Educational Research: two cultures and three estates

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There can have been few less auspicious years in which to deliver the Presidential Address of the British Educational Research Association. As we all know 11 June 1987 saw the election of a Conservative Government for a further five-year term and with it, the reinforcement and possible extension of a hostile policy climate for both research in general and education in particular. At the 1986 Annual Meeting of the British Association for the Advancement of Science held in Bristol, this climate was well described by the President, himself a distinguished scientist and fellow of the Royal Society, when he referred in impassioned terms, to the desperate state of pure scientific research in this country. Progressive starvation of vital resources he suggested, was leading to the break up of world-famous research centres and a steady 'brain-drain' of talented scientists to more far-sighted countries or out of research altogether. It is now widely acknowledged that hitherto celebrated research institutes of which Britain has in the past, been justifiably proud, are finding it virtually impossible to engage in the pioneering work for which they are uniquely suited. Urged to look to industry for support to supplement the dearth in state-funding, pure scientists encounter once again the prevailing utilitarianism and a tendency to support only the very specific end-product applications of research. The 'seed-corn' of such industrial and commercial applications is not being sown, thus presaging an era in which the neglect of pure scientific research will seriously inhibit Britain's competitiveness in the international market as well as her potential contribution to more philanthropic fields such as medicine and education.

As this trend continues apparently unchecked we encounter the interesting anomaly of philanthropy and personal patronage trying to act as a finger in the dyke to stem the potential haemorrhage in British scientific research. Where once it was the successful industrialist who provided much of the necessary patronage for the arts, more than one successful artist is now helping to make-up the critical shortfall in resources needed by the pure science research community. It is ironic perhaps, that Tom Sharpe, that scourge of the Establishment and all its scions, and of universities and the education system in particular, should have become conspicuous among those donating money to support scientific research. Truly we now seem to be in an era when the worship of science and technology is matched only by the meanness of resource allocation to pay for its less glamorous aspects.

This audience will not need to be reminded just how far the utilitarian malaise of laisserfaire individualism has spread. In almost every branch of state-supported activity the same famine or resources is apparent. As Government reneges more and more on its commitment to support key state services such as health care and education the inefficiencies and inequalities produced by such policies are all too apparent. In the world of higher education with which many of us here will be familiar, the energy for scholarship is steadily being dissipated in the pursuit of ever more elaborate bureaucratic strategies for cost-efficiency and fund raising. Contract research workers are thrown unceremoniously onto the dole queue as supply and demand dictate; frustration and demoralisation are increasingly the norm for tenured academics as the new generation of scholars which should be being recruited into universities and colleges is passed over, leaving an ageing academic community, many of whom have little hope of promotion.

This already gloomy picture of the effects of rationalisation in the research community is thrown into still starker relief by the opulence and glamour which surround those occupations more closely associated with the financial world itself. Many of the graduates going into merchant banking, accountancy, stockbroking and some branches of industry will, after a few years, be earning more than the most distinguished university professor with a lifetime's service of scholarship. And if it could have at one time been argued that relatively modest financial reward was more than made up for by autonomy and tranquillity of mind, the opportunity to indulge intellectual passions-or indeed other passions-unhindered by the pressing business of life, few academics enjoy such liberty now.

To our jaundiced 1980s eyes, 'The History Man' of the nineteen sixties and the halcyon days of academic expansion and radicalism seems to have been free not only to indulge a wide range of interests-academic or otherwise-but to be remarkably free too of the energy-sapping drudgery of cost-centre administration and the ubiquitous application of external performance criteria. With the Bill to abolish academic tenure about to go through parliament, the days of the eccentric genius, the intellectual radical, and the discomforting revolutionary thinker, are surely numbered.

If one could only be convinced that such a policy was motivated simply by a desire to rid academe of its 'dead wood' it might be marginally more acceptable though even this limited objective begs a multitude of questions about criteria, and is itself likely to stir up a hornet's nest of professional retaliation, as Sir Keith Joseph discovered when he tried to incorporate the eradication of incompetent teachers as part of his policy for teacher appraisal. But in the case of academic tenure, the move would appear to be much more closely associated with purely financial motives aimed at enabling higher education institutions to hire and fire as centrally-determined funding policies dictate' If this approach works well for industry-and this itself is debatable if only in terms of the human suffering it causes-it is totally inappropriate for a world of scholarship in which the critical mass of researchers, data and international contacts essential for the creation of centres of excellence, may take many years of sustained financial support to build up.

The world of academe is quite literally another world, or, as I want to propose tonight, another culture. It is characterised by values, goals, ways of working and rewards which are fundamentally at odds with those of laissez-faire individualism and profit, market-forces and competition. It cannot, as I shall argue in what follows, be squeezed into a

conformity with the prevailing political culture. To the extent that it is forced to submit, the consequences both for science and for society may well be disastrous.

The Two Cultures

As educational researchers we form part of that scholarly community which upholds and seeks to promulgate, the values of systematic enquiry and respect for evidence. Although we cannot hope to emulate the single-minded and selfless dedication of the clerics and scholars of a previous era, distracted as most of us are by less noble concerns of status, power and monetary reward, most of us would nevertheless claim that we work within a set of ethical principles which are a distinctive characteristic of our calling. In the most general terms these ethical principles centre on the pursuit of truth. This does not mean that we embrace any absolute notion of truth since for most of us in the social sciences, this cannot be; but rather we seek to describe, illuminate, portray and hopefully sometimes, even explain, that small section of reality that serves as the focus for our particular enquiry. Recognising that we can never divorce ourselves from our own values-some of which we may not even be aware of overtly-we try to generate insights which are dictated as closely as we can make them by the data themselves. These data are in turn collected according to detailed canons of procedure which years of experience within the various disciplines have consecrated as the most impartial and illuminating basis for scholarship in that field.

It is this scientific culture that we seek to teach our students when we urge them to distinguish between fact and opinion, evidence and value-judgement. When we teach them the skills of systematic enquiry, interpretation and analysis. Indeed from their earliest days in school, pupils are taught to observe, consider, report and interpret, distinguishing this process from the experiential, intuitive, emotional response which characterises other parts of their learning.

I am not referring here simply to the commonly-made distinction between 'arts' and 'science'-the contrasting intellectual cultures that C. P. Snow has so graphically expounded in his writing. Whilst recognising its continuing importance, many of us might want to take issues with this kind of crude distinction arguing that, at its best, the Popperian inductive leap or the Kuhnian conceptual revolution, involves a degree of creativity much more akin to that of the novelist or the painter than to the patient hypothetico-deductivism of the laboratory scientist. This same debate as applied to education has been a favourite theme for examination questions. Students are asked to discuss, for example, whether teaching is an art or a science, a debate which has increasingly spilled over into educational research itself and the debate about "what constitutes truth and appropriate methods of discovering and recording that truth" (Gibson, 1978). The debate takes various forms-

"objectivity versus subjectivity; positivism versus hermeneutics; orthodoxy versus the counter-tradition; empiricism versus understanding. the natural sciences versus the human or social sciences"... (Gibson, 1978). These are distinctions with which most of us are familiar. Since the early days of BERA, we have in fact seen a steady shift away from the more positivist scientific paradigm and towards more interpretive models and

methodologies. Those of us who have resisted the temptation to polarise exclusively into one or other camp, have tended to suit the method to the issue and thus work within both paradigms (see, for example, King, 1982).

It is clear that educational research, like the other so-called social sciences, occupies an uneasy conceptual and methodological middle ground between naturalistic science on the one hand and interpretive disciplines such as history and literature on the other. Indeed it can and should build on the strengths of both as appropriate. This is now well-born conceptual territory, which I shall not rehearse here, although interestingly enough the question of quite in what way the two paradigms can be theoretically united continues to be a question as absorbing and elusive to Social Scientists as deciding the sex of angels was to a previous generation of scholars.

Tonight I want to dwell on a rather different polarisation that may not have seemed pertinent within the hallowed academic portals of the Cambridge which C. P. Snow was describing nor indeed to the well-defined boundaries of scholarship of that era. It is a distinction which has much affinity with that between pure and applied research but takes this relatively neutral distinction a stage further to include the crucial axis of values.

Social sciences, educational research among them, cannot escape having a value dimension-an argument I set out in a paper published in the Scottish Educational Review in 1979 entitled 'Educational research through the looking glass'. Whether it is in the way in which questions are addressed or indeed the very nature of the questions that are asked, values represent a more or less conscious filter on reality. When the first empirical researches were conducted into imbecility and madness in the mid-nineteenth century, this helped to reify the existence of madness as a concept as Gillian Sutherland in her book *Ability, Merit and Measurement* points out. And yet, Foucault in *Discipline and Punish* argues such a concept was then a relatively new instrument of disciplinary power which could have had no meaning outside the particular normative climate that produced it. The subsequent history of social and educational research is full of examples of concepts-such as intelligence or cultural deprivation which are themselves cultural constructs-being used as the basis for policy decisions when subsequent research, conducted in a different cultural climate would challenge not only their significance but their very existence.

Furthermore, all researchers are subject to the vulnerability that they cannot normally control how the results of their work will be used. In her biography of Enrico Fermi his wife describes the moral dilemmas he faced in deciding whether he should pursue his research into splitting the atom in the early 1940s. Although few of us in education will ever face such a difficult choice, many will be aware of the unfortunate effects that have followed when half-truths and distortions have been allowed to take the place of fully considered research findings. If Bernstein's "elaborated and restricted code" analysis is the most obvious *cause celèbre* in this respect, it is far from being unique.

But, serious as these issues are, they are not new. They are indeed endemic to any research enterprise and as such form part of the scientific culture. It is rather the potential

impact of a particular set of commercial values which presents a distinctive challenge for contemporary scholarship and it is the significance of this rival culture that I now want to address.

The Commercial Culture

In my very general introduction to this address I rehearsed some of the woes which now increasingly confront researchers, notably problems of finance and morale and political expediency. Underlying such symptoms we may detect the impact of a political ideology which embodies the following dimensions:

- (1) that as far as possible, the research effort should be demand-led;
- (2) that researchers should have to compete with each other for available resources;
- (3) that research, like the arts, should look for industrial sponsorship to make up for any shortfall in state funding;
- (4) that where government money is involved, government will have an increasing say in how that money should be spent.

Such an extension of the Rothschild formulation of the customer-research relationship first put forward in the early 1970s represents a considerable strengthening of capitalist principles. Not only does it reflect a considerable tightening in accountability between sponsor and sponsored; it also, more significantly, represents the elevation, and hence imposition, of one set of value criteria-those of the sponsor over those of the researcher with which it may well be at odds. The former is likely to look for maximum pay-off for minimum investment, the resolution of short-term goals and specific problems. Sponsors may even look for research to support a particular policy stance or product. By contrast the researcher's criteria of worth will lie in the care with which the study is carried out, the sensitivity of the conclusions drawn and the relevance of the findings produced to the larger body of scholarship in a particular field. The distinction is fundamentally a question of whether the researcher is there to serve science or whether science exists to serve particular interests. Whilst the two are not mutually exclusive they nevertheless represent a fundamental difference in emphasis at least and arguably in values as well.

The distinction I have been making is a very general one and open to critique by those whose different epistemological stance would challenge the relatively neutral 'ideal-type' model of scientific enquiry that 1 have put forward here. Indeed I am ready to accept the structuralist argument which would maintain that the organisation of scholarly disciplines that has evolved is itself the embodiment of a particular and arbitrary set of power relations which have been highly significant in the formation of contemporary society and continue to reinforce the peculiarly alienative and abstract forms of knowledge that characterise our attempts to interpret reality. In educational research this kind of critique has been strongly mounted by Jack Whitehead and others and I will return to it later. More generally, the point is well illustrated by a recent *THES* reference (18.9.87, p. 2)-a conversation between Sir Herman Bondi-the then Chairman of the National Environment Research Council-and Bishop John Robinson of *Honest to God* fame:

'God', said Bondi to Robinson, 'was recently applying for a grant from a scientific institution to study the origins of Creation. 'It was declined on three grounds: first that there was no visible evidence that He had done any work on the subject for a long time; second because no one had been able to replicate the experiment; and third because the only records of it had not been published in any recognised scientific journal...'

Meanwhile, accepting the limitations of the dichotomy I have highlighted between the scientific and commercial cultures, I would like to classify it in a little more detail and by looking at some of its practical implications, justify why I attach such importance to the two cultures analysis. It is no coincidence that the field of educational research can provide some of the most illuminating illustrations of these tensions since this is simply a reflection of the highly ambiguous nature of educational research itself.

Specific issues in Educational Research

First whilst we find ourselves in common cause with other disciplines in seeking to overcome the impact of current government policies for research and research institutions, few of us can be unaware that in contrast to currently glamorous disciplines such as biotechnology and computer science, educational research will come near the bottom of any list of national research priorities and this is reflected in both the absolute level and type of funds available.

Secondly, unlike most other disciplines, educational research enjoys far from wholehearted support from the community it most directly serves - Teachers in particular, have been shown to have little interest in research findings as Cane & Schroeder's (1970) study revealed. Many are cynical about the contradictory nature of so much research. Others are put off by the way in which the results of research are communicated. With the best will in the world, the pressing concerns of the classroom leave little time for teachers to familiarise themselves with research evidence and then to work out ways of applying this in their practice. Experience and professional instinct appear to be more useful resources.

When John Nisbet and I carried out our study into the impact of research on policy and practice in education, which was published in 1980, we found that these same issues governing the relationship between research and practice also figured strongly in that pertaining to policy. The point was forcibly made to us by a number of people in government that even if there existed a total commitment to the value of educational research, policy formulation can rarely wait upon the initiation and subsequent results of such enquiry. Further they argued that constraints of existing plant and personnel, coupled with financial restrictions, often severely reduce potential policy options.

Thirdly, to add to the more or less rational barriers to take-up associated with the amount and timeliness of the research findings available is the parallel impact of more idiosyncratic situational factors. As Hoyle (1982) has pointed out, at the core of much

policy activity is the micropolitical reality of personal career concerns. A politician, for example, may deliberately provoke a dispute in order to be able to demonstrate his or her political acumen in its resolution-a point well demonstrated, some would argue, in Kenneth Baker's deliberate provocation of teachers in abolishing their pay bargaining procedures. So in Henry IV part 1, Shakespeare portrays the future Henry Vth quite consciously manipulating his public image for perceived political gain:

So when this loose behaviour I throw off
And pay the debt I never promised,
By how much better than my word I am,
By so much shall I falsify men's hopes,
And like bright metal on a sullen ground,
My reformation glittering o'er my fault
Shall show more goodly and attract more eyes
Than that which hath no foil to set it off.
I'll so offend, to make offence a skill
Redeeming time when men think least I will.

(Henry V Part 1, Act 1, Sc. 2)

Political memoirs are full of examples of this micro-political dimension where particular policy issues are merely pawns in a personal power game to be played as political advantage dictates in a trade-off which owes little to any consideration of the relative merits of the various policy options. It would be wrong to attribute all policy-making to such expediency just as it would be wrong, sadly, to anticipate a transformation in Kenneth Baker anything like as dramatic as that between the irresponsible Prince Hal and the great Statesman of Agincourt for greatness seems to have gone out of fashion in our own generation. Rather the political arena should be seen as one in which questions of personal advantage are situated at the centre of a number of concentric ideological rings which overlay the explicitly personal motivation at the core with successively more general layers of value, each initiative being a blend of personal beliefs, political expediency and bureaucratic possibility. Indeed, if we are to believe the satirical insights of *Yes Minister* it is often the last of these, rather than the first, that determines-'for better or worse'-what get done in education.

It is all too easy for professional politicians, whose primary motivation is self-agrandisement, to initiate legislation which they perceive will have political sex-appeal. Although the current economic wisdom dictates that many of these initiatives will be explicitly financial, directed at procuring greater cost-efficiency and lower absolute expenditure, others are more substantive. An obvious example of the latter which clearly reveals its genesis in political, rather than educational, motives, is the Greater Educational Reform Bill about to go through Parliament. Somehow it is difficult to imagine R. A. Butler self-consciously designating the 1944 Education Act as a 'Great Educational Reform Bill' before even it had become law even if history would now dub it so. Mr Baker's move to introduce a National Curriculum and 'bench-mark' tests of individual pupil standards at 7, 11, 14 and 16 flies in the face of a mass of historical and psychological research evidence which testifies to the likelihood of such tests lowering,

rather than raising, educational standards. The Secretary of State's highly simplistic view of motivation which almost totally disregards the closely related, but potentially more powerful, role of confidence appears only to be matched by his lack of understanding of what makes teachers give of their best.

It is quite clear that this particular policy initiative owes its major motivation to judgement that the time is politically ripe for a return to the old educational securities of subjects and testing-the traditional recipe enforced by a degree of central control only equalled in this country in the Revised-Code of the nineteenth century. Maclure has pointed out in a recent *TES* editorial, 'Payment by Results' did not work very well even in the days of relatively uncomplex educational provision when such regulations were confined to the elementary school and most of secondary educational provision was still private. National curricula and testing only work as well as they do in those contemporary education systems that the Government clearly admires-such as those of France and W. Germany-because teachers in these countries have in general a longstanding ideological commitment to self-imposed conformity. Seeking to impose such a bureaucratic yoke in this country where it is the antithesis of prevailing professional ideology is likely to mean a great deal of effort being expended towards inhibiting teachers from doing what they do best. For several decades, English primary schools in particular have been the focus of much international admiration in their ability to provide a richly creative learning environment enjoyed by the vast majority of children. Now, the simplistic thinking informing contemporary political versions of accountability seems set fair to enmesh schools in a welter of external constraints where more open-ended approaches to learning will have little place. The recent Chevènement curriculum reforms in France based on 'back to basics' policies are proving popular with parents who tend to associate more traditional pedagogies with a securer basis for learning. It is this popularity, and the potential votes it represents, that would appear to explain the unwillingness of government to initiate, or even listen to, any kind of educational debate about the likely effects of current policies.

New Approaches to Research

But although many of us will find this apparent lack of regard for empirical evidence distressing, it can hardly be regarded as novel. We need constantly to remind ourselves of our responsibility to engage with those outside the research community as well as inside it, so as to ensure as wide a coverage as possible of relevant research findings. Although the evidence suggests fairly consistently-see, for example Carol Weiss' book Using Social Research in Public Policy Making-that the impact of research is likely to be incremental and indirect for the reasons outlined above, the same evidence also suggests that research can be significant in changing the prevailing climate of opinion. This is only part of the story however. Recent years have witnessed the phenomenal growth of a rather different research paradigm which brings with it a quite different set of problems as well as considerable potential. Fuelled by the growing popularity of 'naturalistic' research approaches in the early seventies, as well as the development of increasingly sophisticated interpretive theory, democratic evaluation rapidly established itself as a dimension on the educational research agenda. The manifesto produced at the first

Cambridge Evaluation Conference (see D. Hamilton *et al.*, 1977) served both to mark what had already been achieved and to provide a springboard for future developments. The humanistic emphasis which has throughout remained central to this particular genre of research has typically found expression in explicit ethical statements governing research procedure and an elevation of those who might in the past have been termed 'subjects'-itself a term not without significance-into more or less active partners in the research enterprise. In her recent book, *Getting to Know Schools in a Democracy* the account that Helen Simons provides of some of her own evaluation experiences provides a very good illustration of the principles upon which such evaluations are typically based and the strains these can cause when they come in conflict with some of the more traditional 'hit and run' research assumptions of many policy-makers and administrators.

And yet, ironically enough, it is this kind of evaluation which has played a significant role in sustaining, if not indeed raising, the profile of educational research in recent years. Perhaps because of its highly applied character, that means it is typically tied to a specific educational initiative; perhaps because of the great care taken to make findings accessible to expert and lay-person alike, perhaps because the aim is to describe outcomes rather than to establish proof, evaluation has now become an integral part of many policy initiatives, Many educational researchers are finding themselves for the first time committed to working alongside government, the results of their work eagerly awaited by those responsible for drafting policy. Equally eager are likely to be the other participants in the evaluation who will have reflected back to them an analysis of the results of their own efforts and so in turn be provided with insights from the evaluation that they can use to improve their practice in the future. It would seem therefore that the 'new evaluation' has proved capable of overcoming some of the most intractable problems of the relationship between both research and policy and research and practice. But it is this very rapprochement that carries its own perils for in breaking down those barriers which have hitherto inhibited the impact of educational research on both policy and practice it also renders the scientific culture at least semi-permeable to the norms of the commercial culture if a sponsoring body is involved.

Anyone who has been involved in negotiating an evaluation contract with a sponsoring body will know the kind of issues I am referring to here. First the focus of the project will have to be negotiated with the sponsor. How far the individual researcher will be able to influence the design of a particular study is likely to depend both on the topic involved and on the political skills of the individuals in question. In many cases, winning the contract may involve competitive tendering-a factor which is likely to limit still further the researcher's design options. There is an ever present danger in such a situation that the most economical bid may not be the best one and that, as in any other industry, paring costs too far will result in a sub-standard product.

Secondly, there is the important question of to whom the results of the research belong. Many contracts restrict the researchers from publishing the data gathered without the explicit permission of the sponsor, an embargo that if enforced, transgresses one of the most fundamental tenets of the scientific culture as well as breaking faith with those who have allowed themselves to be the subject of the research. But some University Statutes

currently insist on the results of research being published. Thus we may well see in the not too distant future a formal confrontation between the scientific and the commercial culture as represented by universities and commissioning bodies respectively.

Meanwhile, we are likely to witness the same kind of financial strategies which central government is currently employing to control the focus of a considerable portion of local education authority expenditure (i.e. the ESG) also being used for the control of research topics. The amount of money allocated by the DES through its own research fund, as part of specific policy initiatives or for on-going programmes such as the APU and now bench-mark testing, far outstrips the funds available for independent bidding through the ESRC.

Indeed even the ESRC has announced in its most recent Newsletter than an increasing proportion of its budget will be used to initiate research on chosen topics rather than being available in response to unsolicited bids for funding. Although due in part to a desire to make research better coordinated and thus increase its potential impact, this development, coupled as it is with their greater representation of non-academic industrial and political interests on the various research committees of ESRC which has been characteristic of both the recent structural reforms of ESRC, is also likely to provide telling evidence of the political will to make the scientific culture-at least in the social sciences-increasingly subject to the commercial culture.

Thus, whether tendering for a specific evaluation contract or bidding for funds for a more conventional research project, educational researchers are likely to find themselves increasingly subject to market forces. Those working in more policy-fashionable areas are likely to find funds much more easy to come by but are also likely to be more or less constrained as to the form their research takes and the way in which its results are presented. Some, whose research findings go against the prevailing wisdom or are critical of the research sponsors in some way, will face difficult ethical problems in reconciling their scientific responsibility to report their findings as truthfully as possible and the deleterious consequences that doing so may have for them in terms of the possibilities of disseminating their findings or perhaps future funding possibilities. The *Spycatcher* controversy is a very illuminating *cause célèbre* of a much more general penchant on the part of Government to seek to suppress information of any sort which is perceived to be prejudicial to its own current interests and policies.

And there are yet more subtle dangers which accompany any attempt to make educational research more policy relevant and 'permeable'. An Open University television programme examines the dissemination of educational research through a detailed consideration of the tremendous impact of Neville Bennett's research report, *Teaching Styles and Pupil Progress* published in 1977. In this programme Bennett himself warns of the dangers of research findings being corruptly used by 'ideologies' if it happens to be relevant to prevailing public concerns. Donald MacIntyre stresses the need for critical appraisal by other researchers before any attempt is made to 'go public' with research findings. He stresses too the importance of building any one study into the larger body of

related research in order to establish a critical perspective on its likely validity and significance.

Whilst the reaction to Bennett's work probably took all sections of the research community by surprise, including the author, we do not appear to have learnt from this lesson. Evaluation studies in particular are often 'one-off, ad hoc studies which make little attempt to relate to, or extend the existing literature. In so doing they risk abandoning a cardinal principle of 'systematic enquiry' which is to engage in a research endeavour that contributes to the formation of cumulative insights and ultimately, generalisation.

One of the effects of such tunnel vision is to ignore the value issues that may underlie a particular piece of research. As Bridges, Elliott & Klass argue in their introduction to the forthcoming report of the Fourth Cambridge Conference on Education Evaluation, the premises of many new initiatives are taken as unproblematic when they are in fact social constructs which have "to be interpreted in relation to a given social context" any such premis is a "prescriptive rather than a descriptive concept" (p. 223). This point is well illustrated by Andy Hargreaves in his recent article in the TES 'Modular way to a modular life' (21.8.87) in which he argues that the current policy concern with 'improving pupil motivation' can be shown to hide other strategies of manipulation of both teachers and pupils. Thus in evaluating the policy initiatives designed to increase pupil motivationsuch as records of achievement-it is also our duty to use the theoretical and analytical tools of academe to explore at a fundamental level the significance of the developments we are studying. That this is difficult to do-for both practical and epistemological reasons-I know from personal experience, but it is that same experience that convinces me of the grave dangers of selling the pass to the forces of pragmatism or what I am terming tonight 'the commercial culture'.

A Strategy for Attack

Thus educational researchers, are increasingly finding themselves drawn into the relatively unfamiliar maelstrom of the commercial culture by the opportunities it presents for research to occupy a more central role in policy-making. They are drawn in too in their search for funding. Despite the very rapid acquisition of commercial skills on the part of many researchers that this penetration of the scientific culture has stimulated, as a community we still have little in the way of defences with which to assert our own cultural values against such an ideological encroachment. What may result if we do not do so is well illustrated by the contemporary situation in Chinese Universities as Cleverley describes it in a forthcoming paper in Comparative Education where the expectation that scholars will fund their research work from commercial sources has resulted in a situation where virtually all academics are obliged to 'moonlight'. Teaching commitments as well as 'pure' research are neglected so that time can be spent making money for personal or professional gain. In such a situation there is little chance of academics being able to hold themselves aloof from the situation. Those unwilling to sully themselves in the crude business of the market-place will be likely to find

themselves, like the landed gentry of a previous era, impoverished and irrelevant to the mainstream of industrial and scientific development.

Thus, having begun this address with a good measure of self-pity and academic handwringing, I want to conclude on a much more militant and positive note. Simply bemoaning the fate which the unjust Gods have been pleased to mete out to us at the present time will result in our succumbing to the consequences of our own weakness as surely as in any classical tragedy. The rather charming academic unworldliness characterised in the ideal-type of the absent-minded professor has no more place in the cut and thrust of contemporary utilitarianism than the sycophantic vicar or the paternalistic squire-equally beloved stereotypes of our culture. Systematically stripping ourselves of our naivity, we must individually and collectively examine what strategies we may adopt to sustain and strengthen educational research in the hostile years to come. As the new President of an association which must shoulder a major responsibility in this respect I feel it is beholden upon me to offer some lead to the more specific discussions that I hope BERA members-collectively and individually-will begin to undertake. I would therefore like to suggest two possible areas in which there seems to me to lie the possibility of bringing about a potentially effective strengthening of our enterprise.

First and foremost, we need to convince our potential paymasters that educational research has already proved its value and will continue to do so. Given the chance we need to devote some energy towards the public dissemination of examples where research has been relevant and important to either policy or practice or both. Somehow we must try to raise the status of educational research so that it receives the proportion of funding in relation to the total enterprise which is currently characteristic of more explicitly scientific fields such as medicine and engineering. This is most likely to be achieved by the careful steering of a middle course between ivory-tower 'research-speak' on the one hand and the more immediately relevant, but essentially ad hoc insights of project evaluation, on the other. If we can emphasise a research style in which the more abstract search for generalisations does not preclude addressing the more specific questions of a particular policy issue, our research is likely to be regarded in a much more favourable light.

One example of how this might be done is by making much greater use of the experience of other education systems than is currently fashionable. The Chinese example 1 cited earlier provides a good example of the kind of insights comparative educational research can provide for policy-making whilst demonstrating the dangers of a simplistic deduction along the lines of 'well its worked there it will work here'. The great strength of comparative studies is that they typically address relevant policy issues whilst relying heavily on the well-established canons of systematic enquiry to explain the differential impact of such policies in various national and sub-national settings'. It is this blend of relevance and objectivity that we need increasingly to pursue if we are to maintain our scientific integrity whilst projecting ourselves from the incursions of a parallel research paradigm on the one hand or extinction on the other.

Secondly, as I intimated earlier, whilst we may be two cultures we are 'thrie estates'. In our case, the aristocracy the clergy and the people may be translated into government, scholars and practitioners. In recent years the yawning gulf between researchers and teachers has begun to be very effectively bridged by the advent of forms of enquiry that unite both groups in common cause. Whether through principle or pragmatism, there has been a growing tendency for educational researchers to address the issues that teachers themselves identify; to share with teachers insights as they are generated so that validation or further illumination may be generated by the latter's response. In some cases the main responsibility for the research has been handed over to teachers with professional researchers providing technical support and dissemination. As a result, many teachers have become much more interested in and supportive of the research enterprise.

Whilst unlikely to favour a return to the purest principles of scientific culture as far as educational research is concerned, teachers represent a potentially powerful ally in the fight for educational evidence rather than political expediency, as the basis for policymaking. Subject as most educational institutions currently are to the effects of the same corrosive policies that are of such grave concern within academe, there would seem to be a strong argument for the formation of a new alliance between the two groups. To lay before the public the evidence from experience and research that is the only effective weapon against policies inspired by a political climate of self-seeking and natural selection.

As we gather in the early Autumn of 1987, we find ourselves poised on the brink of momentous changes in education. These changes are on a scale which threatens some of our most deep-seated cultural assumptions about the way in which education should be delivered. It is our task, as researchers, to use our relative detachment from the most extreme consequences of current policy, to provide the analysis that must be the first stage in any effective response. We must be the champions of evidence, clear-thinking and objective debate and expose the greater part of current rhetoric for what it is, the application of crude commercial principles to the exploitation of our most precious natural resource. All those, who, like me, believe the opportunity for an effective and enjoyable education is every child's right, must enlist on the side of policy-making that has evidence, rather than ideology, as its informing principle. It is BERA's duty to demonstrate this important distinction; I believe it can and must be done-and done now.

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NOTE

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