# THE ROLE AND IMPORTANCE OF ACADEMIC FREEDOM IN THE POLICY PROCESS

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# THE ROLE AND IMPORTANCE OF ACADEMIC FREEDOM IN THE POLICY PROCESS

#### **Summary**

This paper discusses the role and importance of academic freedom in the policy process. By way of case studies, it is argued that academic freedom plays a crucial role in relation to the development of public policies. We discuss this matter within a framework that allows the understanding of the relationship between researchers and the intervening State, the corporate and non-government sectors with economic or social interests in any particular intervention, the media, and citizens. We apply the framework to recent cases that illustrate problems that have arisen. Moreover, we hypothesise that the problems have become more acute since the start of the era of privatisation and new public management with research agendas and targets often being increasingly set by policy makers. Finally, we draw some conclusions about the role of researchers and institutes in relation to agricultural and rural matters in modern democracies, arguing that freedom of speech and expression is an essential element in the policy role of researchers.

#### **Key words**

Academic freedom, Policy process, policy decision-making, policy advice, research, research institute,

#### 1. Introduction

The questions in this paper concern the role of the researcher, and by extension research centres and institutes, in relation to the development of public policies. We set these questions within a theoretical framework which is largely devoted to other purposes, notably why public policies exist, and what is the influence of different "interests" in the formation of policy. We use this framework because it helps our understanding of the relationship between researchers and the intervening State, the corporate and nongovernment sectors with economic or social interests in any particular intervention, the media, and citizens. This relationship is not always an easy one, and we report recent cases to illustrate some problems that have arisen. The problems can evidently be particularly acute for researchers who are wholly or mainly funded by the State, and where they are contracted or employed to deliver advice and "evidence". Moreover, we hypothesise that the problems have become more acute since the start of the era of privatisation and new public management with research agendas and targets often being increasingly set by policy makers. Finally, we draw some conclusions about the role of researchers and institutes in relation to agricultural and rural matters in modern democracies, arguing that academic freedom is an essential element in the policy role of researchers. Without this freedom, which should be constitutionally guaranteed and perhaps otherwise regulated, policy makers are free to pick and choose the evidence that suits their immediate and usually short – term purposes without the fear of challenge. In these respects, the media has an important role to play in informing the public about the findings of research and debating its implications for policy, thus forcing politicians to recognise and engage with research which they do not necessarily like.

# 2. Academic freedom

One of the earliest accounts of academic freedom is the *Authentica Habita* issued by Holy Roman Emperor Fredrick Barbarossa in 1158 to protect scholars at the University of Bologna, the oldest university in the world, from the city authorities (KARRAN 2009). The contemporary conception of the term "academic freedom" can be traced back to the German University model of the early 19<sup>th</sup>-century (HOFSTADTER and METZGER 1955). The founding fathers of the University of Berlin, among those the

Humboldt brothers, employed the twin principles of *Lehrfreiheit* (freedom to teach) and *Lernfreiheit* (freedom to learn). Professors should have the right to perform teaching and research according to their interests, and students should have the right to choose what courses to follow. While the freedom to teach is still highly recognised, the freedom to learn has been somewhat excavated over time due to specialisation of fields of research and course-load requirements related to academic degrees. As BOLLINGER (2005) notes, the freedom to teach implies, almost by definition, that professional standards for the academy should be set by faculty members itself, and not by external actors, in order to secure the Universities' autonomy. A third related aspect of academic freedom concerns the right of academic self-governance and institutional autonomy (HORWITZ 2005). In order to guarantee freedom to teach and freedom to learn, the principle of academic self-governance is deemed necessary.

The justification of academic freedom is "that it protects the moral and intellectual integrity of the teachers" (SHILS 1995:7). If the public cannot be sure whether a teacher is independent in presenting her work, then the teacher has lost her integrity and her work is of minor value. Academic freedom protects the teacher not only from outside the University, but also from the University itself (and other professors). TURNER (1988) thus compares the role academic freedom plays for academics with the role judicial independence plays for the judge or the freedom of conscience plays for the clergy. Equally important, however, is the importance of academic freedom for the functioning of a democracy, since it provides the necessary independent information to support debate and judgements of public actions, not only to politicians but also to citizens and the media (KARRAN 2009).

KARRAN (2009) uses BERLIN's (1969) distinction between positive and negative academic freedom. While positive academic freedom means the absence to fear from sanctions against one's own work, negative academic freedom means that the researcher has the necessary resources to conduct his or her research. Although academic freedom is secured, the guarantee is more or less worthless without these resources. The lack of negative academic freedom is especially true in research institutes that have a low share of "own" money to spend. Tenders and calls for proposals with specific research questions predetermined by governments and public agencies as well as private sector funded research eventually threaten academic freedom.

As a rather crude way of measuring some of the key themes around academic freedom, we searched for various combinations of key words on google scholar and google. The results, shown in Table 1, indicate the relative attention give to the themes discussed above, especially but not only in the context of Universities, and also in the USA. Without relying too heavily on the results of this simple search, the results are constituent with our prior beliefs and the broad argument in this paper.

Table 1. Results of an internet search on "academic freedom"

Keywords	Scholar.google.com		www.google.com	
	Hits	% of hits on AF	Hits	% of hits on AF
Academic freedom (AF)	54 200	100	1 370 000	100
AF & University	50 300	93	1 200 000	88
AF & Public-sector research	214	0.4	824	0.1
AF & Higher education	29 300	54	542 000	40
AF & Agricultural research	655	1	6 240	0.5
AF & US	46 900	87	997 000	73
AF & Europe	18 400	34	300 000	22
AF & Politics	26 400	49	512 000	37
AF & Policy-making	4 960	9	24 600	2
AF & Policy process	890	2	4 020	0.3
AF & Policy advice	342	1	2 150	0.2
AF & Threat	18 600	34	242 000	18
AF & Politics & Threat	11 900	22	126 000	9
AF & Democracy	18 500	34	343 000	25
AF & Accountability	13 000	24	164 000	12

Source: scholar.google.com and www.google.com accessed between 24. august and 1. september 2010

#### 3. A framework of explaining policies

We consider "Policy" to be a framework for intervention, usually public. Such intervention by States is as old as State's themselves, witness, for example, the rice/wheat granaries of ancient China, Egypt, and the Incas in South America. As COULOMBE *ET AL* (1990) observe, agriculture has always been an "affair of State", and a centrepiece of public policy. However, the "modern" sense of public policy arose from the alliance of State and Capitalism, or "state capitalism", in 19th and 20th C. Here Governments take a much wider and larger role in regulating and managing the market system in order to moderate its effects on distribution of income and wealth, health, welfare, or environment, and even out fluctuations in national economic activity caused by "over exhuberant animal spirits" of entrepreneurs and financial speculators whose actions lead to "booms and busts" of economic activity. Thus we can point to "economic policy" after John Maynard Keynes, following the reparations crisis after World War I and the economic "crash" of the later 1920's, "social policy" (the "welfare state"), and physical and spatial planning following World War 2, as well as developments in international policies, following the Bretton Woods conference. This panoply of state intervention was joined by economic planning, and to an extent can be seen as a response to communism.

This wide scope for policy was somewhat attenuated following what Stiglitz calls the "Washington Consensus" and the attacks on "big government" by Friedrich Hayek and Milton Friedman in particular during and after the 1980s, and at least until the recent economic crisis.

In a European context, agricultural Policy had its modern origins in the almost ubiquitous corn laws

introduced in the 17th and 18th Centuries<sup>1</sup> and attacked in Britain by classical economists Adam Smith and David Ricardo. Indeed, in contrast to most contemporary attempts to influence policy, David Ricardo's openly published and widely distributed pamphlets on the evil of the corn laws, which protected landowners and raised the price of food in Britain, along with the Irish and Scottish "potato" famines of the mid 19th Century, persuaded then Prime Minister Robert Peel to abolish the corn laws in Britain. Public intervention in agriculture was nevertheless further increased during and between the First and Second World Wars, in post world war II legislation (e.g. the 1947 Agriculture Act in the UK) and further in the EEC by the implementation of the 1957 Rome Treaty following the Stresa Conference (TRACY 1982).

In the literature of the social sciences, several alternative and sometimes competing ideas exist about the origins and rationales of public policy, some examples being:

- Policy exists to serve the interests of powerful groups (royalty, landowners, rich merchants, capitalists, the church, etc) [SMITH]
- Policy exists to protect individuals from these powerful groups [MILL]
- Policy exists to pursue societal goals [MARX]
- Policy exists to protect human rights (civic, social, political) [MARSHALL] and to promote "moral properties" e.g. justice and fairness [RAWLS]
- Policy exists (only) because of (and to ,,correct") ,,market failure" [BATOR, MOYER and JOSLING]
- Policy results from rent seeking behaviour of interest groups [KRUEGER, STIGLER, PETIT]

All of these different approaches have problems, some of which are discussed in Sheingate (2001). We will not these further here, but rather seek to use the framework to address the issue of the role of the researcher in relation to policy making.

#### 4. The Role of the Researcher in Policy Making

The role of the researcher differs according to one's understanding of the policy making process. In particular the role varies from the more passive one of simply providing an analysis of the single or multiple outcomes of policy options and being ignorant with respect to the policy makers' final choice, to the more active one of engagement with the policy process itself. In the former case, research is seen as entirely "objective" and free of a researcher's value judgements and opinions; in the latter, the researcher's value judgements and opinions are either open or covert, but it is not denied that they are present. Bonnen and Schweikhardt (1998) review relevant literature on economists as policy advisers and draw on their own experiences in these roles. Their focus is on how to bridge the communication gaps between academics and policy makers, and they are motivated by the belief that "in teaching policy we can do a better job of preparing students to become analysts, advisers to policy decision makers, policy researchers, and extension specialists." They do not address the issues of selectivity in the use of research by policy makers, or indeed the suppression of evidence, but instead tacitly assume that failures are due to communication problems, a finding which presumably reflected the literature that they reviewed.

Nevertheless, the communication gap which they discuss is important when we seek to understand the giving, and adoption, of research based policy advice. BONNEN and SCHWEIKHARDT also cite BEHN

<sup>&</sup>lt;sup>1</sup> Denmark was an exception in Europe in being an early adopter of free trade, a position it largely maintained until joining the EEC in 1972. See Tracy.

(1981), who identified several "critical differences between the worldviews of the policy maker and those of the policy adviser" notably "(a) the policy adviser is more likely to be concerned with efficiency, whereas the policy maker is more likely to be concerned with program outputs as benefits, whereas the policy maker is more likely to be concerned with program inputs as benefits; and (c) the policy adviser is more likely to view the sunk costs of past policy decisions as irrelevant to future policy decisions, whereas the policy maker is more likely to view sunk costs as a justification for future policy decisions." (BEHN 1981, VERDIER 1984: 423).

Brenner and Werker (2009) on the other hand are more concerned with the problem for policy advisors arising from the fact that "economic processes are uncertain". Consequently, "policy can err". They explore the use of "abductive" simulation models to "reduce policy errors by inferring empirically reliable and meaningful statements about economic processes." In this case, the argument is more about the quality of research or its presentation, rather than understanding the reasons for use or non-use, or suppression, of research-based evidence.

GARDNER (1996), in his article on the results of the 1995 Farm Bill, argues that "economic analysis along cost-benefit lines was both important and had good effects in the 1995 farm bill and other recent policy debates." He continues that "Economists have influenced farm legislation in two ways: (1) through positive economic analysis of the effects of policy proposals; and (2) through normative recommendations, usually based on fairly primitive applied welfare economics..." GARDNER suggests that the influence has not always been positive, sometimes contributing to obfuscation or "smoke and mirrors", or making incorrect predictions e.g. of budgetary costs. However, he claims that, apart from their research and analysis, the views of agricultural economists' make a difference, even if this is "indirect, slow to develop, and typically out-weighed by interest-group positions that carry more electoral and financial support". Further "much of agricultural economists' influence is indirect in that it does not address policy issues themselves but rather the presuppositions of policy debate. For example, agricultural economists have been hammering away for years at the idea that farmers as a group are economically disadvantaged."

More importantly for our purposes, GARDNER examines the role of the press, and the relationship of researchers to interest groups, and not merely the direct researcher-policy maker relationship. He points out that the "editorial pages of influential newspapers like the New York Times, Washington Post, and Wall Street Journal have a far wider reach than agricultural economists. These publications frequently espouse opinions in opposition to commodity programs that are clearly congruent with, if not derived from, economists' arguments." He continues, "Moreover, agricultural economists get a serious hearing where it is most important - in the Agriculture Committees of Congress, at the USDA, and among organizations of commodity growers themselves. Anti-commodity program viewpoints are often rejected in these places; but even so, these viewpoints make a difference in the fate of policy options. Congressional committee staffs, for example, are infected with the thinking of agricultural economists..." GARDNER proceeds to argue that policymakers are in fact honest brokers, seeking to "maximize the size of the economic pie given the special interest demands upon them; but (who) in fact, recognize their limited knowledge of how to do this and hope that economists can provide them with recipes for meeting political demands." However, GARDNER's article should be read in the light of his final statement that "Governmental management of economic activity should be narrowly focused on matters of genuine public goods and externalities, and not attempt to manage markets." This normative position puts GARDNER in the "Washington consensus" camp of those who believe in minimal government, and where the implicit task of researchers is seen as maximizing national income and minimizing government intervention in markets. He does not address the questions of (mis)use of research evidence, or suppression of evidence. Nevertheless, he does provide a case study which apparently shows how the evidence of agricultural economists succeeded in influencing policy.

PANNELL and ROBERTS (2009) argue that of all the research designed to influence policy "only a minority succeeds in its policy intent". Drawing on a wide range of other research, they suggest that the following are some of the main reasons for this poor uptake:

- The importance of non-scientific considerations such as "legal mandates, societal desires, economic benefits and costs, rights, distributional equity and procedural fairness".
- The existence of political or bureaucratic "hidden agendas" which mean that "research that seeks to advance the public interest is not wanted".
- The priority given to policy "fashions and crises" leaving "little scope for science (or any other input) to influence policy in a policy area that is not currently high on the agenda.
- The importance of timing issues, especially timeliness in research
- The problems of accessing policy makers and establishing trust
- The inter-twining of facts and values because some researchers are also advocates of a cause
- The incentives given to researchers which emphasise publication in refereed journals rather than activities that make their work known and recognised by policy makers.
- The complexity of environmental, social and economic interactions in relation to land and rural topics.
- The problem of communication mentioned earlier. This may be aggravated by a lack of expertise among the staff responsible.

PANNELL and ROBERTS also conducted their own "policy implementation research" in rural Australia, and they were able to complement the foregoing list through their direct experience of seeing to engage with the policy making community in relation to research on soil salinity. Among the additional points they make from this experience, the following four stand out in the present context:

- Management culture... "There seems to be a belief that management of the process of government is much more important than detailed knowledge of the substantive issues. From our observation of the policy that emerges under this attitude, we believe that it is mistaken".
- Lack of transparency about policy process... "It was difficult to know who we should talk to; we probably wasted time meeting the wrong people in some cases. We travelled great distances to have brief meetings, or to find that the key people were not available to meet due to another urgent priority."
- Interagency rivalries... "Government officers who felt threatened by the implications of our work sought to undermine it in various ways. In some cases, our work was used by government officers to bolster arguments that we did not support."
- Recognition that "achieving broad-scale uptake and application of our research in the real world required a very large commitment of time, energy, resources, and creativity."

While the evidence of PANNELL and ROBERTS does provide some "hooks" to address questions of the use or non-use of evidence and its suppression by Governments, they do not address this issue explicitly in their article. We therefore turn to some specific and recent cases of attempts to suppress research based evidence.

#### 5. Case studies

Here we present five examples of attempts to suppress evidence, which may be seen as the extreme case of policy makers seeking to "ignore" evidence which does not suit their purposes, or which they do not like for some reason. In all of these cases, we are not seeking to evaluate the correctness or otherwise of the "evidence" itself, but rather demonstrate how powerful government and corporate interests seek to suppress research, even in open democratic countries. The first is the case of our own institute, NILF, where Government, and the Institute Board, sought to discipline one of our colleagues, a researcher, for writing an article in a daily newspaper criticising the current government for not taking agricultural policy matters serious enough. Ultimately this case has a positive outcome in the form of cross party agreement to legislate in 2010 on academic freedom for researchers employed at research institutes. The second and third cases deal with the highly emotive area of GM foods, the first of which so far having a less happy ending in the "sacking" of three researchers, and vilification of those concerned by august and powerful scientific bodies, such as the (British) Royal Society. The second GM example concerns the corporate funders of research, who prevented publication of the research until after a crucial regulatory decision had been made by the FDA in the USA. The fourth and fifth cases are related to the equally contested area of Climate Change, and deal with mitigation policies as well as the science itself.

### 5.1 Researcher critique of Government Policy: NILF, 2009

NILF is independent public research body owned by the Ministry of Agriculture and Food and with a board appointed by the Ministry. NILF-researcher Svenn-Arne Lie published a comment in the daily newspaper Klassekampen on September, 2nd 2009. In it, he claimed that economic, regional and agricultural policies of the left-wing parties were absent, leading to the removal of agriculture in large parts of Norway. The comment made Leif Forsell, a Director General in the Ministry of Agricultural and Food to send an email to NILFs director, Ivar Pettersen, the same day were he stated that the comment was not "free and independent research as the Ministry wishes that NILF conducts", but instead a "free expression of strong opinions and based on weak and partly wrong facts". He suggested Pettersen to "consider writing a comment [in the same newspaper] in which you make clear that Lie has written a private comment that has no foundation in NILFs research and that NILF does not support". Pettersen did write and publish a comment in Klassekampen on September, 7 after having talked to Lie, but claimed he acted independent of Forsell's email. Lie responds with a new comment in Klassekampen September, 9. The daily newspaper *Nationen* brought the case to the wider public by publishing an interview with Lie (September, 29) and the e-mail Forsell had sent to Pettersen (October, 1). Forsell's action towards Pettersen was first supported by the Permanent Secretary in the Ministry, and the Chairman of NILFs board, Gudbrand Kvaal. Forsell contends in an interview with *Nationen* (September, 29) that he understands a university professor to possess a higher degree of academic freedom than a researcher at NILF. Several newspapers covered the case and asked the question about NILFs independence from the Ministry, which is legally rooted in NILFs statutes. A group of NILF researchers published a letter in Nationen (October, 6) stating that researchers at NILF do not accept to be overruled by the Ministry. Finally, the Minister of agriculture and food, Lars Peder Brekk, declared in *Nationen* (October, 9) that research institutes enjoy the same degree of academic freedom as universities and university colleges, and apologized for the misunderstandings about that issue that have appeared in the media. Many interpret his statement as a reprimand of Forsell's action.

The outcome of this case is a unanimous proposal of the Parliament's Standing Committee on Research, Education and Church Affairs to the Parliament in which the Government is asked "to put forward a proposal that in a suitable way clarifies academic freedom for researchers at institutions that are not covered by the Act relating to universities and university colleges". The Committees proposal follows a

<sup>&</sup>lt;sup>2</sup> http://www.stortinget.no/no/Saker-og-publikasjoner/Publikasjoner/Innstillinger/Stortinget/2009-2010/inns-200910135/

proposal of a single member of the committee that justified the proposal by supporting the arguments of NILF-researchers.

In the aftermath of the public debate, directors of other research institutes were interviewed to give their views on academic freedom in the institute sector. In at least two instances, the directors of a public-sector research institute would feel uncomfortable if two researchers from their respective institutes would bring professional disagreement on a subject matter to the public.<sup>3</sup> This is regarded as not having enough 'control' over what's 'going on' in the institute. The leadership seems to have the opinion that conflicts and discourses should be tried to be solved inside the institute before going to the public. From a policy advice point of view, this perspective may be, ironically, contrary to what was intended. For a policy maker, and even more so for debates in the media and civil society, the discourse between two researchers with differing stances is probably more useful than the "watered" and "compromised" version that the opponents could agree upon.

Inside NILF, the case led to a new awareness regarding popular-scientific publication. A new publication policy was developed by the employees and the adoption of a new policy how to deal with the media and was developed by the employees and leadership at NILF together. The document concerns cases where an article for a journal or newspaper states the affiliation of the author and states two basic principles: the author's professional independence and the institute's professional neutrality. The latter is a necessary condition of the former: Without an institute's professional neutrality, an employed researcher cannot be independent. That means, if an institute should announce or accept an official view on a policy issue as its own, it would bind and constrain all researchers at that institute, taking away their professional independence. The institute can nevertheless behave as an author in specific cases, e.g. when publishing economic accounts or collectively gathered farm account data. Furthermore, the policy document contains three headings of non-binding advice: To create value by presenting new knowledge (and not just repeating existing knowledge for the sake of being present in the media); to be professional by using sound scientific arguments and by clarifying value statements; and to play as a team by circulating the piece to be published among colleagues, especially to colleagues who are likely to be critical of the content of the piece. It is important to note that failure to meet these guidelines does not lead to any formal sanctions as they are explicitly stated to be non-binding.

It is not our intention to judge the scientific merits of the statements made by either party in this case, but what can be learned from the case is that bureaucrats seem to perceive academic freedom as restricted at public (or private) research institutes when compared with universities. This distinction may be explained historically by the close ties between the bureaucracy and the public research institutes. Some research institutes in Norway were founded by separating out research and development activities formerly within the ministry itself or governmental agencies. Moreover, as NILF prepares official statistics (e.g., economic accounts on agriculture, farm account data) on behalf of the ministry, the public may have an opinion that NILF has its own "voice" and takes a stand on its own in the public debate and that opinions from NILF researchers express NILFs "official" standpoint. Both opinions are at least misleading. NILF as such does not have a view on any matter regarding policies. It is the researcher that is solely responsible for any public dissemination of results. Similarly, a researcher can never claim to speak on behalf of the institute.

<sup>&</sup>lt;sup>3</sup> Arne Bardalen, the director of the Norwegian Institute for Forestry and Landscape, and Norunn S. Myklebust, the director of the Norwegian Institute for Nature Research according to forskning.no, a Norwegian on-line journal with focus on research (http://www.forskning.no/artikler/2010/juni/254577, accessed 1-Sep-10).

# 5.2 GM Foods: The case of Dr Arpad Pusztai and Dr Stanley Ewen<sup>4</sup>

Research undertaken by Dr Pusztai at the Rowett Institute, a largely Government funded research institute dealing with animal and human nutrition, and Dr Stanley Ewen then at the University of Aberdeen' Department of Pathology, involved feeding rats on GM bred potatoes, modified to produce the snowdrop protein (lectin). These were compared with a control group of rats simply spiked with the lectin. Because the control group did not suffer the same ill-effects, the researchers believed the GM device used to carry the new gene into the potatoes to be the probable source of cell damage in the stomachs, and parts of the intestines, of the first group of rats.

Dr Pusztai gave a 12 sentence, 150 second interview in the BBC's "World in Action" programme in August 1998. A few days after his appearance on TV and subsequent Radio broadcasts, the Rowett Institute suspended him, claiming that the GE potatoes were not intended to be used as food and, further, that the results reported by Dr Pusztai were misleading because he had "mixed up" the results of different studies. In that context it was pointed out that he was old (68), giving the impression of a senile and confused person. Other claims were made and Pusztai was dismissed from his post. According to Andrew Rowell, a journalist writing in the Daily Mail, both Bill Clinton and Tony Blair were involved in the sacking of Dr Pusztai<sup>5</sup>. "Breaking his long silence over the affair, he [Pusztai] now claims that he was fired as a direct consequence of Tony Blair's intervention. The day after his World In Action broadcast, he believes that two phone calls were put through to his boss, Philip James, from the Prime Minister's office in Downing Street. The following day he was fired. He says he was informed of the calls by two different employees at the Rowett. Dr Putsztai and his wife were also told by a senior manager at the institute that Blair's intervention followed a phone call to Downing Street from President Bill Clinton, whose administration was spending billions backing the GM food industry. To sceptical ears, this sounds scarcely credible. Would the Prime Minister really have had any influence over the position of a respected scientist? And yet the story is supported by two other eminent researchers. Stanley Ewen, says another senior figure at the institute told him the same story at a dinner on September 24, 1999. 'That conversation is sealed in my mind,' Ewen says. 'My jaw dropped to the floor. I suddenly saw it all -it was the missing link. 'Until then, I couldn't understand how on Monday Arpad had made the most wonderful breakthrough, and on Tuesday it was the most dreadful piece of work and immediately rejected out of hand.'

The second source to confirm the story is Professor Robert Orskov OBE, who worked at the Rowett for 33 years and is one of Britain's leading nutrition experts. He was told that phone calls went from Monsanto, the American firm which produces 90% of the world's GM food, to Clinton and then to Blair. 'Clinton rang Blair and Blair rang James,' says Professor Orskov. 'There is no doubt he was pushed by Blair to do something. It was damaging the relationship between the USA and the UK, because it was going to be a huge blow for Monsanto.' Dr Stanley Ewen also "retired early" from the University of Aberdeen as a result of the controversy and pressure from his Dean. He had collaborated with the Rowett

Here we rely on personal communications with Dr Zsuzsa Bardocz who was Head of the Gastrointestinal Unit at the Rowett Institute between 1991 and 1993 and Head of Food -Gut -Microbial Interaction Group from 1994. She is the wife of Dr Arpad Pusztai and received "early retirement" from the Institute in May 2000. We also rely on personal communications from Dr Stanley Ewen who collaborated with Dr Pusztai on the GM Potato research. Also relevant websites we examined include: <a href="http://www.freenetpages.co.uk/hp/a.pusztai/">http://www.freenetpages.co.uk/hp/a.pusztai/</a>, accessed 8-Feb-10 <a href="http://www.mad-cow.org/UKGMO/Lancet.html">http://www.mad-cow.org/UKGMO/Lancet.html</a>, accessed 8-Feb-10 <a href="http://www.biotech-info.net/Ewen\_submission.pdf">http://www.biotech-info.net/Ewen\_submission.pdf</a>, accessed 8-Feb-10 <a href="http://www.thelancet.com/journals/lancet/article/PIIS0140673698058607/abstract">http://www.thelancet.com/journals/lancet/article/PIIS0140673698058607/abstract</a>, accessed 8-Feb-10 <a href="http://www.psrast.org/pusztai.htm">http://www.psrast.org/pusztai.htm</a>, accessed 8-Feb-10

<sup>&</sup>lt;sup>5</sup> Source: The sinister sacking of the world's leading GM expert – and the trail that leads to Tony Blair and the White House. By Andrew Rowell. Daily Mail. July 7, 2003

Institute for eleven years, and was a co-applicant on the successful Government grant application for the study with Dr Pusztai in question. Dr Ewen was not dismissed, but reports that conditions became very tense between the Medical Dean and himself "culminating in the threat of disciplinary action. A major contretemps was caused by the Dean's insistence that I hand over the raw data of my results to ACNFP and I knew only too well that publication in the Lancet would be rendered impossible. We had an explosive meeting at one stage and my premature retirement was accepted and our paper in the Lancet successfully appeared in October 1999. The disciplinary action was threatened indirectly via my former Ph.D. student and would take the form of an attempt to cancel my merit award". Dr Ewen told us that his "freedom of speech was impeded to say the least due to direct Government interference and crude blunt measures were used in an attempt to suppress the truth. The harmful possibilities of GM food are still denied despite 60 papers to the contrary in the intervening 10 years thus Pusztai's visionary project was too far ahead of time."

Whatever the merits of the science in this case, and we are certainly not in a position to judge that as economists, we can note the consequences of what is claimed to be government and industry pressure transmitted through Institute Directors and Deans of Schools who are very sensitive to the potential loss of research funding, or the closing of doors to new applications for such funds. Even if this pressure is not overtly applied (through those telephone calls), the mental pressure arising from Research Assessment Exercise performance indicators is probably sufficient in the case of Universities, while the delicate position of a largely government funded Institute (which also had some Monsanto funding)<sup>6</sup> with respect to its government and industry relations is also evident. In this case the reputations of researchers with long and strong track records were tarnished not only by their dismissal or early retirement, but also by subsequent reports of formerly reputable bodies such as the UK Royal Society.

#### 5.3 GMOs: The case of rBST

Our second GMO case is drawn from the letter in Lancet of Saturday 3 July 1999 by Eric Brunner and Erik Millstone on the "Health Risks of Genetically Modified Foods". The main point of this letter is to stress the importance of "the integrity of the peer-review process ... to the maintenance of high standards in science". However, the authors also report on their direct experience with "trial data on recombinant bovine somatotropin (rBST, an injectable hormone which raises milk yield in dairy cows) raising doubts about the standards of such peer reviewing, as well as shedding light on the behaviour of the large corporations. In the case of rBST, official regulatory authorities accepted the manufacturer's unpublished analysis. We previously identified the shortcomings in this analysis, and did our own, but we were unable to publish it because the company concerned withheld consent. Here the peer-review process was compromised, partly by the pressures on the existing regulatory process and partly by the requirement for commercial scientists to deliver the product to market. In general, if pre-approval studies are not published, any questionable conclusions may go unchallenged. Put another way, if applicants are able to argue successfully that disclosure would cause commercial harm, then peer scrutiny may be restricted." The authors continue "A process that bears the hallmarks of these difficulties led to the approval of rBST for farm use by the US Food and Drug Administration in 1994. rBST is unlicensed in Canada and the European Union. The company seeking to market this productivity aid gave us data from eight randomised controlled trials. We did a meta-analysis and found evidence for a pro-mastitic effect due to rBST. The report was sent to the company and to a UK peer-review journal. Although our report passed the peer review, the company refused permission for its publication on the basis that the trial investigators would soon submit their own analysis for publication. In the following 3 years, no such report appeared. We resubmitted our paper to a US journal and then to another UK journal. On each occasion the paper

<sup>&</sup>lt;sup>6</sup> Monsanto had apparently given the Rowett Research Services a \$224,000 grant prior to Pusztai's interview at the BBC. Source: http://www.psrast.org/pusztai.htm

<sup>&</sup>lt;sup>7</sup> Millstone EP, Brunner EJ, White IR. Plagiarism or protecting public health. *Nature* 1994; **371:** 647-48.

received peer approval but could not be published because the company alleged they had copyright over our analysis of their data. We were eventually able to publish our findings as a response to a public accusation of plagiarism by a company representative, but only after FDA approval for rBST had been given." The authors point out that there is no method of recourse in such situations, and argue for further openness in the regulatory process in the UK and elsewhere for new foods.

This case illustrates the problem of copyright exercised by research funders or providers of data used in research, and their attempts to suppress publication of "inconvenient" results, again in the sensitive field of food science and GMOs.

# 5.4 Climate Change: The case of Dr Clive Spash, CSIRO Australia<sup>8</sup>

Spash is an ecological economist who started his career at Cambridge, UK, then moved to The Macaulay Institute and Aberdeen University, before taking up his position with the Australian Commonwealth Scientific and Research Organization (CSIRO) in Canberra. In early 2009, Spash wrote a paper, The Brave New World of Carbon Trading, which was critical of carbon emissions trading schemes of the type favoured by most governments and many corporations in the post-Kyoto and pre-Copenhagen debates on mitigation of carbon emissions, a key policy area in relation to Climate Change. Spash argued that "redesign would not address the concerns raised". CSIRO sought to prevent the paper from being published even after peer review and acceptance by the New Political Economy Journal. Spash explains the subsequent furore: "After several months the issue became public and was the subject of debate in the Australian Senate. The CSIRO was forced to release the paper but first attempted to subject the work to serious alterations, to which (he) was asked to assent without making any changes. He felt that he could not agree. The journal New Political Economy also wrote to Senator Carr stating the changes made were so substantive that the paper was no longer equivalent to that which they had accepted for publication earlier that year. After six months attempting to seek due process there remained no internal recognition within management of any failure on their part or any breach of acceptable scientific practice. Despite considerable support from his colleagues Clive felt that he could no longer work within an organisation being run with such an approach to management and where arbitrary judgment over political sensitivities are employed to alter or ban research findings. He resigned his position." The paper is now available on the web<sup>9</sup>. The case again demonstrates how "the authorities"<sup>10</sup> pressurize research Institutes to "toe the line" and avoid publishing research based work which is critical of their policies in a sensitive area, thereby denying, or at least seeking to deny, the engagement of academia, the public, the media, and opposition politicians the opportunity to engage in the kind of debate which government's democratic duty to protect citizens requires.

# **5.5.** Climate Change: The case of the University of East Anglia<sup>11</sup>

Our final case also concerns the highly sensitive area of climate change, in this case climate science itself. Here the hacking of emails between climate scientists suggested that data was withheld from the public and deleted, data was manipulated, and the peer-review process itself was rigged. The aim, it is claimed, was to prevent critics from gaining access to data and analysis which may appear to contradict the orthodox view of climate change and global warming.

<sup>&</sup>lt;sup>8</sup> Source: personal communication with Clive Spash, and his website http://www.clivespash.org/main.php?page=cnsrsp&style=default

<sup>&</sup>lt;sup>9</sup> At <a href="http://mpra.ub.uni-muenchen.de/19114/">http://mpra.ub.uni-muenchen.de/19114/</a> accessed 9 Feb 2010.

<sup>10</sup> It is not always evident who "the authorities" are, of course, but CSIRO is a high profile government sponsored research institute, and the government responses in the media strongly point to their involvement. What is less clear is whether any corporate interests were also involved.

<sup>&</sup>lt;sup>11</sup> See Fiona Harvey"s article "Climate scientists feel heat in email probe" Financial Times, February 6 2010.

This case was reviewed by three independent panels. The third panel did not find evidence that the scientists at UEA were at the forefront of casting doubt on the independence of the peer review system. However, the report states: "On the allegations that there was subversion of the peer review or editorial process we find no evidence to substantiate this in the three instances examined in detail. On the basis of the independent work we commissioned [...] on the nature of peer review, we conclude that it is not uncommon for strongly opposed and robustly expressed positions to be taken up in heavily contested areas of science. We take the view that such behaviour does not in general threaten the integrity of peer review or publication." (RUSSELL ET AL. 2010) The panel raises instead the interesting question of the role of the editor(s) of a scientific journal in the process of whether or not to publish uncommon and opposed research findings. Furthermore: "We believe that peer review is an essential part of the process of judging scientific work, but it should not be overrated as a guarantee of the validity of individual pieces of research, and the significance of challenge to individual publication decisions should be not exaggerated." This comment underlines the subjectivity of research and the publication of research. Many members of the scientific community may have been in the situation where one's own piece of work is highly acknowledged by one reviewer, but deemed unsatisfactory by a second reviewer; rejected by one journal and published by a second journal. Moreover, the panel found the scientists at UEA to be too restrictive with respect to the transparency of their data.

Again we cannot comment on the substantive issues of climate science.

#### 6. Discussion

The relationship between research based advice and policy making is clearly problematic. There is no direct and generalisable relationship. Nor should we expect there to be such a relationship. Politicians are ultimately responsible to citizens in a democracy, albeit modified by their relationships to special interest groups including corporations, unions, representative bodies, and parties. Whilst ideas and evidence matter, it is votes in the next election that matter most.

In such a context, it is perhaps a truism to observe that research based advice which influences policy most is that which gains most votes while losing few or even none at all. It helps if this advice also accords with the advice of significant interest groups which also have the ear of the policy makers. It also helps if relevant parliamentary committees have heard and adopted the advice in question in their reports. In this set of cases we can find, for example, the advice presumably given by GARDNER himself and reported in his 1996 paper. More difficult are the cases of research which criticises Government, Corporations or other significant interests, especially in politically sensitive areas. The cases we discuss are far from exhaustive, but they indicate the diversity of circumstances and outcomes as well as the significance of the issues involved - food safety and genetic modification, climate change, and agricultural policy. The cases focus on 'positive' academic freedom rather than 'negative' academic freedom, to use BERLIN's (1969) distinction cited by KARREN (2009) in the sense that they deal with cases where government or its agents, or indeed a private sector sponsor, have sought to prevent publication or in some way interfere with findings, rather than with cases where researchers have been unable to undertake research due to lack of resources. This is not to say that negative academic freedom is not important, or that the arguments we advanced at the start of the paper concerning the tendencies of governments and research councils to pre-define research topics and priorities, are not also important. However, it is fair to say that the media is more focused on cases of violation of positive academic freedom. In at least one case (NILF) one outcome is a proposal for new legislation to give legal protection to that right. As we can see, the areas of research involved in such cases often involve large and powerful interests, and significant public concern, in which issues about the relationship between "evidence" and policy" which may otherwise escape notice become very clear.

Our presented cases took place in recent years, and do not span out the time period before and after the

start of the era of privatisation and new public management. There is a broad and extensive literature that deals with the issue of academic freedom and the changing environment for universities and public-sector research as a consequence of new public management. SCHIMANK (2005) studies the effects of new public management for German universities. He argues in disfavour of new public management claiming that it poses a threat to the traditional values of the academic profession. HIMANEN ET AL. (2009) study the steering model of universities in five OECD countries with data for the years 1987-2006. They find that the model that focuses most on the independence of the university from the state is the one that seems to be the most beneficial with respect to research performance. Schubert (2009) presents an econometric analysis using data from German universities to study the hypothesis whether new public management has led to improved efficiency in terms of research output (measured by e.g., third party research, advisory service fo companies, doctoral titles, publications and citations) over research input (measured by e.g. the number of students). His results indicate indeed signs of increased allocative efficiency due to new public management strategies. His quantitative analysis does abstract, however, from possible conflicts that can arise from those new strategies with respect to the independence of universities and researchers. LEVIDOW ET AL. (2002) present an account of structural changes in the agricultural publicsector research establishments (PSREs) in Western Europe. Studying those changes for PSREs in the United Kingdom, The Netherlands, France, Denmark, Germany and Spain, they find that the research priorities of PSREs have been more policy-directed, while core funding has been reduced or has been made dependent on competitive bidding for projects. They argue that "increased private-sector involvement undermines the public-service roles for PSREs and their public credibility as independent".

In this respect, the relationship between academic and PSREs needs to be examined in more detail. The traditional definition of academic freedom defined in terms of freedom to teach, freedom to learn and self-governance or institutional autonomy does not apply to PSREs as they do not have teaching obligations and are usually steered by an external board. What is left is academic freedom in terms of conducting and presenting research without fearing threats and sanctions. As many PSREs have to compete for research projects where the themes are often determined by governments or research councils, what remains of the concept of academic freedom would be in the most constraining case the pure choice of method.

#### 7. Conclusions

From this paper and the material we assessed for it, we have arrived at several broad general conclusions.

First, no research can ever be taken as the final word on any topic, whether this is in domains of natural or social science or indeed the arts and humanities. All research is in this sense "provisional".

Second, and more arguably, no evidence is entirely untainted by the values, beliefs and opinions of the researcher(s) involved. This statement is more likely to be refuted by natural scientists than by social scientists and historians who either admit their personal positions openly and/or accept their role as actor in their own research.

Third, researchers and their institutions find it hard to resist the demands and pressures of those funding their research whether this is Governments or Corporations, interest groups or non-government bodies.

Fourth, we find evidence that academic freedom is tentatively more under pressure at public-sector research institutes compared to universities due to the absence of self-governance and autonomy of the former. Research institutes are commonly owned by public or private agents, which may make it more difficult to develop a culture of academic research known at universities. In addition, there is evidence that leadership at research institutes are more inclined to make the institute appear as a "homogenous research body" contrary to a university that promotes the diversity of perspectives. Nevertheless, academic freedom (defined at a minimum as the free choice of method) is arguably at least as important

for such institutes, since they have a privileged role in relation to the research-advice-policy cycle, and since trust in government and policy process is essential for good government in a democracy.

In these circumstances, the best protection for the public in general must lie in the greatest transparency of research and freedom of speech for researchers. This seems to be the case whatever position one takes on the logic of the policy process, and the role of the researcher, in a democracy. Free and open debate on research findings, in which the media have a most important role, is the only way to guarantee against the dangers which we have highlighted, and to build relationships of trust as well as transparency in policy making processes. It follows that a constitutional or legal guarantee of the rights of researchers to freedom of speech needs to be established if this is not already present. The only question is whether this right would be sufficient in the complex modern world. In our view, the evidence we have seen strongly suggests that more is needed. In particular, researchers who do not have such guaranteed rights both from their employer and from the funder(s) of their research should not have access to peer reviewed academic publications. This is the more important because of the status of "peer reviewed" research on the one hand, and because of the potential for "manipulation" of the peer reviewing process on the other. There are other safeguards needed with respect to the latter, arising from concentration of certain academic outlets in a few or even one institution, and in terms of the editorial and reviewing process.

Finally, returning to our initial policy framework, academic freedom appears to be a universal concept that is valid and independent from how one views policies and policy processes. In this respect, the framework is of minor help to support the argument for academic freedom. However, the changing view of policies over time and the rhetoric of the reduction of state intervention and 'big government' after the 1980s appears to have had the opposite effect not only in terms of state direction of research themes and topics (which have become increasingly predetermined, thus affecting negative academic freedom), but also, perhaps, in terms of attempts to influence research outcomes and publication. On the other hand, through the focus on policy-directed research, researchers may increase their opportunities to engage directly in policy decision-making processes. This being the case, the importance of a broad perspective on academic freedom (and not only the freedom to choose research methods) becomes even more evident as a necessity to guarantee the researchers' independence, credibility and integrity.

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