also emanated from his libertarian views, which meant that he was strongly against anti-smoking publicity. He thought people should be given the data and draw their own conclusions; he criticized Doll and Hill only after an article in the BM7 had stated that people should be discouraged from smoking.

<sup>&</sup>lt;sup>27</sup> M. Parascandola, 'Cigarettes and the US Public Health Service in the 1950s', *American Journal of Public Health*, 91 (2001), pp. 196–205; idem, 'What is an epidemiologist? Biostatistics and epidemiology at the National Cancer Institute', unpublished manuscript; idem, 'Skepticism, statistical methods and the cigarette', *Perspectives in Medicine and Biology*, 47 (2004), pp. 246–61.

<sup>&</sup>lt;sup>28</sup> C. Talley, H. I. Kushner, and C. E. Sterk, 'Lung cancer, chronic disease epidemiology, and medicine, 1948–1964', *Journal of the History of Medicine and Allied Sciences*, 59 (2004), pp. 329–74.

In a legal case against the Philip Morris tobacco company his testimony argues that in the US scientific consensus about the smoking and lung cancer relationship was reached without a doubt in the mid-1950s and that controversy was only kept alive by the tobacco companies; these focused on public relations activity to keep the controversy going. United States District Court for the District of Columbia, United States of America versus Philip Morris USA INC., United States written direct examination of Allan M. Brandt, Ph.D. http://www.usdoj.gov/civil/cases/tobacco2/20040920%20Allan%20M%20Brandt%20Ph.D520Written%20Direct.pdf Accessed 23 Nov. 2004. Talley and Kushner have worked for the tobacco industry defence law firms but have withdrawn their support for US industry legal positions and declare in their article that it is not intended to provide any support for the industry's legal case.

<sup>&</sup>lt;sup>36</sup> R. A. Fisher, 'Dangers of cigarette smoking', *BMJ*, 2 (1957), p. 43. In the same volume, see also idem, 'Alleged dangers of cigarette smoking', pp. 297–8; idem, 'Lung cancer and cigarettes', *Nature*, 182 (1958), p. 108; idem, 'Cancer and smoking', *Nature*, 182 (1958), p. 596; idem, *Smoking, the cancer controversy: some attempts to assess the evidence* (Edinburgh, 1959); J. B. Fisher, *R. A. Fisher: the life of a scientist* (New York, 1978).

This view of what was termed 'propaganda' was common at the time and informed the early health education responses. $^{31}$ 

The issue of inhalation also divided the researchers, since, paradoxically, it seemed that fewer smokers who inhaled developed lung cancer. There were threats of libel. Bradford Hill had offered data to Fisher from the 1952 study he and Doll had carried out, but not from the 1950 study. Fisher accused the researchers of suppressing evidence. This controversy was played out in a number of publications and also taken up by other authors. The closure of scientific controversy on the issue of causation came finally through Bradford Hill's postulates, published in 1965 when Hill was president of the section of Occupational Health of the Royal Society of Medicine. Hill had first begun to develop the criteria for cause and effect and association in the late 1930s and had expanded them in a lecture at Harvard in the 1950s. Their publication in the 1960s formalized guidelines for causal inference and marked the closure of the main period of controversy. In a recent paper, Luc Berlivet has taken the British story and looked at the controversy surrounding smoking and lung cancer and its key role in the formation of the modern science of epidemiology. He argues that

there was more to criticism of supporters of the 'causal hypothesis' than just a reaction of rear guard scientists and vested interests plotting to undermine a promising, if young, scientific practice ... The controversy stirred up by the publications on the relationship between tobacco and lung cancer was eventually transformed into a highly positive retrospective story. This is a process which reminds us of other famous episodes of 'discovery' in the history of science.<sup>34</sup>

This scientific debate had an effect on the policy response of civil servants and others in government. After the publication of the second Doll and Hill report in December 1952, the Imperial Tobacco Company, the main British tobacco company, entered the fray and papers from both sides were circulated to the SAC in February 1953. As a result, the conflicting evidence, from Doll and Hill and from Geoffrey Todd, assistant manager in the statistical department of the Imperial Tobacco Company, was submitted to a committee chaired by the government actuary, Sir George Maddox, later that year. The civil servants in the MH were uncertain. Sir John Charles, the chief medical officer (CMO), told Percy Stocks, chief medical statistician to the Registrar General's Office, 'As regards the evidence, I am in general agreement with what you say, but what I

 $<sup>^{31}</sup>$  V. Berridge and K. Loughlin 'Smoking and the new health education, 1950s to 1970s', American Journal of Public Health, 95 (2005), pp. 956–64.

<sup>32</sup> This was the view at the time, although subsequently it was shown that all cigarette smokers inhaled, even if unconsciously. Thanks to Walter Holland for a comment on this point.

<sup>&</sup>lt;sup>33</sup> This sequence of events is detailed in I. Chalmers, 'Fisher and Bradford Hill: theory and pragmatism?', *International Journal of Epidemiology*, 32 (2003), pp. 922–48, the proceedings of a conference which included recollections from Walter Bodmer, Fisher's ex student and Sir Richard Doll. This evidence emerged in response to a question from the author of this article and was subsequently elaborated by research in the Fisher papers carried out by Peter Armitage and Ian Chalmers.

<sup>&</sup>lt;sup>34</sup> Berlivet, "Association or causation?".

was looking for was evidence apart from the analogous or purely statistical. So far as I am aware, there is no *purely* pathological evidence of this long incubation period in lung cancer.'<sup>35</sup> Neville Goodman, an MH civil servant, cited in an internal minute the tobacco industry's opposing research report, the failure of attempts to show a carcinogen in tobacco, and other causes of the rise in lung cancer such as smoke pollution. <sup>36</sup> Doubts about the scientific objectivity of Wynder, who visited the Ministry in 1953, also compounded the issue.

He is a young man 'far gone in enthusiasm' for the causal relationship between tobacco smoking and lung cancer. (I had been told when I was in New York this spring that he was the son of a revivalist preacher and had inherited his father's antipathy to tobacco and alcohol). The American Cancer Society was very suspicious of his early work for this reason.<sup>37</sup>

The statistical panel reported in November 1953, and found that a 'real association' had been established, with a 'strong presumption' that the real association was causal. It might also be dependent on co-factors such as the urban-rural difference, occupational matters, and so on, and the report therefore treated with great reserve the death rates which had been calculated by Doll and Hill through a section on estimated risks in the 1952 paper. The SAC accepted this conclusion, recommending that young people should be warned about the risks of smoking. The government assessment of the state of scientific opinion was beginning to become clearer, and it was this development in opinion which led to the first MH statement in the House of Commons in February 1954, followed by a press conference. Macleod as minister of health made a statement but promised no further action; there was a need for further research.<sup>38</sup> Macleod's statement was made as a written parliamentary answer. He chain-smoked his way through the subsequent press conference, but subsequently gave up his sixty a day habit in favour of two or three small cigars a day. 39 The parliamentary discussions of the time show similar fluidity in the political appreciation of the health risk. In an adjournment debate held in March 1953, MPs from across the political spectrum expressed uncertainty or opposition. Harmar Nicholls, Conservative MP for Peterborough, expressed the then common view of the dangers of arousing 'cancer phobia': the fear of cancer could be worse than cancer itself. The report 'is more a report of statisticians than a medical report'. Bessy Braddock, Labour MP for Liverpool Exchange, drew attention to the urban-rural divide in the figures and favoured an environmental explanation. 'In view of the fact that

<sup>&</sup>lt;sup>35</sup> Sir John Charles to Percy Stocks, 18 Feb. 1953, London, National Archives, Ministry of Health papers (NA/MH), MH55/1011.

<sup>&</sup>lt;sup>36</sup> Minute from Neville Goodman to Mr Gregson, 12 Mar. 1953, London (NA/MH), MH55/1011.

<sup>&</sup>lt;sup>37</sup> Note by Goodman to Gregson, 28 Oct. 1953, London (NA/MH), MH55/1011.

<sup>&</sup>lt;sup>38</sup> Smoking and lung cancer, report of the statistical panel appointed by the CMO, MH, 6 Nov. 1953; minutes of Standing Advisory Committee, 22 Dec. 1953; draft memorandum to cabinet Home Affairs Committee, 26 Jan. 1954, London (NA/MH), MH55/1011.

<sup>&</sup>lt;sup>39</sup> R. Shepherd, Ian Macleod (London, 1994), pp. 91–3.

cigarette and pipe smoking goes on all over the country, it is folly to say that it is the main cause of lung cancer. $^{40}$ 

Expert opinion was related to another issue: the role of the tobacco industry. Here there had been a long history of co-operation in Britain . Tobacco was a key import during the Second World War and its duty a major source of government revenue. During the war the industry had been under strict government control and the Board of Trade appointed Sir Alexander Maxwell, who before the war had been a leading leaf merchant, as tobacco controller. The industry, in its relationships with government, was different to the US tobacco industry, which had no such continuing corporate tradition. 41 Both Maxwell and Sir John Partridge of the Imperial Tobacco Company had close and continuing access to government. Imperial dominated the industry/government relationship in the UK until the late 1970s. The Imperial Board had been astonished by the Doll/Hill studies and saw its role as working with government, as it had done during the war, this time to produce a cleaner product. The US industry, by comparison, was distant from government, and concentrated from the start on public relations exercises to counteract the perceived dangers of smoking. 42 In the late 1970s, with changes in the ownership of the industry, Imperial's dominance faltered and the role of the US companies in the UK became more significant. 43 But in the 1950s the close relationship with government was marked by efforts to deal with the health issue.

The industry provided another source of scientific expertise, in particular through its own statistician, Geoffrey Todd, whose report had been submitted to the SAC. The industry also planned to fund research, and had approached both the MRC and the MH in 1953. Sir Alexander Maxwell, chairman of the Tobacco Advisory Committee, in a secret memo to Harold Himsworth, secretary of the MRC, stated his lack of belief in any true association between smoking and lung cancer. In order to investigate the true causes of lung cancer the committee wished to covenant £250,000 over a period of seven years. Discussions between the Treasury and the MH resulted in a compromise whereby the tobacco company's gift was to the government, which would then allocate it to the MRC. This avoided charges of the impropriety of the Council accepting money from an interested body. The gift was for research into smoking and lung cancer, but also

<sup>&</sup>lt;sup>40</sup> Hansard, Parliamentary Debates, 19 Mar. 1953, lung cancer (smoking) adjournment debate, cols. 333–50.

<sup>&</sup>lt;sup>41</sup> B. W. E. Alford, W. D. and H. O. Wills and the development of the U.K. tobacco industry, 1786–1965 (London, 1973), pp. 399–428.

<sup>&</sup>lt;sup>42</sup> Brandt's legal testimony gives much detail on this public relations stance. United States District Court for the District of Columbia, United States of America versus Philip Morris USA INC., United States written direct examination of Allan M. Brandt, Ph.D. http://www.usdoj.gov/civil/cases/tobacco2/20040920%20Allan%20M%20Brandt%20Ph.D520Written%20Direct.pdf. accessed 23 Nov. 2004.

<sup>&</sup>lt;sup>43</sup> V. Berridge and P. Starns, 'The "invisible industrialist" and public health: the rise and fall of "safer smoking" in the 1970s', in V. Berridge and K. Loughlin eds., *Medicine, the market and the mass media: producing health in the twentieth century* (London, 2005), pp. 172–91.

into the means of removing the harmful elements from the tobacco, when they were identified. This was the origin of a long programme of 'product modification' research which was of particular significance in the 1970s and also fuelled the work on nicotine carried out in the 1980s and 1990s. The gift was to be made, so John Boyd Carpenter at the Treasury wrote to the lord president, the marquess of Salisbury, for research into smoking and lung cancer, and 'presumably of the means of removing the elements in the tobacco which may have this effect'. 44

A visit paid to Europe by Dr C. C. Little in 1956 to survey the state of play on tobacco research and funded by the Tobacco Industry Research Committee, an American industry organization, provided an outsider's view of the relationships between the British industry and government. This again differentiated the British and US industries. In the US the industry took a public relations stance from the outset with a view to defence of future legal actions. 45 But the British industry, Little reported, had no knowledge at all of what had been funded from its MRC benefaction; industry was not seeking to influence the course of research. During his visit, Dr Little moved easily between the scientific cancer research community, the MH, where he met the CMO, Sir John Charles, and the Imperial Tobacco company offices and laboratories in Bristol. He advised the British industry that it should follow the US model and set up a co-ordinating committee to fund research. His idea was that it could be an MH advisory committee. In the event the manufacturers set up in 1956/7 the Tobacco Manufacturers Standing Committee, subsequently renamed the Tobacco Research Committee, which opened its own laboratories in Harrogate in 1962 after the MRC benefaction had come to an end. The industry did not make a secret of its connections and referred to the US industry research committee in its first published report.46 There was criticism of the US industry from the British side, which was uneasy with the American industry's public relations approach. 47

The tobacco industry connection was also a concern for government because of the revenue implications. In February 1954 Macleod as minister of health made a statement to the Commons which relayed the advice given by the SAC. This statement was made, as Herbert Brittain of the Treasury put it, 'in language which was in no way dangerous or embarrassing to us from the revenue point of view'. Macleod himself had commented with cheery cynicism in a letter to Boyd Carpenter at the Treasury in January 1954, 'we all know that the Welfare State and much else is based on tobacco smoking'.<sup>48</sup> Tobacco tax was an important

<sup>&</sup>lt;sup>44</sup> Letter from John Boyd Carpenter to marquess of Salisbury, 8 Feb. 1954, London (NA/MH), MH55/1011.

<sup>&</sup>lt;sup>45</sup> Little to Hartnett, 25 Apr. 1956, Council for Tobacco Research Collection http://legacy.library.ucsf.edu/cgi/getdoc?tid=dqfiaaoo&fmt=pdf&ref=results.

<sup>&</sup>lt;sup>46</sup> Tobacco Manufacturers Standing Committee, *First annual report for the year ended 31 May 1957*, refers to the close links with the US Tobacco Industry Research Committee, pp. 3–4.

<sup>&</sup>lt;sup>47</sup> Duncan to Hartnett, 15 May 1956, Council for Tobacco Research Collection, http://legacy.library.usf.edu/cgi/getdoc?tid=xpf1aaoo&fmt=pdf&ref=results.

<sup>&</sup>lt;sup>48</sup> Letter from Ian Macleod to John Boyd Carpenter, 29 Jan. 1954, London (NA/MH), MH55/1011.

part of government revenue (16 per cent of central revenue in 1950) and signs of further movement on the causal hypothesis later in the 1950s evoked Treasury anxiety. A supplementary answer given by Robin Turton from the MH on 5 March 1956, where he said there was a causal connection, brought forth enquiries from the Treasury; had there been more developments since 1954? Sir John Hawton, the MH permanent secretary, replied soothingly,

needless to say, we are very conscious of the close Treasury interest in this subject and that is one of the things which governs the guarded sort of statements which we have so far made ... If there is any question of our being driven to say more than we already have on this subject, we shall of course only do it in consultation with you or your people ... I have a strong feeling that we are going to be put under more and more pressure to give more positive warnings to the public – and particularly from our own Central Health Services Council and its Medical Committee ... Until then I don't think there is anything we need do and I think that the best policy is to keep the subject as quiet as we are allowed to. <sup>49</sup>

But the matter was not allowed to remain quiet. It was referred to the full cabinet, where it was decided that Turton should make a restrained statement in the Commons. Macmillan as chancellor of the Exchequer wanted this held back until after the budget. His diary entry for 19 April 1956 read, 'Cabinet 11.45, Singapore, British Guiana; medical views on the dangers of smoking. If we lose Singapore, it's a terrible blow to all our Far Eastern interests. If people really think they will get cancer of the lung from smoking it's the end of the Budget!'50 Politicians at this period were generally cynical about the whole smoking issue, apart from its economic implications. Macleod told a House of Commons questioner who wanted an American report on smoking and lung cancer published as a White Paper, that dozens of reports, all claiming to be authoritative, were being published. 'If my hon. Friend is a heavy smoker and is concerned about the connection between cancer of the lung and smoking, I would recommend him to give up reading.'51 Macmillan commented about the statement to be made in 1956 by the minister of health, 'Cabinet approved a statement to be made by the Minister of Health about Tobacco and cancer of the lung. It was a much better draft than the original one. I only hope it won't stop people smoking!'52

Economic issues were not the only political consideration. Smoking was politically difficult for government, but so too was air pollution, with which the smoking—lung cancer issue intersected. The issue was also scientifically contentious. The text of a TV broadcast on the subject in 1953 after publication of the Doll/Hill research on smoking and lung cancer in 1950 gives a sense of the focus on both individual and environment. Introduced by Charles Fletcher,

Sir John Hawton to Hubert Brittain, Treasury, 15 Mar. 1956, London (NA/MH), MH55/2232.
 H. Macmillan, The Macmillan diaries: the cabinet years, 1950–1957, entry for 19 Apr. 1956, ed.
 P. Catterall (London, 2003), p. 551.
 Hansard, Parliamentary Debates, 15 July 1954.

Macmillan, Diaries, entry for 23 May 1956, p. 556.

later famous for his pioneering *Your life in their hands*, the programme was called *Matters of medicine*. <sup>53</sup> Dr Guy Scadding, taking part, expressed the views clearly:

smoking cannot be called the cause of lung cancer, since non-smokers also get the disease, and moreover the increase in cigarette smoking is not likely to be the only cause of the increase in the lung cancer death rate. The effect of smoking cannot explain the difference in mortality between town and country dwellers. Perhaps the effect of air pollution is another factor. If the effects of smoking and general pollution of the air ... reinforce each other, I think that most of the known facts about the incidence of lung cancer can be explained.<sup>54</sup>

This scientific uncertainty also caused difficulties at the political level, in the negotiations which took place in 1957 between the cabinet committee on cancer of the lung, which was appointed in that year, and the MRC, which planned to issue a statement on the causes of lung cancer. The minutes of the cabinet committee show that both the potential of the smoking issue and the issue of air pollution included in the MRC draft statement were matters of alarm – but that air pollution was more central.

The MRC, so it was reported to the cabinet committee, had for the first time come to the conclusion that the smoking of tobacco had a direct causal relationship to lung cancer and therefore there was no alternative but to publicize their conclusions. It was the proposed inclusion in the MRC statement that up to 30 per cent of lung cancer might be caused by air pollution which caused the greatest political alarm. This would give air pollution, the minutes record, 'unwarranted prominence'. The committee thought that Professor Bradford Hill and Dr Doll had failed to show any substantial difference in risk among nonsmokers in greater London and in rural areas. So the politicians asked the MRC to re-examine their statement. Both statements, so it was commented, had obvious political implications.<sup>55</sup> On 31 May 1957, Lord Home, the lord president of the council (responsible for the MRC), reported back on the changes made in the statement. The MRC had re-examined their draft and proposed to modify the references to atmospheric pollution which implied that it might be responsible for up to 30 per cent of such deaths. The section would read instead, 'on balance it seems likely that atmospheric pollution plays some part in causing the disease, but a relatively minor one in comparison with cigarette smoking'. A further section was modified to read, 'A proportion of cases, the exact content of which

<sup>&</sup>lt;sup>53</sup> For the significance of this programme, see K. Loughlin, ""Your life in their hands": the context of a medical-media controversy', *Media History*, 6 (2000), pp. 177–88.

<sup>&</sup>lt;sup>54</sup> Matters of medicine, 3, 12 Jan. 1953. In an interview, Dr Scadding later recalled how Doll had put him up to make this broadcast because he did not want to do it. Scadding was the 'respectable front', a comment which indicates the status of issues round this scientific claim. Guy Scadding, interview with Sir Gordon Worstenholme, London, Royal College of Physicians (RCP), RCP/Oxford Brookes video interview collection.

<sup>&</sup>lt;sup>55</sup> Minutes of first meeting of the cabinet committee on cancer of the lung, 7 May 1957, London, National Archives, cabinet papers (NA/CAB), CAB 130/127/GEN 588.

cannot yet be defined, may be due to atmospheric pollution. <sup>56</sup> The pollution issue was effectively headed off. The 1956 Clean Air Act, passed after the great London smog of 1952, was just on the statute book, but had been widely criticized for failing to deal with industrial pollution and for only dealing with smoke. <sup>57</sup> This episode showed that, although government was wary about the smoking and lung cancer case as a policy issue, it was infinitely preferable to air pollution. That was the issue which government did not want reopened. <sup>58</sup>

The politics of health education funding and control were also involved. Health education had traditionally been conducted by the Central Council for Health Education (CCHE) established in 1927, the successor to the British Social Hygiene Council, the interwar voluntary body which had conducted health education campaigns. During the war publicity had been a central responsibility of the Ministry of Information but after the war responsibility was again passed back to the local authorities who were to rate-fund the CCHE's work. Central government had no wish to resume funding of these activities as discussions of smoking publicity made clear. <sup>59</sup> But there were also other reasons why there was reticence about health education. An MH statement in May 1956 explained why central publicity would not be the right thing.

The considerations on publicity concerning smoking and lung cancer differ slightly from those on cancer publicity generally in that the special point – that people might give up smoking – is not a matter of reporting symptoms. It does however concern an individual decision which involves others to a very much smaller extent than the subjects of past central public health campaigns.  $^{60}$ 

Smoking, it argued, was not a 'disease' in the way cancer or indeed infectious disease was. It might lead to disease, but not for many years. The notion of long-term 'risk', as we have seen, was not yet central to public health in the 1950s. Publicity would be asking people to curtail a habit which was deeply embedded in everyday culture. It might also raise public fear about cancer, which the Ministry

<sup>&</sup>lt;sup>56</sup> Memorandum by secretary of state for commonwealth relations and lord president of the council, 31 May 1957, London (NA/CAB), CAB/130/127/GEN 588.

<sup>&</sup>lt;sup>57</sup> R. Parker, 'The struggle for clean air', in P. Hall, H. Land, R. Parker, and A. Webb, eds., *Change, choice and conflict in social policy* (London, 1975; repr. Aldershot, 1988), pp. 371–409. See also Roy Parker's comment and oral history in the transcript of the witness seminar on the smog of 1952 in www.lshtm.ac.uk/history. V. Berridge and S. Taylor, eds., *The big smoke: fifty years after the 1952 London smog* (London, 2005).

<sup>&</sup>lt;sup>58</sup> In 2002, at a conference of European environmental epidemiologists held on the fiftieth anniversary of the 'great London smog' members of the audience informed the author that it was almost impossible to research air pollution and lung cancer because it would be seen as undermining the smoking and lung cancer case. This was not an issue of government funding, rather the 'climate of opinion' about research priorities which prevented such initiatives.

<sup>&</sup>lt;sup>59</sup> Public health propaganda; smoking and lung cancer: publicity policy, 1957–1960, London (NA/MH) MH55/2203.

<sup>&</sup>lt;sup>60</sup> Tobacco smoking and cancer of the lung, brief for adjournment debate, 1 Mar. 1957, London (NA/MH), MH55/2220.

had been concerned to damp down. Unfounded cancer phobia might generate a demand for services at a time when NHS costs were becoming a political issue.<sup>61</sup>

Conservative politicians were concerned about the implied role of the state. R. A. Butler, lord privy seal, commented in May 1956, 'From the point of view of social hygiene, cancer of the lung is not a disease like tuberculosis; nor should the government assume too lightly the odium of advising the general public on their personal tastes and habits where the evidence of the harm which may result is not conclusive. '62 This is a theme which emerged consistently throughout the political discussions. Politicians were worried about the implications of the 'nanny state'. As the minutes of the cabinet committee on smoking record, 'The Government should not seek to intrude into the sphere of an individual's personal responsibility. It was however, important to stress this element of personal choice since direct government action was excluded. '63 The focus was also quite different from traditional public health campaigns. One civil servant pointed out that any campaign would have to be directed to men (who were the majority of smokers) rather than women and children who were the more usual objects of public health attention. 64 It was much easier on many political grounds to leave this to the local authorities.

Lying behind this discussion was the cultural normality of smoking and its embedding in a range of social customs and practices. This was far from the simple continuation of the liberal individualism of the gentlemanly culture of smoking which Hilton has ascribed to this period. 65 Tobacco tokens for old age pensioners were issued by government in the 1950s. Smoking was also a crossclass activity with its own rituals. The public health researcher Walter Holland recalled that for many years after the smoking/lung cancer research had been published, Bradford Hill would keep a box of cigarettes in his room at LSHTM. When Holland asked him why this was so, Hill was incredulous; it would be impolite not to offer visitors a cigarette. 66 Norman Brook as cabinet secretary was equally amazed at a suggestion that government should set trends. 'Does this mean that Prime Ministers should not smoke - or at least should not be seen smoking in public?' he wrote in amazement in 1962.<sup>67</sup> In the 1970s, when the researcher Nicholas Wald wished to trace the changes in tar levels in cigarettes since the 1940s, he was deluged with cigarette stubs and cigarette cases containing tobacco which grieving widows had kept as mementoes of their dead husbands. 'His last cigarette' had a cultural significance which has become 'hidden from

<sup>&</sup>lt;sup>61</sup> E. Toon, 'Cancer education in the 1950s', paper given at the National Institutes of Health conference on cancer, Nov. 2004, forthcoming in the *Bulletin of the History of Medicine*.

<sup>&</sup>lt;sup>62</sup> Memorandum by lord privy seal, 1 May 1956, London (NA/MH), MH 55/2232.

 $<sup>^{63}</sup>$  Minutes of second meeting of cabinet committee on cancer of the lung, 3 June 1957, London (NA/CAB), CAB 130/127/GEN 588.

Minute to Mr Pater on new Medical Research Council statement, 1 Apr. 1957, London (NA/MH), MH 55/2220.
 Hilton, Smoking in British popular culture, p. 234.

<sup>&</sup>lt;sup>66</sup> Interview with Walter Holland by Virginia Berridge, 6 Mar. 1997.

<sup>67</sup> Norman Brook to Prime Minister, 11 July 1962, London (NA/CAB), CAB 21/4878.

history' with the subsequent marginalization of smoking.<sup>68</sup> The cultural aspects of post-war smoking have been surprisingly little researched.<sup>69</sup> For the Labour government of the 1960s these had political implications which will be discussed below. Thus policy in the 1950s was being formed in a very different political and social climate to that which operated later on. As Doll himself stated in evidence to the Commons Health Committee in 1999–2000,

In retrospect, it may be surprising that resistance to the idea that smoking caused so much disease was initially so strong. Three factors, at least, contributed to it. One was the ubiquity of the habit, which was as entrenched among male doctors and scientists as among other men and had dulled the sense that tobacco might be a major threat to health. Another was the novelty of the epidemiological techniques, which had not previously been applied to any important extent to the study of non-infectious disease. The findings were consequently undervalued as a source of scientific evidence. A third was the primacy given to Koch's postulates for determining causation. The evidence that lung cancer also occurred in non-smokers was consequently taken to show that smoking could not be the cause and the possibility that it might be a cause was inappropriately doubted. The manner in which lung cancer was linked to smoking was not, however, unique. All the other major diseases related to smoking were found to be so by epidemiological enquiry and laboratory evidence of physiological effects that provided plausible mechanisms by which smoking might cause them was obtained only later and, in some instances, is still awaited. <sup>70</sup>

## IV

The policy environment began to change in the 1960s. There was 'pressure from without', and there was an incipient policy lobby or policy community on the issue which linked medical or public health interests within government with medical interests outside. Within government there was political rethinking of the issue, although the electoral arguments still remained strong, even for the Labour government of the 1960s. Above all, a 'new public health' for which smoking was the central issue, was beginning to consolidate. Even before the Royal College of Physicians (RCP) published its first report on smoking in 1962, there were some signs of change. Pressure came from Scotland and also from the international level. Scotland, in this as in other health issues, was often a catalyst for developments in British health policy more generally. Edinburgh carried out an active

<sup>&</sup>lt;sup>68</sup> Interview with Nicholas Wald by Virginia Berridge, 4 July 1996.

<sup>&</sup>lt;sup>69</sup> Rosemary Eliot of the University of Glasgow has been carrying out oral history interviews with men and women smokers: *Women and smoking since 1890* (forthcoming). Other evidence comes from research carried out by social scientists, for example the pioneering and controversial research by Hilary Graham on lone mothers smoking: 'Women's smoking and family health', *Social Science and Medicine*, 25 (1987), pp. 47–56.

<sup>&</sup>lt;sup>70</sup> Sir R. Doll, 'Tobacco: a medical history', appendix 1, memorandum by Health Education Authority, minutes of evidence taken before the Health Committee, 18 Nov. 1999, p. 26, House of Commons, session 1999–2000, Health Committee, Second Report, *The tobacco industry and the health risks of smoking*, II: Minutes of Evidence and Appendices (London, 2000) 27–II.

The impact in the 1980s of HIV/AIDS on British drug policy is another such example.

health campaign about smoking in 1959, organized by the City Corporation in response to the MH circular. The impact of the campaign was assessed by the social survey researchers, Ann Cartwright and Fred Martin, newly arrived with John Brotherston from LSHTM. Pressure came from the Scottish Office for a more effective health education campaign and more extensive government action. In June 1961 a memorandum was sent from the Scottish Office which stressed the high and rising incidence of lung cancer in Scotland and criticized government policy. Two main policy options were identified: a campaign directed at children and young people; and one directed at the whole population followed by an increase in the tax on cigarettes. The Scottish Office favoured the latter option although recognizing that this would be a new departure in health policy, one area of several where the public had to be induced to exercise personal self-restraint.<sup>72</sup> Policy models were also being developed at the international level. In 1959 the relatively newly established WHO published a report on the Epidemiology of Cancer of the Lung, the report of a study group in Geneva in November of that year, chaired by Doll. This confirmed smoking as a major cause of lung cancer and downgraded air pollution. The model of 'policy transfer' is perhaps appropriate here, the transfer of models developed in other countries (Scotland) or at the transnational level into national policy.<sup>73</sup>

At the same time a 'policy lobby' was emergent on smoking, developing as a 'policy community' in the way in which Jordan and Richardson have delineated the concept with links into government. In the 1950s, there had been no real interest group or 'policy community' on the issue. Apart from key individuals like Joules, no significant lobby was pushing the anti-smoking case, nor indeed was there any consistent policy position. The researchers themselves were not activists in this cause. Although Bradford Hill had worked within government during the war, he had advised Doll that it was best to steer clear of the political dimensions of the research. It was his view that a young researcher's career could be tainted by an apparent lack of scientific objectivity. Doll's socialist convictions were known and he remained a member of the Communist Party until 1957. Hill remarked towards the end of his life that he had made Doll passionate about statistics as a replacement for left-wing politics.

In the 1960s smoking became emblematic of a new role for medicine as the defining voice in the delineation of health risk in post-war British society. George Godber as deputy CMO was an important 'inside' influence. He was quietly encouraging Charles Fletcher to take the issue through the Royal College as a

<sup>&</sup>lt;sup>72</sup> Memorandum from Scottish Office, 23 June 1961 (NA/MH), MH55/2227.

<sup>&</sup>lt;sup>78</sup> For discussion of policy transfer, see R. Rose, 'Ten steps in learning lessons from abroad', discussion paper number 1 for ESRC Future Governance initiative, lessons from comparative public policy, 2001.

<sup>74</sup> Jordan and Richardson, *British politics*, p. 33.

<sup>&</sup>lt;sup>75</sup> 'Conversation with Sir Richard Doll', *British Journal of Addiction*, 86 (1991), pp. 365–77; interview with Sir Richard Doll by Max Blythe, Dec. 1986, RCP/Oxford Polytechnic video archive.

<sup>&</sup>lt;sup>76</sup> Letter from Chris Birch, the secretary of Doll's Communist Party branch, *Guardian*, 27 July 2005.

<sup>&</sup>lt;sup>77</sup> Interview with Bradford Hill by Max Blythe, 1990, RCP/Oxford Polytechnic video archive.

way of exerting external pressure on government.<sup>78</sup> The need for an outside 'policy lobby' was widely recognized in the Ministry. In part this was a way of convincing the CMO, Sir John Charles, who was reluctant to act, but also for wider reasons, as a way of giving the issue a significance which it might not otherwise have. Godber wrote to Goodman in July 1961, 'I am convinced that a considerable increase in price would do more than anything else to cut down consumption but that the pressure to do this should come from unattached scientific bodies from the weight of the medical profession ... and not from any official sources. '79 Enid Russell Smith in the Ministry also recognized the need for an external source of pressure so that government could use that to justify action. 80 That policy lobby was indeed emergent in the late 1950s and early 1960s, comprising chest medicine, cancer, and epidemiology; it had moved from the low status Central Middlesex Hospital, where many of the specialists had been based, into the medical elite represented by the RCP. Robert Platt as president and his modernizing agenda for medicine was a key influence as well as the networks of Charles Fletcher.<sup>81</sup> The role of Godber as CMO provided the link with government and to the international level: it was also symbolic that, on retirement, Godber became the chairman of the Health Education Council, one of the key institutions which promoted the new public health agenda.

The RCP report for the first time provided an agenda for action for this community. It dropped air pollution as a priority (the committee had originally been intended to consider both) and provided an alternative package for government to consider. More education of the public; more restrictions on the sale of tobacco to children; restrictions on advertising; restriction of smoking in public places; increased taxation; information on tar and nicotine content; antismoking clinics. Here was the agenda to respond to. And this was for the first time a media agenda as well. The College employed a public relations consultant for the first time and held its first press conference; the book sold to the public, and there was a 'Panorama' programme shortly after its publication in March 1962. Charles Fletcher's Penguin special on smoking followed a year later. This was a new era in the role of scientific argument and of the medical lobby. For the first time, science was reaching out to the public and using the full panoply of

<sup>&</sup>lt;sup>78</sup> For discussion of this manoeuvre, see C. C. Booth, 'Smoking and the gold headed cane', in C. C. Booth, ed., *Balancing act: essays to honour Stephen Lock* (London, 1991), pp. 49–55 and V. Berridge, 'Science and policy: the case of post war British smoking policy', in S. Lock, L. Reynolds, and E. M. Tansey, eds., *Ashes to ashes: the history of smoking and health* (Amsterdam, 1998), pp. 143–62.

Godber or Goulding (author unclear) to Goodman, 4 July 1961, London (NA/MH), MH
 55/2227.
 Minute from Enid Russell Smith, 5 Feb. 1962, London (NA/MH), MH55/2204.

<sup>&</sup>lt;sup>81</sup> Berridge, 'Science and policy', p. 149.

<sup>82</sup> RCP, minutes of fourth meeting of committee to report on smoking and atmospheric pollution, 17 Mar. 1960, RCP archive. The committee did reconvene to consider air pollution, but progress on that issue was much slower and the report was not published until 1970. RCP, Air pollution and health (London, 1970).
83 RCP, Smoking and health (London, 1962).

<sup>84</sup> Interview with Roger Braban, RCP PR consultant, by Virginia Berridge, June 1995.

<sup>85</sup> C. Fletcher, Common sense about smoking (London, 1963).

marketing and consumer oriented techniques which were then emergent in a post-rationing society. The Cohen Report on health education of 1964 and the formation of the Health Education Council in 1968 set the seal on the new style of persuasive public health. 86

The politics of the issue also began to change, although this change was less apparent by the end of the 1960s. Some differences can be identified between the Conservative and Labour governments of this decade, but it was rather a question of the attitudes of individual politicians rather than one of party political division. After the publication of the first RCP report, the government had set up a cabinet committee on smoking which held its first meeting in the home secretary's room in the House of Commons on 28 February 1962. The tempo was different. The MRC was pressing for action. The publication of the report broke a stalemate in government where policy was in limbo; the Ministry was 'waiting for the RCP'. Enoch Powell, as minister of health, had seen a draft of the RCP report and wrote with characteristic vigour in November 1961:

The Government has it in its power, without prohibition or interference directly with anyone's freedom of choice, to cut cigarette smoking whenever and to whatever extent it pleases. Indeed, given the probable flatness of the demand curve, they could combine a big cut in consumption with no reduction, and possibly an increase in revenue. If duty were increased for explicitly public health reasons, the opprobrium would be much less than with ordinary increases of taxation, and it would be possible to use a cost of living index which excluded tobacco (or cigarettes) ... In my opinion if the Government is unwilling to use this power ... then health education and all the rest is merely humbug and will be felt and seen to be such. In any case, 'health education' has already gone a long way ... without producing the slightest effect, and I don't believe advertising makes any difference one way or the other.

The publication of the Report will excite temporary interest and for weeks afterwards we shall have to answer a shower of tiresome Questions about what the Government is not doing; but unless my colleague is prepared to use the fiscal weapon, I personally propose to indulge in as little humbug as I can get away with.<sup>87</sup>

David Eccles, as minister of education, was 'gung ho' for action, in part because of his family background.<sup>88</sup> But there was in-fighting between the CCHE and the MH about the responsibility for a health education campaign. Bruce Fraser, the new MH permanent secretary, was of the opinion that the CCHE could not conduct a campaign for central government which was distinct from its role in helping the local authorities with their health education work. The lack of central government control, when potentially central government money would be spent, was a basic sticking point. Various institutional alternatives were extensively discussed, battles which were certainly re-run thirty years later over

<sup>&</sup>lt;sup>86</sup> Discussed in Berridge and Loughlin 'Smoking and the new health education'.

<sup>&</sup>lt;sup>87</sup> Minute from Enoch Powell, 11 Nov. 1961, London (NA/MH), MH55/2227.

<sup>&</sup>lt;sup>88</sup> His father Macadam Eccles had been a medical temperance supporter and addiction specialist. See V. Berridge, 'The Society for the Study of Addiction, 1884–1988', *British Journal of Addiction*, 85 (1990), pp. 985–1087.

HIV/AIDS.<sup>89</sup> But the two ministries, health and education, did bring a joint memorandum to the cabinet committee at its first meeting. This called for a national campaign with further restrictions on the sale of cigarettes to children and on smoking in public places, restrictions on tobacco advertising, and a differential tax on cigarettes.<sup>90</sup>

Cabinet committees had been briefly formed in the 1950s at the time of the various parliamentary statements and had been chaired by the home secretary of the day. Butler as home secretary chaired the first meeting of the latest committee. But Macmillan as prime minister did not want him in this role and Hailsham as lord president of the council took over. The ministerial committee was paralleled by one of officials which did the detailed work. Cary, deputy secretary in the cabinet office, was chair of the committee. 91A draft report was ready to go to the lord president by the middle of April. 92 The report, preceded by a flurry of activity in the relevant departments, was relatively anodyne, placing its reliance on health education and on voluntary agreements for advertising. The officials came down against differential taxation and the taxation option in general. This would penalize the poor, raise the cost of living, and have a serious effect on producer economies such as Rhodesia. It was underpinned by a belief that more restrictive action could not be sustained without major change in public attitudes to smoking. The Edinburgh research and the government's own pilot survey of public attitudes to smoking through the Central Office of Information had confirmed that most people knew about the smoking and lung cancer link, but their views on why smoking was harmful to health were different, laying stress on the environmental nuisance aspects rather than the risk-based epidemiology.

In the event education and voluntarism were the keynotes of the response and the committee decided not to make a statement. As Hailsham told Macmillan, a small publicity campaign would not be welcomed and interest anyway had abated for the present. He proposed to set up the machinery and start the campaign, perhaps issuing a statement later on. A meeting with the manufacturers might also result in an agreement to apply the TV restrictions voluntarily to other advertising so the government could also claim credit for that. <sup>93</sup> At a subsequent meeting in the House of Lords with representatives of the Tobacco Advisory Committee, the lord president said the government accepted the scientific case as in the RCP report but was against compulsion and action which would lead to pressure for similar measures in respect of alcohol and even foods like chocolate. It was 'not the government's purpose to induce any catastrophic change in

<sup>89</sup> For discussion of the tensions between central and local and over central government control, see V. Berridge, *AIDS in the U.K.: the making of policy*, 1981–1994 (Oxford, 1996).

 $<sup>^{90}\,</sup>$  Minutes of first meeting of ministerial committee on smoking and health, 21 May 1962, London (NA/CAB), CAB 134/2518.

<sup>&</sup>lt;sup>91</sup> Cary was reluctant to reveal its existence. See note from him to the other officials on the committee, 27 Apr. 1962, London (NA/CAB), CAB 21/4648.

<sup>92</sup> Minutes of third meeting 13 Apr. 1962, London (NA/CAB), CAB 130/185/GEN 763.

<sup>&</sup>lt;sup>93</sup> Lord president to prime minister, 25 July 1962, London (NA/CAB), CAB 21/4878.

smoking habits'. The meeting resulted in a move towards overall agreement on advertising restrictions based on the code applicable to television. On 14 November, Hailsham wrote to Maxwell. He felt the informal way this matter had been dealt with was suited to other issues as they arose. But he was clear that he was no stooge for industry interests. Someone at Carreras had sent him a box of filter-tipped Piccadilly. 'This was indeed bearding the lion in his den, but it was as ineffectual as the devil's attempt on St. Anthony.'94

The government response was thus muted and focused on a strategy, health education, which the health minister recognized as ineffective. The multiplicity of interests in government was a key factor. The Treasury view ultimately prevailed over the taxation issue but not before the implications had been fully aired at the political level. The role of the industry was important, although its representatives were called in after the political decisions had been taken. Also behind these decisions was a desire to achieve a balance in policy and the realization that, without a huge change in the social positioning of smoking, there was little point in initiating a major programme of change.

The publication of the American surgeon general's report in 1964 led to a further officials' report and political interest. The American report extended associations between smoking and health risk to diseases other than lung cancer, but the officials did not feel this warranted further action. Hailsham received a draft and was disappointed at their negative conclusions. The Social Survey had focused on smoking and had shown that attitudes were changing. On 6 April 1964 he wrote, 'I consider that the American Report, the American action and the Social Survey have strengthened the case for action, and that it is not too early to say that our limited campaign is failing and that unless we can bare our teeth nothing that we do will be taken seriously.' He suggested an extension of the health education campaign and consideration of banning smoking in cinemas and advertising, together with a health warning on packets. He also inserted a significant change in the inequality argument deployed by officials. Now the words 'it would bear more hardly on the poor than on the rich' were replaced by 'it could be harder for a poor man than for a rich man to continue his existing level of smoking and while this element of discrimination might be said to be more to the poor man's benefit, it would be unlikely to go uncriticised'.95 On 30 June the cabinet committee approved the officials' suggestion of a modest extension of the government health education campaign. There was no support for a ban on TV advertising or on smoking in cinemas. Least opposition was attracted by packet warnings.

The minister of health in the succeeding Labour government, Kenneth Robinson, was a doctor who took a more active line on smoking. His meetings of individual ministers on the matter caused alarm on the part of Burke Trend, the

<sup>&</sup>lt;sup>94</sup> Hailsham to Sir Alexander Maxwell of the Tobacco Advisory Committee, 14 Nov. 1962, London (NA/CAB), CAB 21/4878.

<sup>95</sup> Note from Hailsham, 6 Apr. 1964, London (NA/CAB), CAB 21/5083.

cabinet secretary, who channelled these through the Home Affairs Committee in order to stop the proliferation of ad hoc ministerial committees on the boundaries of home and economic affairs. Trend also promoted the 'anti nanny state' argument which had carried weight with Conservative politicians.

But on what grounds are the Government justified in intervening in those cases where a man's personal habits may damage only himself? And, if we accept that the Government are entitled to intervene in such cases, does this argument apply only to a man's physical habits, or does it extend also to his mental habits – i.e. to what he reads or watches on television? In short, where does the argument, if logically pursued, stop? 96

But the nature of policy was changing. Robinson promoted voluntary agreements which led to the disappearance of cigarette advertising from TV. The acceptance of money from the manufacturers for research was no longer a straightforward matter. When the issue of resumed industry funding was reopened in the mid-1960s, various possibilities came under consideration, including an MRC take-over of the industry's new laboratory complex opened at Harrogate in 1962, but nothing came of the contacts. <sup>97</sup> Such requests were seen as calling into question government policy, including the banning of TV advertising of cigarettes.

Electoral considerations about smoking continued to operate, however. Robinson's wider proposals were killed off by Richard Crossman when he moved to the Department of Health and Social Security in 1968. Both he and the prime minister, Harold Wilson, were worried about the electoral implications of smoking restrictions. When Robinson presented a draft bill to outlaw cigarette coupons, Crossman's reaction was brusque. He

simply blurted out that this was another of those Bills which we simply couldn't afford to pass when we were running up to an election because bans of this sort made us intensely unpopular, particularly with children and families. If you're going to deal with the cigarette smoking problem, you should not try this kind of frivolous but intensely unpopular method. There was a tremendously violent reaction with everyone saying that here we must stand on moral principle. I heard it from Eirene White, Dick Taverne, and Edmund Dell, representing the Board of Trade which has switched its junior Ministers around, and, indeed, I only had two or three people on my side. However, I'm still just powerful enough to hold the thing up and finally I suggested that instead of forbidding coupons we should ration the amount of money to be spent on advertising and leave it to the cigarette manufacturers to decide how they should spend their money. I found this infinitely preferable. Harmony achieved.<sup>98</sup>

It was significant that Dell, as minister for the department with close links to the tobacco industry, supported restriction, not a 'pro-industry' approach. Smoking's

<sup>&</sup>lt;sup>96</sup> Note from Trend to prime minister, 27 Jan. 1965, London (NA/CAB), CAB 124/1686.

<sup>&</sup>lt;sup>97</sup> 26 Aug. 1965, letter from Herbert Bowden to Norman Buchan MP, London (NA/CAB), CAB124/1686.

<sup>&</sup>lt;sup>98</sup> R. Crossman, *The diaries of a cabinet minister*, III: Secretary of state for social services, 1968–1970 (London, 1977), entry for 19 July 1968, p. 147.

significance as an electoral issue was changing, although electoral concerns were still a strong disincentive to action as this incident indicates.

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By 1971, when the RCP published its second report, much water remained to flow under the bridge. The end of the 1960s can be see as the 'end of the beginning' and a suitable resting point for assessment of the initial policy response. Denial and delay is an inadequate framework of assessment and policy science theories are helpful but need historicizing. The changes of the 1950s and 1960s were symbolic of a wider paradigm shift in the way in which health issues were presented by and to politicians and the public. A new role for medicine, the presentation of scientific facts to the public through the media, was an important component of the changed situation. The medical reports of 1962 and 1964 made risky behaviour by the public a matter for governments; and they made smoking an issue for the public. Politicians were engaged: witness Hailsham, Powell, and Robinson, who represented an opposite view to those who stressed public opinion. The policies which emerged reflected fiscal concerns but also interests like health education, air pollution, or the state of public opinion. There was a balancing act across government. The central/local tension over control and financing of health education often occupied ministers' minds as much as its content. Electoral considerations were dominant. It would have been unthinkable for governments to impose the public smoking bans of the early twenty-first century in the 1950s.

Network theories are more helpful but need historical development. Networks changed over time; and they were not so clearly segmented for and against smoking. The anti-smoking policy lobby, absent in the 1950s, consolidated in the 1960s. The negotiations about the establishment of the RCP committee and its subsequent report saw the formation of a policy community with links into government and also with the outside medical constituency. The policy linkages were more complex than the industry versus public health model. In the 1960s and after, parts of that lobby also linked with industry round an agenda of 'harm reduction'. Historical analysis of post-1945 public health has focused on the organizational and professional changes which brought the demise of the medical officer of health and his rebirth as the community physician within health services. 99 Alongside that service-focused world, a 'new public health' was forming with an ideology which stressed individual responsibility in the context of population-based interventions aimed at persuading the public. This public health was not centred on the community physician and drew on different networks and strategies to achieve policy change. Smoking was the key issue which acted as the template for much that followed: it symbolized a new era of health risk and individual responsibility.

<sup>99</sup> As in Lewis, What price community medicine?

The historical modifications presented here are also suggestive of the policy uses of history. Narrowing historical analysis to policy advocacy undermines its utility for option appraisal. Smoking policies and cultural change have passed through stages in the UK in which different relationships have operated at different points in time. Policy formation is messier and more complex than public health advocates or political science would have us believe. We need to take account of such historical analysis as a detached basis for discussion of the interaction between evidence, culture, and regulation and its potential future implications.