Academic Research and Management Practice: Is the Relevance Gap Closing?

Les Worrall
Sam Lubbe
Rembrandt Klopper

Abstract

Over the last decade, there has been much debate in academic research circles bemoaning the fact that management practitioners are not using the academic research being produced in universities. These debates have focused on the research rigour and relevance debate and on the need for new forms of social organisation for the production of management knowledge encapsulating concerns about the structure of business schools, the nature of management education and the conduct of research. Yet, despite this debate and the clamour for increased relevance, the amount of funding that academics are attracting directly from business is continuing to decline. The purpose of this paper is to stimulate debate on these issues.

Introduction

In the recent past there has been an appreciation in the business strategy literature, typified by Nonaka and Takeuchi (1995), that knowledge is an essential, non-imitable element of a firm's competitive strategy. Government policy all over the globe has increasingly focused on 'knowledge transfer' from universities to businesses as a policy goal and universities

being increasingly exhorted to develop effective partnership relation-ships with businesses to capitalise on, exploit and transfer the knowledge being created in universities in order to enhance the competitiveness and productivity of businesses. While these initiatives are focused much wider than the transfer of management knowledge, and often focus on trans-ferring and then exploiting technology to return revenue back into an under-funded higher education system, one might expect that the adop-tion of the outputs of the academic research being carried out in schools should lead to the improvement of the competitive position and im-prove the productivity of businesses assuming, of course, that university-produced research outputs are relevant, applicable and capable of being implemented.

Despite this hope, experience would lead us to feel that this trans-fer of management knowledge is not taking place. Indeed, there is evi-dence to suggest that academic research has had, and continues to have, little effect on management practice (see Ford *et al.,* 2005; Brannick and Coghlan, 2006; Keleman and Bansal, 2002; Tranfield and Starkey, 1998; and, Starkey and Madan, 2001). These concerns are far from new and there a references going back to the early 1980s expressing concerns that academic research had had 'little effect on the life of organizations' and that more effort needed to be applied to achieving 'greater utiliza-tion of organizational research' (Beyer, 1982: 588 *cited* in Vermeulen, 2005: 978). Ghoshal (2005) even went as far as to suggest that bad man-agement theories were actually destroying good management practices. Academic research, as currently enacted, seems to have a considerable 'utilisation problem' and a low level of 'face validity' among practitio-ners. As Rynes *et al.* (2001: 340) argue, executives rarely turn to aca-demics or their research findings to solve problems and academics rarely turn to practitioners when they are trying to frame research questions or 'for insight when interpreting their results'. Despite these concerns, Ry-nes *et al.* (2001: 342) also identify a paucity of empirical research on why the gap has been created and is being sustained.

The purpose of this paper is to assemble some thoughts about aca-demic research and, in particular, to explore the 'relevance gap' by ex-amining the impact of academic management research on management practice; to discuss the nature of academic research; and, to discuss how

changes in universities may be affecting academic research; to review the recent debate about the modes by which management knowledge is produced. The paper concludes with a short discussion about of some of the structural issues that seem to be perpetuating the academe-practice gap.

The Impact of Academic Research on Practice

It is incontrovertible that academic research had had much less impact on management and organisations than the array of fads, half truths, self-laudatory accounts of business leaders and plausible sophistry that can be found in the bookshops of airports all around the world. While fads have the ability to pervade the world of management practitioners, more traditional management research does not. Some might argue that some of the fads that have been adopted have an academic parentage (for example, the business process re-engineering movement, followed by re-engineering the corporation and, finally, re-engineering management (Champy, 1995) have some academic provenance) but this commodified research has, we argue, be transformed by the process of commodification into a form of plausible sophistry that is too easily ingested by a cadre of managers who lack the critical skills effectively to evaluate either the validity of the claims the research makes or the potential organisational damage that populist material of this type can bring about. Unfortunately, on the re-engineering theme, the popular and business press has several examples of firms re-engineering themselves completely out of existence. Too many managers seem to think that 'if it worked there, then it will work here' not being able to see the context-dependence of much of this research. The point remains: fads have a much greater mimetic capacity than more robust forms of academic research. This view is reinforced by Van Aken (2004: 220) who concludes that 'management fads, scorned by academics' seem to have had much more impact on management actions than the output of mainstream academic researchers. Others, using Pettigrew's rigour-relevance concerns (Pettigrew, 2001) have argued that academics have been more concerned with clearing the rigour hurdle than they have the relevance hurdle (van Aken, 2004: 223; van Aken, 2005: 19) mainly because academic career paths are structured to place more value on rigour than on

relevance. Some might even argue that some academic researchers have no intention of even trying to clear the relevance hurdle as they regard the world of practice with some disdain.

Our concerns about these issues have become more pronounced recently following our involvement with our university's Research Committee. Information presented to the research committee using data has shown that the amount of funding coming into academic research from private sector organisations has declined since 1995/6 and has still continued to decline in recent years despite the relevance gap receiving significant attention by academic management researchers since the late 1990s.

If one examines the decline in '1995/6 currency' then the decline is even more severe. If academic researchers were closing the 'relevance gap' with managers in the private sector then surely the private sector would see academic research as something from which they could generate competitive advantage and the economics of self-interest would take over. Clearly, there is either a very limited market for academic research as it is currently visualised by the private sector or the market is failing for some, as yet, unclear and unspecified reason. The two other sources of funding (the public sector and Science and Technology) have shown different trends from that of the private sector particularly since 2002-3. The increase from the public sector is more difficult to explain. Some suggestions are made later on in this paper. The fact that there is a GBP10 billion market for consultancy in the UK (Wensley, 2007) somewhat destroys the myth that there is no market for management knowledge (or what passes for management knowledge). In 2004/5, the amount of funding from the business sector to university-based academic researchers amounted to less than 0.1% of consultancy industry turnover (Wensley, 2007).

Why should this be so? At the ABS research conference in March 2007, Robin Wensley, Director of the Advanced Institute of Management, raised several concerns about 'academic research' (Wensley, 2007). He *cited* evidence drawn from within the ESRC that showed that academic research had the lowest success rate of any discipline in bidding for 'response mode' research funding and a higher proportion of research bids that were rated as 'problematic'. As an occasional reviewer, we can

concur with this assertion having found academic research proposals often to be somewhat under-theorised with indifferently developed methodologies. Wensley also *cited* evidence from the 2001 Research Assessment Exercise to reveal that while 3% of economists were in the two lowest research rated categories, this increased to 20% in management and business. He mention evidence going back to the mid-1960s indicating that the funding councils of the time saw management research as having 'particular difficulties' though it was not entirely clear what these particular difficulties were.

Perhaps the reason why the business sector does not fund more academic research is because academic research is perceived by them not to be very good? Is it because academic management researchers and management practitioners have different and perhaps even incommensurable frames of reference (see Rynes *et al.,* 2001: 341) in respect to what constitutes management knowledge in general and operationalisable management knowledge in particular? It may be that academics value the academic reputation system and value their desire to make progress within it as more important than producing research that resonates more strongly with the practitioner reputation system. It may be that the market is not failing: it may be that academic management researchers are just not responding to an unambiguous market signal from one of its stakeholders (especially management practitioners in the private sector) perhaps because they put other stakeholders' interests or their own self-interest ahead of management practitioners. It may be that private sector management practitioners in particular do not see the value of more academic, theory-driven research because of the way that they have been socialised by the management education processes they have been through. Perhaps M and Ds that emphasise the 'how to' over the 'why so', war stories over theory and 'doing over thinking' are to blame? Perhaps Ms and Ds and deliverers on M and D programmes that are detached from research are perpetuating a vicious circle?

Interestingly, while recent evidence suggests (Worrall & Cooper, 1999) that the proportion of managers with an M-degree was about the same in both the public and private sectors (11%), managers in the public sector were twice as likely to have masters' degrees or doctorates from

other disciplines (24%) than were managers in the private sector (12%). Does this mean that managers in the public sector (who generally have higher levels of certificated education than managers in the private sector) might be more receptive to 'academic research' than managers in the private sector? On the other hand, Weick (2001: s71) argues that the relevance gap is 'as much a product of practitioners wedded to gurus and fads as it is of academics wedded to abstractions and fundamentals. But why are they wedded to populist gurus? Other critical management scholars in discussing the relationship between the producers and consumer of management knowledge have raised questions about the portability of academically-produced management knowledge into practice implying that practitioners are often only receptive to knowledge that reaffirms or reinforces their existing beliefs (Carter & Jackson, 2004). Whatever the cause, or causes, of the relevance gap or the portability/receptivity gap there seems to be clear evidence that the gap between academic management researchers and management practitioners is widening and not narrowing (Hodgkinson *et al.*, 2001) and that this may be particularly problematic when the quality of management is often characterised as not particularly inspired given the productivity differentials that exist between businesses globally.

There is evidence to suggest that these gaps are wide and are widening further but little good research to explain why these gaps exist and what can be done to close them: it is clear that we need more relevant, rigorous and operationalisable research here. Essentially what is needed is a body of theory that will explain why these gaps exist and have persisted and a body of theory that will help to identify how to close these gaps. As we shall argue later, pragmatic academic research needs to integrate both the 'why' (theories to develop understanding – episteme or 'disinterested understanding') and the 'how' (theories of action to guide effective implementation – techne or craftsmanship). Arguably, in many cases academics have focused on the why much more than they have focused on the how. While academics tend to value why over how, practitioners tend to value how over why: in many cases practitioners do not care why but they do need to know how!

Is there Something Peculiar about Academic Research?

Having been involved with research organisations like the National Research Foundation (NRF), the British Academy of Management (BAM) and the Association of Business Schools (ABS) since the early 1990s, we have heard many presentations about the relevance gap, about developing more effective relationships with practitioners and about academia having to contribute more towards enhancing the competitiveness of the economy. In this vein, it is interesting to read Donald Hambrick's 1993 presidential address to the American Academy. He likened academic research to George Bailey, the central character in Frank Capra's film 'It's a Wonderful Life'. In the film, George is about to commit suicide when an angel (Clarence) takes him back to see the void that there would have been if George had never existed. As Hambrick disparagingly concluded, after applying the same test to academic research, 'we will find out that things might have worked out very well without us' (1994, p. 11). So why has academic research failed to make an impact on the world of practice despite the research outcomes it produces and the huge number of students who now take business and management at undergraduate level and the large number of Ms and Ds who have passed through our collective portals?

Our questions are: is there any such thing as 'academic research' over and above research in the disciplinary domains that underpin management and is there a coherent body of academic research literature? A review of the 2001 RAE (Geary, *et al.,* 2004) revealed that around 1,580 different journals were *cited* within the business and management unit of assessment ranging from the mainstream to the downright obscure. Bessant *et al.* (2003: 62) concluded that in the 2001 RAE, the business and management 'Unit of Assessment' (UOA) covered a wider range of disciplines than any other UOA. It is clear that academic research is an umbrella term that has within it disciplines such as economics, sociology, psychology, and, 'management sciences'; which embraces subject domains such as marketing, strategy, accounting and finance, human resource management, and, information management; and has embraced a wide range of methodological stances ranging from econometrics, through action research to critical ethnography. It is clear that management is a highly differentiated field which Tranfield and Starkey (1998: 345) label as 'heterogeneous and fragmented' and a field that 'operates

no single agreed ontological or epistemological paradigm'. Pettigrew (2001: s63) does not see management as a discipline but as 'a confluence of different fields of enquiry'. Perhaps this is one of our more fundamental problems. As Hatchuel (200: s34) has argued, within a renewed model of academic research, there is a need for a clearer 'scientific identity' for academic research 'differentiating it from social and economic studies'. This also resonates with van Aken's (2004, 2005) view of management as a 'design science'.

These problems are also confounded by other distinctions. First, it is important to distinguish between business and academic research and research that is conducted within schools; and, second, it is important to distinguish between research about management and research for management. There are many questions about the social organisation and location of research in universities. Over the recent past, it is undeniable that universities have become more 'managerial' and issues of structure and about the changing location of power have become more predominant (Bryson, 2004) in an increasingly hard financial climate. Increasingly, economics departments, industrial sociology departments, organisational psychology groups within larger psychology departments and many other disciplinary-based and relatively small-scale academic units have (often forcibly and with resistance) been relocated within business schools – 'the cash cow' of the university system (Starkey *et al.,* 2004: 1521).

While the creation of an environment where multi-disciplinary and trans-disciplinary can take place is not necessarily a bad thing. Coalitions and alliances seem to develop more effectively 'bottom up' and organically rather than from units grudgingly being co-located spatially but not spiritually as an outcome of a top down management review usually designed to reduced costs or to make the organisational chart look tidy. Additionally, there has been a shift in the locus of power in many universities (especially the former polytechnics/technikons) away from more collegial forms of governance structure where power is more diffuse and distributed to more managerial forms which are more hierarchical and where power is more concentrated within a cadre of elite academic managers most of whom have jettisoned their publishing/research careers in their quest to acquire status. These shifts have done much to reshape

the milieu in which academic (and other) research takes place particularly when they have been coupled with initiatives designed to increase what is known as 3rd Stream Funding. Third Stream Funding is that which is derived directly from business especially from the exploitation of knowledge generated from within the University and in partnership with external businesses. It is often seen as a way of topping up university finances given the continuing erosion of teaching and research funding.

Universities have been put under increased pressure to generate this form of funding as teaching and research funding has come under considerable pressure as government funding for teaching in particular has failed to keep place with inflation, student numbers have increased and the number of teaching staff has failed to keep pace with the increased number of students. These trends have led to an intensification of academic work with, in many cases, increased teaching loads reducing the ability of academics to undertake research either at all or at the highest level of quality. Bessant *et al.* (2003: 64) in their review of the 2001 RAE noted that there are huge tensions in universities between teaching, research and practical experience and concluded that 'nowhere in the higher education sector is this tension more evident than in business and management'. It is somewhat paradoxical that as universities have been put under pressure to generate more funding directly from business, the amount of funding that business schools are attracting from businesses has actually declined both absolutely and relative to other sources of funding. Clearly, institutional factors such as these have a major effect on some academic's capacity to do research.

Research about Management or Research for Management?

A second area of debate is the difference between research about management and research for management. While some academics might value the contribution their research could or does make to management practice, there is also a clear core of academic researchers, particularly those of a more critical persuasion, who are more concerned to deconstruct and critique management than to support it. A strong theme in much critical academic research is to focus on the victims of manage-

ment and their emancipation. It is hard to see how many practitioners would engage with the research of the overwhelming majority of critical management researchers some of which is linguistically and conceptually impenetrable and some of which, to quote Martin Parker (2002), is 'against management'. Whether some managers would actually benefit from reflexively deconstructing what they are doing and what their value systems actually are and are leading them towards is, however, another point entirely.

A paper by van Aken (2004: 219) begins with the premise that there are 'serious doubts about the actual relevance of present-day academic research as developed by the academic community'. He argues that academic research needs to adopt the paradigm of the 'design sciences' which are built on field-tested, technological rules. However, he is concerned that much theoretical work is 'too reductionistic and hence too broad or too trivial to be of much practical relevance' (221) – hence the utilisation problem. Van Aken then contrasts management with other applied fields such as medicine and engineering, in which the integration of theoretical research within practice is, he asserts, much better developed. He argues that in medicine there is a distinction between the theoretically-grounded knowledge production process designed to improve our understanding and the development of theories focused on problem-solving which engender the transfer, adoption and implementation of that knowledge into medical practice. While there is a distinction between laboratory-based science and clinical practice this should not be taken to imply that these are distinct and non-interacting as there distinct advantages to be gained between the joint working of both groups and the co-production of knowledge between groups as clinicians provide evidence of the effect of interventions back to the laboratory based groups which, in turn, might enrich existing theory or identify new paths for investigation or identify new problems or 'reframe' old problems. This pattern of organisation does not exist in the academic research domain although there are examples of this form of social organisation of academic research

in Sweden and France (Hatchuel, 2001; Starkey & Madan, 2001).

Increasingly, in the field of medicine, cross, inter, multi or trans-disciplinary groups are being created – perhaps focused on specialisms

such as oncology - which erode professional and disciplinary boundaries and create a more co-operative mode of knowledge production that fuses together those who 'do the laboratory science' with both clinical practitioners and social policy professionals facilitating the flow of feedback, learning and reflexivity. This is the embodiment of Mode 2 knowledge production as outlined in Gibbons *et al.* (1994) and discussed in Tranfield and Starkey, (1998) and by Eden and Huxham (1996) in their work on action research where it is seen as imperative that research and situated learning are embedded with action or change processes. Mode 1 research is defined as the 'traditional mode' of knowledge production in which knowledge is produced often from a single disciplinary perspective and with little emphasis on its adoption and deployment. Huff (2000: 288) characterised Mode 1 'discipline based, university centred, and dominated by highly trained individuals'; it is 'primarily cognitive, carefully validated by peer review, and applied later, by others, if it is applied at'. Some of the distinctions between Mode 1 and Mode 2 research are shown in Table 1 which has been adapted from Keleman and Bonsal (2002) and augmented with material drawn from Gibbons *et al*. (1994), MacLean *et al.* (2002) and Huff (2000).

Van Aken (2004:235) argues that

> the relevance problem of academic management research can be mitigated if description-driven research, resulting in what may be called Organization Theory, is complemented by prescription-driven research, resulting in what may be called Management Theory.

This reflects Tranfield and Starkey's (1998: 346) assertion that academic research is not only about 'knowing what' but also about 'knowing how'. Beer (2001:59) argues that a key factor that prevents the development of usable knowledge is that a 'split' exists between those who develop 'substantive management theory and those who practice and study how knowledge can be implemented and organizations changed'. Van Aken's distinction between substantive theories and theories of ac-

tion is clearly important and a challenge that few management researchers seem to have effectively addressed. Exceptions to this criticism are provided by Hatchuel (2001) who defines a model of 'intervention-research' based on a negotiated partnership arrangement between researchers and the host organisation. Here problems are historically and contextually embedded in an organisational setting but the prime aim of the researcher is to locate these problems within a more academically grounded context. In the French and Swedish organisations he describes, a research capability is developed in these organisations as a direct result of their structured engagement with academic researchers. Hatchuel (2001: s38) argues that significant cultural change occurs in host organisations which means that 'managerial choices, endeavours and evaluations can be progressively designed with increased scientific awareness' and that 'there is no better method to reduce misleading mimetic behaviour, blind compliance to gurus or fashion in management practice'. Modes of working of this type do not seem to exist in the UK: perhaps they should.

Aspect	Mode 1	Mode 2
Research boundaries	Single discipline, impermeable, paradigmatic conformity	Transdisciplinary, permeable
Stakeholders and audience	Academics often within a prescribed discipline and often a much smaller sub-field of 'experts'	Academics and practitioners
Aim	Production of new knowledge, theory building, adding to the base of disciplinary knowledge, replicability, validity Production of enduring knowledge	To gain insights that are useful and usable to practitioners and society at large Production of solutions Production of transient knowledge

Outcome	Basic and applied research	Applied and applicable research
Organisation	Often individualist Research agenda set autonomously Hierarchic Substantial commitment to extant bodies of knowledge	Team based Externally defined research agenda Heterarchic, networked
Dissemination	Peer reviewed journals controlled by other academics, well defined and institutionalised channels, single and limited public	Transfer into practice, practitioner-oriented journals, dissemination often through professional bodies, multiple publics

Aspect	Mode 1	Mode 2
Usage	Production precedes consumption May never be used to support practice Potential use does not influence research design	Simultaneous production and consumption: knowledge production and diffusion are interlinked and may be multi-modal
Orientation	Elitist, exclusive	Pluralist, participatory
Evaluation criteria	Excellence as determined by peers, disciplinary norms and quality audits (e.g. the RAE)	Applicability, perceived usefulness by research users and contribution to practice by practitioners
Validation	Validation through peer review and publication	Validation in use

Methodology	Defined by the academic discipline	Plural and defined by the research context, often emergent

Table 1: Mode 1 and Mode 2 research compared

A major corollary of the move to Mode 2 knowledge production is that its social organisation is completely different from the form of social organisation that underpins Mode 1 knowledge production. Many of the aspects of the social organisation of Mode 2 knowledge production run counter to the current social organisation of academic management research. Transdisciplinary research could be valued highly although almost all the research submitted was constrained to the traditional disciplinary silos found in most schools. It seems unlikely that the transdisciplinary challenge will be met by schools given that the assessment panel is organised very much on the traditional divisions that still reflect the functionalist structure and mode of operations of most schools (e.g. marketing, strategy, and human resource management). The key point to emerge is that the move to more co-operative processes of management knowledge production is being held back by institutional inertia in both universities and business organisations and by cognitive inertia among academics and practitioners. As Ghoshal (2005: 88) argues, 'the only alternative to any form of ideological absolutism lies in intellectual pluralism, which is likely to lead to both better research and to broadened usefulness'.

The Social Organisation of Academic Research and Management Education

Not only does the move to Mode 2 knowledge production have implications for the social organisation of research, it also has implication for the design of schools and the design of management education programmes. If the medical analogy is taken further, this would imply that schools should adopt the organisational model of medical schools and become what some have called 'Professional Schools'. There has been some debate of late about the future of schools. Pfeffer and Fong (2002)

have forecast the end of the school and Starkey *et al.* (2004) have sought to rethink the business school. Murray (2006:10) has warned that business schools educate new generations of managers who ignore the academy because it cannot offer coherent evidence based enlightenment and argued that managers want 'research to be enmeshed in action' but that this is resisted by academics. The essence of Pfeffer and Fong's (2004) argument is that schools should be assessed in two fronts, their contribution to the production of academic research and their contribution to management education. The authors argue that schools fail on the research front as they neither deliver rigour nor relevance and, according to Starkey *et al.* (2004: 1522), they fail on the teaching front because they have conspicuously failed to 'generate critical thought and enquiry about business and management'.

Consequently, Starkey *et al.* (2004: 1523) argue that there is a need to reinvent business schools 'geared to developing skills in reflective, collaborative and analytical thinking as well as action mindsets that enable managers to negotiate the complex tensions that exist between the conceptual and the concrete'. This will require new forms of school organisation that focus on the co-production of knowledge as schools form partnerships with businesses to focus on the issues that businesses themselves consider relevant not on the issues that academics think practitioners should focus on. Other writers have suggested that schools should seek to create a breed of 'professional' managers who practice forms of 'evidence-based management' that are common in the medical profession. Contra Murray (2006), Rousseau and McCarthy (2007: 84) argue that 'contemporary managers and management educators make limited use of the vast behavioural science evidence base relevant to effective organizational practice'. While one might not question their 'relevant to' thesis (Murray 2006, does, however, question the 'relevant to' thesis), one might be legitimately concerned about whether behavioural science research is actually accessible to, and then implementable by, practitioners because of the lack of what van Aken terms complementary 'management theory'.

The new form of school advocated by Starkey and Madan (2001) and Starkey, Hatchuel and Tempest (2004) does not sit well with the

form of many schools both in the teaching and research styles of academics nor in the learning expectations of students who, from personal experience, seem to have acquired an increasingly instrumental and often minimalist approach to their own education as the educational system has itself been commodified. Certainly, the configuration of most schools does not look remotely like the 'new agora' that Starkey *et al.* (2004) and Nowotny *et al.* (2001) see as a form of organisation where multiple stakeholders and participants in knowledge production 'co-mingle'. While this is easily said, it is not easily delivered due both to the 'cognitive inertia' of many participants and because it would require the radical transformation of the academic recognition system. In this new system of values, high quality practitioner-orientated research would be valued as highly as that published in top rated academic journals and academics would be able to progress their careers based on their contribution to practice coupled with their contribution to the development of their specialisms though, under Mode 2, they may have to take a more eclectic and inclusive approach from those working in single discipline arenas (Starkey & Madan, 2001).

What is surprising is that the management literature on these issues – especially the creation of the new agora – never mentions the impact of new and emerging technologies on the increasing ability of currently disparate stakeholders to co-mingle as a virtual community of practice to develop new knowledge and share different perspectives. Perhaps this can be explained by inertia and also because academics might feel that they are losing control over the educational experience and the 'educational dynamic' that they have controlled in the past. Perhaps some might see the end of 'academic magistracy' as a problem as new players become more influential in the management knowledge production system. Under the existing Mode 1 regime it is academics themselves, through the peer review regime, who decide what constitutes knowledge, what is worthy of being published and what can enter the academically-approved public domain (even if that public may be very small and self-selecting).

The Rigour - Relevance Issue Pursued

The discussion so far has focused on issues such as rigour and relevance and the adoption of different research styles (or modes of knowledge production) which have different forms of social organisation that collide with some highly institutionalised practices and values in both academia and practice. Some of the emerging issues are addressed in Table 2 where, following Hodgkinson *et al.* (2001), a two-by-two table (ubiquitous in management publications) is developed in which research is categorised based on the level of theoretical and methodological rigour (high/low) and the level of practitioner relevance (high/low). Again, following Hodgkinson (2001), research is categorised into four types labelled 'puerile' (low relevance/low rigour), 'populist' (high relevance/low rigour), 'pedantic' (low relevance/high rigour) and 'pragmatic' (high relevance/high rigour). While populist research addresses the 'issues of the moment' as defined by practitioners there is a clear concern that some of the 'research' conducted in this field may have been stimulated primarily by the availability funding and not by scientific enquiry: consequently, it may fail to pass muster when compared against the methodological and theoretical standards demanded in the 'pedantic' quadrant. The pedantic quadrant is characterised by many of the criteria associated with Mode 1 (see Table 1 earlier) which, some might argue, are being perpetuated by a highly traditional and well institutionalised academic recognition system and research quality assessment exercises such as the RAE which, like many other performance/quality management systems of its type may have distorted the very thing it set out to measure.

'Popularist' Consultancy? Epistemic drift Publishable in practitioner journals Fads, sophistry? Inappropriate solutions to pressing problems Doxa	**'Pragmatic'** Problem-solving focus Theoretically robust Academic & practitioner collaboration Mode 2 characteristics Unlikely to be published in "top" journals? Episteme and techne
'Puerile' Addressing irrelevant problems with inadequate theories and methods	**'Pedantic'** Accessible to the few Targeted on the few Mode 1 characteristics Main aim to be published in the "top" journals RAE oriented Episteme

Table 2: *A typology of research (adapted from Hodgkinson, Herriot & Anderson, 2001)*

Arguably, in the pursuit of relevance, more academic research (but not all academic research) should be trying to reposition itself within the pragmatic quadrant where the focus is clearly on developing theoretically and methodologically robust solutions to urgent managerial problems ideally by academic researchers working closely with practitioners to achieve what *Gibbons et al.* (1994) would call knowledge production 'in the context application'. However, Starkey and Madan (2001:16-20) identify that significant institutional, structural and cultural changes are needed to bring this about: they argue for 'business education reform'; the move towards interdisciplinarity; the restructuring of academic insti-

tutions to improve knowledge exchange and dissemination; the creation of new cross-disciplinary, impact-focused journals; the development of new measures of 'academic impact'; and, the creation of academic/practitioner forums to facilitate co-mingling and the co-production of knowledge.

While many have seen the advantages of these new formations, others have counselled against too radical a shift having concerns that quick response research to end-user funded, short term issues of the moment might lead to 'epistemic drift' (Tranfield & Starkey, 1998: 350) and a damaging move towards 'popularist science' (Hodgkinson, 2001: s43) as these funding opportunities distort the behaviour of academic researchers and also the type (rigour?) of research that is conducted: this is a real risk but one that can be countered by developing a portfolio approach to management research which values and rewards both basic and applied management research and contains the structures and knowledge production processes that can deliver pragmatic research. Ghoshal (2005) *cites* Boyer (1990) who defined four kinds of scholarship: the scholarship of discovery (research); the scholarship of integration (synthesis); the scholarship of practice (application); and, the scholarship of teaching (pedagogy). Perhaps business schools have lost sight of the need to take a more balanced and integrated view of these four scholarships and our key challenge as academics is to learn how to (re)unite research, synthesis, application and pedagogy into a more coherent whole. By (re)uniting these four scholarship, Ghoshal (2005: 87) argues that we would 'build management theories that are broader and richer than the reductionist and partial theories we have been developing over the last 30 years' which Ghoshal sees as 'bad management theories' that have destroyed 'good management practices'.

Some Concluding Comments

In common with Gibbons (1994), our view is that Mode 2 should co-exist with Mode 1 and should not be seen as a replacement. Not only should theory inform practice, practice should inform theory. Achieving this is, however, far from trivial as it will require radical shifts in the social or-

ganisation of academic research, of the value systems that structure academic research and of the funding regimes that drive it. It will also require a radical reshaping of management education if future managers are to be socialised into engaging in the co-production of management knowledge. As researchers who have always sought to engage with management practice, we can attest to the fact that the potential for learning and personal development by an academic conducting applied research is considerable but disengagement from theory and theory building would mean that the 'applied research' work we do could no longer be called academic.

There are real risks for academics if they fail to engage their core stakeholders in more collaborative forms of research. Hodgkinson *et al.* (2001: s42), for example, comment on a 'worrying trend' which confirms not only a wide but a widening gap between academics and other stakeholders which, if current trends persist point towards 'the demise of university academics as key stakeholders in the knowledge production process' as, for example, consultancies and perhaps even IT-enabled virtual knowledge production environments colonise the gap that academics have failed, or been unwilling, to occupy. Hodgkinson *et al.* (2001), like Pettigrew (2001) see the wholesale adoption of Mode 2 research as problematic and unlikely to close the relevance gap and urge us to move towards undertaking pragmatic research which is high in theoretical and methodological rigour and high in practitioner relevance using a blended research model that combines the strengths of Mode 1 and Mode 2 – or, as Ann Huff (2000) labelled it in her presidential address to the Academy of Management - Mode 1.5. Perhaps a subsequent paper to this one could be labelled 'In search of Mode 1.5' - the characteristics of which are very unclear from Huff's (2000) paper.

While the heated debates that surrounded academic research around five or six years ago seem to have abated, issues about how academic research should develop persist and remain unanswered: 'academic research' is still seen as problematic in many quarters. The relevance-rigour debate seems not to have been answered, if indeed, the rigour-relevance question was the right question to address in the first place. Academic careers are still being made following the tenets of a Mode 1 world: it is still publishing in 'top journals' that counts. Attracting re-

search funding (from funding councils such as the ESRC/NRF or charitable bodies such as the Leverhulme Trust) is seen by many academics to be more prestigious than attracting research income directly from the end users of academic research. In the world of management education, while there are sporadic debates around the design of M and Ds often focusing on the M and D dissertation as the prime evidential element of the research component of the M and D, little seems to have changed. In our experience, it is rare to see an M and D dissertation that passes muster as a robust piece of academic research with many of them falling unambiguously into the 'populist' quadrant of Hodgkinson *et al.'s* (2001) model: some, unfortunately too many, also seem to display the characteristics of the 'puerile' quadrant.

In our opinion, far too large an element of Ms and Ds address the 'how to' rather than the 'why' with the M and D experience of many students being more akin to training in the use of technique rather than to management education using reflexivity and conceptualisation. In our view, a 'professional school' of the type outlined by van Aken (2004) and Hatchuel (2001) needs to have a far better blend of thinking and doing than many programmes particularly those at the lower end of the M and D esteem continuum. Far too many M and D candidates seem to see the M and a D as a salary and status enhancement tool than and educational and developmental experience. Despite attempts to digitise the educational experience, it is also our view that we are many years away from a 'new, IT-enabled agora' that allows multiple stakeholders in academic research to co-mingle virtually and, by so doing, share existing knowledge and develop new knowledge and insights. What is very disconcerting is that much of the research cited here about the relevance of academic research to practice was produced, largely through the activities of British Academy of Management, in the early 2000s: since that flurry of activity calling for more practitioner-relevant research, the volume of research funding going into schools from the private sector has continued to decline. If we are exhorting our students to pursue more evidence-based research, as Rousseau and McCarthy (2007) exhort us to do, we wonder what that piece of evidence is telling us?

References

Beer, M 2001. Why Management Research Findings are Unimplementable: An Action Science Perspective. *Reflections* 2,3: 58-65.

Bessant, J, S Birley, C Cooper, S Dawson, J Gennard, M Gardiner, A Gray, P Jones, C Mayer, J McGee, M Pidd, G Rowley, J Saunders, & A Stark 2003. The State of the Field in UK Management Research: Reflections of the Research Assessment Exercise (RAE) Panel. *British Journal of Management* 14: 51-68.

Beyer, J 1982. Introduction to the Special Issue on the Utilization of Organizational Research. *Administrative Science Quarterly* 27: 588-590.

Boyer, E 1990. *Scholarship Reconsidered: Priorities of the Professoriate.* Princeton: The Carnegie Foundation for the Advancement of Teaching.

Brannick, T & D Coghlan 2006. To Know and to Do: Academics' and Practitioners' Approaches to Management Research. *Irish Journal of Management* 26,2: 1-22.

Bryson, C 2004. What about the Workers? The Expansion of Higher Education and the Transformation of Academic Work. *Industrial Relations Journal* 35,1: 38-57.

Carter, P & N Jackson 2004. For the Sake of Argument: Towards an Understanding of Rhetoric as a Process. *Journal of Management Studies* 41,3: 469-491.

Champy, J 1995. *Reengineering Management: The Mandate for New Leadership.* London: Harper Collins.

Eden, C & C Huxham 1996. Action Research for Management Research. *British Journal of Management* 7: 75-86.

Ford, E, D Duncan, A Bedeian, P Ginter, D Rousculp & A Adams 2005. Mitigating Risks, Visible Hands, Inevitable Disasters: Management Research that Matters to Managers. *Academy of Management Executive* 19,4: 24-37.

Geary, JL Marriott & M Rowlinson 2004. Journal Rankings in Business and Management and the 2001 Research Assessment Exercise in the UK. *British Journal of Management* 15,2: 95-141.

Ghoshal, S 2005. Bad Management Theories are Destroying Good Management Practices. *Academy of Management Learning and Education* 4: 75-91.

Gibbons, M, C Limoges, J Nowotny, S Scwartzman, P Scott, & M Trow. 1994. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*. London: Sage.

Hambrick, D 1994. What if the Academy Actually Mattered? *Academy of Management Review* 19,1: 11-16.

Hatcheul, A 2001. Two Pillars of the New Management Research. *British Journal of Management* 12: 33-39.

Hodgkinson, G, P Herriot & N Anderson 2001. Re-aligning Stakeholders in Management Research: Lessons from Industrial, Work and Organizational Psychology. *British Journal of Management* 12: 41-48.

Huff, A 2000. Presidential Address: Changes in organizational Knowledge Production. *Academy of Management Review* 25, 288-293.

Kelemen, M & P Bansal 2002. The Conventions of Management Research and their Relevance to Management Practice. *British Journal of Management* 13: 97-108.

MacLean, D, R MacIntosh & S Grant 2002. Mode 2 Management Research. *British Journal of Management* 13: 189-207.

Murray, J 2006. Management Research: Who to Talk With, What to Say. *Irish Journal of Management* 26,1: 8-21.

Nonaka, I & H Takeuchi 1995. *The Knowledge Creating Company*. Oxford: Oxford University Press.

Nowotny, H, P Scott & M Gibbons 2001. *Re-thinking Science, Knowledge and the Public in an Age of Uncertainty*. Oxford: Polity Press.

Parker, M 2002. *Against Management.* Cambridge: Polity Press.

Pettigrew, A 2001. Management Research after Modernism. *British Journal of Management* 12: s61-s70.

Pfeffer, J & C Fong 2002. The End of Business Schools? Less Success than Meets the Eye. *Academy of Management Learning and Education* 1: 78-95.

Pfeffer, J & C Fong 2004. The Business School 'Business': Some Lessons from US Experience. *Journal of Management Studies* 41,8: 1501-1520.

Rousseau, D & S McCarthy 2007. Educating Managers from an Evidence-based Perspective. *Academy of Management Learning and Education* 6,1: 84-101.

Rynes, S, J Bartunek & R Daft 2001. Across the Great Divide: Knowledge Creation and Transfer between Practitioners and Academics. *Academy of Management Journal* 44,2: 340-355.

Starkey, K, A Hatchuel & S Tempest 2004. Rethinking the Business School. *Journal of Management Studies* 41,8: 1521-1531.

Starkey, K & P Madan 2001. Bridging the Relevance Gap: Aligning Stakeholders in the Future of Management Research. *British Journal of Management* 12: s3-s26

Tranfield, D & K Starkey 1998. The Nature, Social Organisation and Promotion of Management Research: Towards Policy. *British Journal of Management* 9: 341-353.

Van Aken, J 2004. Management Research Based on the Paradigm of the Design Sciences: The Quest for Field-tested and Grounded Technological Rules. *Journal of Management Studies* 41,2: 219-246.

Van Aken, J 2005. Management Research as a Design Science: Articulating the Research Products of Mode 2 Knowledge Production in Management. *British Journal of Management* 16: 19-36.

Vermeulen, F 2005. On Rigor and Relevance: Fostering Dialectic Progress in Management Research. *Academy of Management Journal* 48,6: 978-982.

Weick, K 2001. Gapping the Relevance Bridge: Fashions Meet Fundamentals in Management Research. *British Journal of Management* 12: s71-s75.

Wensley, R 2007. Research in UK Business Schools or Management Research in the UK? Paper presented to the Association of Business Schools Annual Research Conference, Manchester Metropolitan University Business School, Manchester, 27th March 2007.

Worrall, L & C Cooper 1999. *The Quality of Working Life: The 1999 Survey of Managers' Experiences.* London: Chartered Management Institute.

Les Worrall
Management Research Centre
University of Wolverhampton Business School
United Kingdom

Sam Lubbe
School of Computing
UNISA
South Africa

Rembrandt Klopper
School of Information Systems & Technology
University of KwaZulu-Natal
South Africa