'Little lamb, who made thee?' Roslin Institute scientists with cloned sheep, 1998.

Corrupting research

How the market shapes science

Greg Philo and David Miller

An issue which is very important when considering research findings is: who is paying for the research and what control do the funders exert over the outcome? Science is seldom neutral. Let's look critically at how research funding can affect research findings.

Often the sponsors of research can have a strong influence on the methods and topics of research and the sorts of things researchers can even say about their findings. Universities and the academic community in the UK have recently been much silenced as a source of dissent and independent critical thought. In the UK the BSE ('mad cow disease') crisis is one of many examples which illustrate this. This animal disease jumped to humans via the consumption of beef, but it took over a decade for the government to admit that its 'no risk' policy was wrong and to introduce more effective precautions.

Briefly explain what you think is meant by the statement that 'science is seldom neutral'.

Research and the BSE crisis

In Britain BSE was caused by the strange procedure in which infected cattle brains were incorporated into cattle feed and so fed back to cattle, against all previous practice, thus spreading the disease and passing it into the food chain for humans. The disease has led to the deaths of almost 100 people so far. How could this happen and why were so few voices in the scientific community raised to point to possible dangers? The answers to both of these questions lie in the powerful role of the free market in research in Britain during the 1980s and 1990s.

In 1980 the UK Ministry of Agriculture, Fisheries and Food (MAFF) abolished the safety regime in agriculture proposed by the previous government, stating that 'in the present economic climate the industry itself

Signposts

This article provides extremely useful information and examples relating to how practical issues can affect research. The main practical issue discussed here is funding. The authors show how funding, without which no research can take place, increasingly comes from sources sufficiently powerful to affect not only the topic but the publication of the results of the research. They show how these arguments can be applied not only to sociological research, but to the supposedly much more objective and unbiased 'scientific' research. These issues are seldom raised by students in their answers to examination questions, but are extremely important. Try to make sure that you make relevant reference to some of the material in this article when next writing an answer about sociology and science or about the factors affecting research.

should determine how to produce a high-quality product'. In the same period there was a series of attempts to control the research agenda of science. According to government and academic scientists who were interviewed, public health research was forbidden by MAFF. One scientist at the government's Public Health Laboratory Service said: 'It was obvious to us that this was a public health issue. We were all ready to move...and then we had to stop. The word came from above that this was MAFF's thing.'

MAFF denied researchers access to necessary data and attempted to influence the research funding priorities of the supposedly independent funding councils. MAFF censored scientific reports and bullied scientists into changing their supposedly 'independent' advice. As things stand now, almost all British government departments have clauses in their research contracts which allow government departments to amend or censor research findings. Research reports by sociologists and others for the Department for Education and Employment, for example, require researchers to 'incorporate the department's amendments' in any published reports.

How might these actions be used to comment on the power of the state?

Science and the market

A second major explanation for the relative silence of academics on BSE (with a few notable exceptions) is the increasing closeness of academics to the commercial market place. In the 1980s, funding regimes changed, especially the funding of scientific research. Inadequate public funding for research, together with the advent of the new genetics and biotechnology, resulted in some scientists changing their titles from, say, research director to the more business-like *chief executive officer*, and their research centres became commercialised (see Box 1).

The role of the market has reduced the number of independent scientists who have not accepted research or consultancy money from corporations. The numbers willing to speak out and to highlight the encroachment of market values upon academic research have declined as a result of this. Academic culture has been altered so that more and more researchers (whether they have corporate funding or not) have adapted to the new regime and now cannot see the problem of these links.

Why do you think that universities have accepted corporate sponsorship and donations?

Managing images of science

With commercialisation comes *business practice*. Public relations consultancies are increasingly keen to use academic research in the interests of their clients, and academics working in commercialised environments are increasingly likely to hire PR consultants to advise on the presentation of their research results. In the UK, a PR firm working for the Butter Council promoted unpublished and unreviewed research from a government-funded study, which claimed to show that butter was *not* linked to heart attacks. This prompted useful (for the Butter Council) headlines such as: 'Milk "helps avert heart disease"'.

The Roslin Centre in Scotland, which first cloned Dolly the sheep, used to be largely publicly funded, but private money has played an increasing role and Roslin has become a more commercial operation. When Roslin launched Dolly on an unsuspecting world, a PR company was hired to advise on how to minimise media criticism which, amongst other things, might have affected the value of the financial shareholdings in the centre held by some of the staff.

Such practices mean that scientists are less likely to speak out on issues of health and safety or the public interest. If they do, as in the case of Dr Arpad Pustzai at the Rowatt Centre, who highlighted potential problems of GM potatoes, they can be silenced. Pustzai was removed from his job as a result of his speaking to the media. The scientist who cooperated with the Butter Council 'scoop' was not.

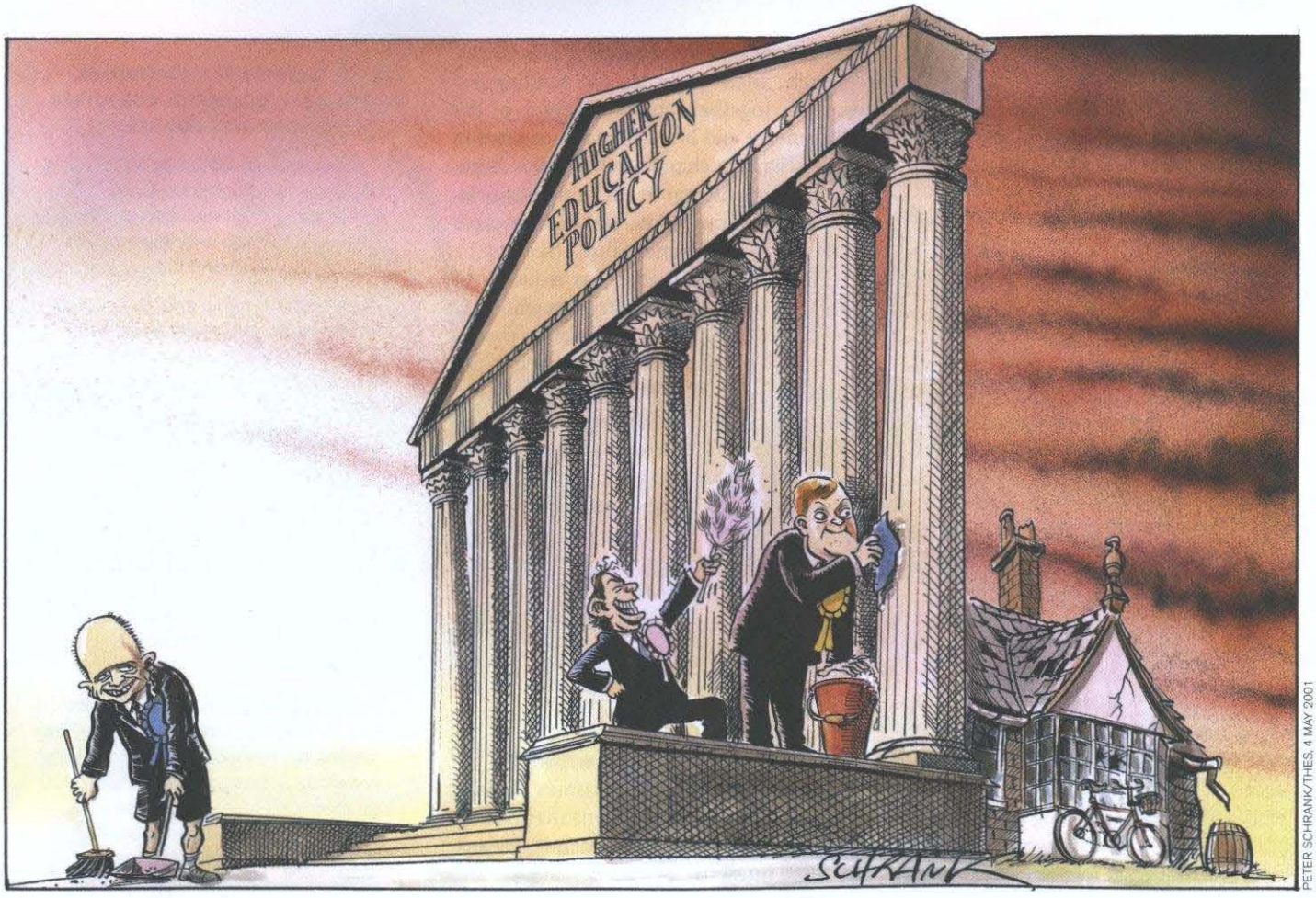
Box 1 Some UK universities which have accepted corporate sponsorship and donations

- The donation of £50m by Microsoft's Bill Gates to Cambridge University is perhaps the most well known. There is corporate funding and sponsorship across the social and natural sciences.
- In the field of media and communications, Oxford University accepted £3.1m for the Rupert Murdoch Chair in Language and Communication and the News International Chair in Broadcast Media. Murdoch, of course, has huge media interests in television (Sky TV), publishing (HarperCollins) and the press (the *Sun*, *The Times* and the *Sunday Times*). Are we likely to see *critical* accounts if major corporations are key figures in funding research? And, if academics *are* critical of these corporations, will the research money still keep rolling in?
- Salford University has a Corporate Communication Unit named after and funded by the nuclear industry; British American Tobacco donated £50,000 to sponsor a Masters degree in strategic communications at the University of Manchester Institute of Science and Technology (UMIST) and has also ploughed £3.8m into Nottingham University for – of all things – a Centre for Corporate Social Responsibility. As universities move closer to being businesses, how well is the public interest served? And how critical and independent is their research?

In the UK, successive governments have tried to encourage the commercialisation of research. The UK government's LINK programme co-funds research with corporate partners. As journalist and author George Monbiot has noted, the LINK programme grants 'discretion' over whether the research should be published to the *corporate* partner in funding. So, those who pay control the publication of findings. As a result of these processes, public debate about science and its research is impoverished and journalists fish in a smaller and smaller pool for truly *independent* experts who are willing to place themselves at the service of the public interest.

The dangers of the market

In *Market Killing* (Philo and Miller (eds) 2000), a book of essays, some of the processes are described by which researchers have become less able to comment critically on the key issues of their own society. Some



PETER SCHRANK/THES, 4 MAY 2001

have simply abandoned empirical research (going out and investigating human processes and behaviour) and the gathering of evidence necessary for social critique. They focus, instead, on obscure theoretical debates. Other authors in the volume point to the pressure on academics to bring in money and to conform to the priorities of funding bodies.

Media researcher Philip Schlesinger, for example, notes that current Research Council scientific policy sees the *purpose* of academic output as being to contribute to the UK's economic performance. He cites a speech on research, made by David Blunkett, Secretary of State for Education and Employment, entitled 'Influence or irrelevance?', which suggested that social science research should become a *service industry* for government policy-making. As Schlesinger notes, this comes down to officials and ministers saying: 'Make yourself useful on my terms.'

Similar issues about US science are raised by Barbara Epstein in her chapter in *Market Killing*. She points to the dramatic changes that have taken place in US universities in the last two decades, in particular the dramatic influx of corporate money and power:

> In 1980, under the Reagan Administration...[it was] possible for a public university to declare a patent on a product of university research; before this, such a product had been within the public domain. This gave public research universities, for the first time, something of substantial value on the market. Deals between corporations and professors, departments, universities began to be struck. By the mid-eighties research in bio-technology was bringing in huge amounts of corporate funds; since then the same trend has taken place in computer science, law, medicine, engineering, and elsewhere...toward a view that university teaching and research should be judged by its contribution to the market.

Note (i.e. write down, and put in a safe place) as many examples as you can find which you could use to criticise the notion of 'the objectivity of science'.

Research still to do

(i) Education

Some critical voices do remain in research funded by independent charitable trusts such as the Joseph Rowntree Trust in Britain. But their resources are tiny compared to government and commercially funded research. There is, however, no shortage of critical issues to discuss.

In the *education debate*, for example, there is very little 'debate' on what education can or should achieve. What is it actually for? Is it meant to impart life skills and values, to show children how to live full and purposeful lives, to produce concerned and thoughtful citizens, to appreciate art and culture? Or, more mundanely, is it meant to instruct on how to avoid pregnancy and drugs, read bus timetables or count change? Or is the whole thing simply intended to prepare people for the workforce?

In the face of these complex questions, politicians mostly avoid debate and, instead, grasp at whatever looks like the quest for academic excellence. Such priorities are rarely questioned in public life. Britain's New Labour politicians (and their Conservative predecessors) like targets that can be set and then claimed to have been met. This sort of limited *positivist* approach is pursued, irrespective of whether the targets have any rational purpose or of how much damage is done to the students and teachers who have to meet the latest quality thresholds.

Why might governments and politicians prefer to focus on 'educational targets' rather than open up a debate on the purpose of education?

(ii) The drugs crisis

On other key social issues such as the *drugs debate* in Britain, the most questioning and

critical voices on policy are coming from the Police Foundation and ordinary police officers, who are forced to work with an incoherent and paradoxical drugs policy. In the future people may ask how on earth we tolerated a situation in which the most dangerous drugs (tobacco, alcohol) were legal, while some less dangerous ones were illegal. Each year in Britain 120,000 people die from cigarettes and 40,000 from alcohol. Why are academics not protesting loudly about the absurdity of this — and about a situation in which many of the problems associated with illegal drugs arise directly from their criminal status?

Some academics have made a living out of the research priorities generated by these policies. Others believe that the policies are foolish, but the climate of hysteria generated by the tabloid press and politicians has made it difficult for them to raise their heads above the parapet. Meanwhile, the government escapes serious critique and pursues a phoney war against drugs, which has criminalised large numbers of young people, increased the prison population and put huge amounts of money at the disposal of organised crime.

Why might the legal sale of alcohol and tobacco be permitted by politicians who are publicly against the legalisation or decriminalisation of other kinds of drug?

The need for independence in research

If academics are to give any lead or guidance on pressing social issues, the universities and research councils must assert their *independence* from the state. In September 2000, the publicly funded Economic and Social Research Council hosted a special session at the British Academy about public understanding of science. A central concern at the meeting was the growing public distrust of scientists, especially those linked with government policy. To this was added an issue raised by Hilary Rose in *Market Killing* — that scientists may have a *commercial* interest (for example, through share options) in the products whose value or safety they are asked to comment upon.

One of the proposals raised in the debate was that members of the academic and scientific communities should agree to a form of Hippocratic oath (as taken by medical practitioners), undertaking not to act against the public interest. It is a measure of the seriousness of the current situation that such a proposal should be raised. A more immediate and necessary reform would be that the research councils should have the criteria of public interest and the independent evaluation of policy clearly stated as the guiding purpose of research. These should have priority over criteria such as 'economic growth' and 'policy relevance'. After all, the tragic case of BSE shows that the public interest is not at all the same as the generation of wealth and being 'useful' to policy-makers.

Write a brief paragraph making out a case for independence in social and scientific research.

Reference

Philo, G. and Miller, D. (eds) (2000) *Market Killing: What the Free Market Does and What Social Scientists Can Do About It*, Longman.

Greg Philo is Research Director of Glasgow University Media Group.
e-mail: g.philo@socsci.gla.ac.uk
David Miller is a member of the Stirling University Media Research Institute.
e-mail: d_miller@uclink.berkeley.edu

eyes on the net

For this issue of *Eyes on the net*, we are going to concentrate on a single web directory (*CSSJournal*) and look at some of the different links it has to sites of sociological interest. The main page we are interested in can be found at

http://cssjournal.com/sites.html#socio

This will take you to a list of links that you should find useful, interesting or even fun. The first thing you will notice is that there seem to be many American links and this is because the United States remains the largest provider of web pages. Some of the American pages are concerned with the profession of sociology (try the *American Sociological Association*). Others might be useful for looking at deviance in a cross-cultural way: for example, *America in the Sixties: Culture and Counter Culture* gives you access to the notes for a whole sociology curriculum unit on the 1960s. *America: the Sixties* focuses on the popular culture and music of that era.

There are some useful sociological sites for A-level students: for example, have a look at *Information Please* for material on family trends, education, gender issues, race and ethnicity, religion and crime, under the banner of *Society and Culture*. Just follow the links through. There is a crime statistics tutorial on the *Crime Statistics* page.

You will find some of the sites we have recommended to you in previous *Eyes on the net*, such as the *SocioWeb* or the *SocioRing*. Don't forget to bookmark these important points of access to all things sociological.

If you are stuck for some appropriate symbols to use as illustrative material in your coursework, try the *Encyclopaedia of Symbols*. If, for example, you are researching in the area of the sociology of religion, there is every imaginable religious symbol available to you to complement your study, and there are a number of links to Buddhism, Islam and Christianity under the heading of *Religion*.

For a fun look at the amazing things people will wear and do in the name of being fashionable, visit the *Bad Fads* museum. From tank tops to Farah Fawcett hair, you will be amazed at the sheer variety of *Bad Fads*. On the sociological side, it might give you some insight into the world of subcultures and the numbers of these that abound.

If you want a serious counterpoint to the rosy and safe image of childhood that many portraits of family life put forward, have a look at the *Children and War* site run by UNESCO. It will demonstrate the ethnocentric view of childhood that comes from Western sociology. If you want to explore other cultures further, there is a marvellous resource available at *Cultures of the World* (and *Cultures of the World Part II*).

These are just a few of the links that are listed on the *CSSJournal* site. Take some time to explore the others if you are surfing, or use a more focused search strategy if you are looking for specific information. The good thing about this site is the wide range of information with a sociological edge that you can pick up.

If you would like to contribute to *Eyes on the net*, write to:

Tony Lawson
School of Education
University of Leicester
21 University Road
Leicester LE1 7RF