The Narrative of 'Evidence Based' Management: A Polemic

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ABSTRACT 'Evidence based' management is a popular contemporary account of the relationship between research and practice in management studies. This paper critically examines the implications of this account from the perspective of Formalism: a narratological approach to critique that focuses on how narratives are made compelling, and hence powerful. Compelling narratives deploy devices that establish (i) credibility and (ii) defamiliarization. Using this approach the paper identifies and examines different ideological strands in the nascent literature on evidence based management: *pragmatism*, *progress*, *systematization*, *technique*, *accumulation*. These are the means by which advocates of evidence based approaches construct a compelling story about the value of this approach. Prior criticism of the evidence based approach has centred on epistemological and technical issues. The aim here is to use an aesthetic mode of criticism to highlight political and moral implications. These are important given the relationship between claims to knowledge and the use of power; and the interaction between management research, and management as practice.

INTRODUCTION

In *Science, Liberty and Peace*, Huxley describes the relationship between scientific research and social problems. He argues that because politicians are faced with 'bewildering complexity', they have to follow the principles of the laboratory scientist, 'who arbitrarily simplifies his [sic] problem in order to make it manageable'. This is dangerous because the process of simplification leads to 'restraint and regimentation' and the 'curtailment of liberty'. It is also logically incoherent because 'science does not even profess to deal with experience as a whole, but only with certain aspects of it in certain contexts' (Huxley, 1947, pp. 26–8). These cautions are relevant when we consider how the relations between research in management studies, and management as a practice, are governed. This paper is a direct attempt to challenge the 'evidence based' approach to governing this relationship.

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The paper is polemical in the same senses that Keenoy (1999, p. 2) describes his re-imagining of the 'problem' of HRM as a polemic: first it proceeds by assertion; second it does not attempt a complete review of the relevant literature; and third, the argument's validity depends on 'being perceived', rather than on claims to a body of evidence or data. In each of these senses it is antithetical to the espoused aspirations of an 'evidence based' approach. Accordingly it offers a much needed and also novel counterpoint. The polemic adopts a mode of critique informed by the literary school of Russian Formalism. The argument is developed using narrative theory and involves studying the work from within the evidence based school not as scientific, or factual discourse, but as contingent and created, hence fictive (Barry and Elmes, 1997; Steiner, 1984). This enables me to specify and analyse ideological strands within the narrative of evidence based management, and to reclaim some of the linguistic turf colonized by those promoting this mode of knowledge production. This approach offers fresh analytical scope using an aesthetic that highlights the political and moral implications of evidence based approaches to management studies.

EVIDENCE BASED MANAGEMENT

Evidence based management is a comparatively recent approach that relies on a familiar account of the status and purpose of social research (we can learn about the world; this learning can and should inform practices). In broad terms, this is common to many writers and researchers in management studies (e.g. Astley and Zammuto, 1992; Beyer and Trice, 1982). I do not wish to challenge that basic account because it is outside the scope of this paper, and also because I am sympathetic to it. Nor am I 'against evidence'; appeals to evidence can and should pay a part in influencing policy and practice, though the rhetorical aspects to this process are often overlooked (Greenhalgh and Russell, 2007; Majone, 1989). Instead, I am interested here in what makes 'evidence based' management a new narrative, and the extent to which it is compelling and coherent. A recent flurry of interest in this topic makes this discussion all the more pertinent (Ashkanasy, 2007; Learmonth, 2006; Learmonth and Harding, 2006; Pfeffer and Sutton, 2006; Rousseau, 2006; Rousseau and McCarthy, 2007).

The most obvious distinguishing feature of 'evidence based management' is that it is derived from the model of evidence based *medicine*, an approach that informs clinical judgments about the care of individual patients and that seeks to apply, 'the conscientious, explicit, and judicious use of current best evidence in making decisions' (Sackett et al., 1996, p. 71). Though some proponents prefer alternative terms, the commitment to evidence is shared. Superior forms of evidence in *medicine* are results from randomized controlled trials, systematic reviews of the results of such trials, and meta-analysis, though clinicians are not restricted to considering these (Sackett et al., 1996). What researchers aspire to is a way of evaluating the quality of 'proven evidence' (McLaughlin, 2001, p. 352). Medical researchers can: devise search algorithms that incorporate proxy measures of the quality of evidence (for example, to include certain journals); restrict the search to recent studies; exclude certain types of clinical trial; and systematically include details of all relevant (including unpublished) research. If appropriately designed, i.e. to focus on

relevant research addressing a specific question, such a procedure may be labelled a 'systematic review' (Boaz et al., 2002).

The (medical) Cochrane Database of Systematic Reviews (CDSR) and Cochrane Collaboration have served as a template for the (social) Campbell Collaboration's register of Systematic Reviews of Interventions and Policy Evaluation (C2-RIPE) and the Campbell Collaboration (C2) itself. C2 is an international coalition of scholars whose aim is to 'bring about positive social change, and to improve the quality of public and private services across the world, by preparing, maintaining and disseminating systematic reviews of existing social science evidence' (Campbell Collaboration, 2007). The Campbell Collaboration is affiliated with the American Institute for Research (AIR), 'one of the largest behavioral and social science research organizations in the world [whose] overriding goal is to use the best science available to bring the most effective ideas and approaches to enhancing everyday life' (AIR, 2007). Key governmental and policy agencies have adopted evidence based principles; for instance, the National Institute for Health and Clinical Excellence (NICE), the National Audit Office, the Social Care Institute for Excellence, and the Cabinet Office in the UK (McLaughlin, 2001). In 1999, the Home Office committed more than £250 million to the Crime Reduction Programme, launched as an initiative in 'evidence based' policy (Hope, 2004). Evidence based research in urban studies (Ellaway et al., 2001), child care (Craig, 2003) and other issues has been carried out under the umbrella of the Economic and Social Research Council (ESRC) funded 'Evidence Network' (Evidence Network, 2007).

In the USA, the alarmingly named What Works Clearinghouse (WWC), was set up by the Department of Education to 'provide educators, policymakers, researchers, and the public with a central and trusted source of scientific evidence of what works' (WWC, 2007). The broader ranging (in terms of jurisdiction, rather than methodology) Coalition for Evidence-based Policy (CEP) 'seeks to advance a major federal and state strategy to: (i) Fund rigorous studies – particularly randomized controlled trials – to build the knowledge base of social interventions proven effective and replicable in community settings; and (ii) Facilitate and/or incentivize the widespread use of these research-proven interventions' (CEP, 2007). Rousseau, in her presidential address to the Academy of Management, cites work on 'evidence based policing' and 'evidence based education' in the USA (Rousseau, 2006). In New Zealand, Tenbensel describes how a commitment to 'better evidence' was shared by different health care agencies (Tenbensel, 2004). This was influential in implementing wide-ranging reforms (although as different agencies pursued better evidence, this led to divergent approaches to rationing health care).

The authorities on evidence based *medicine*, Sackett et al. (1996), stress the importance of *situated expertise*, 'the proficiency and judgment that individual clinicians acquire through clinical experience and clinical practice' and *ethics*, 'compassionate use of individual patients' predicaments, rights, and preferences in making clinical decisions'. Though it is explicitly modelled on evidence based *medicine*, theorizing on evidence based *management* has placed little or no emphasis on the role of situated judgment and ethics. Instead, discussion has centred on the practical, epistemological, or technical challenges prompted by an evidence based approach (Boaz et al., 2002; Davies et al., 2000; Evans

and Benefield, 2001; Nutley et al., 2003; Pawson, 2001, 2006; Tranfield et al., 2003; Young et al., 2002). As yet, there are no definitively agreed criteria for what constitutes 'evidence' in management studies, or on how to determine the quality of 'evidence'. Nor is there a single prescriptive route to developing an evidence base (Dopson, 2006). However, there is a growing body of literature and interest in this field (see also Ashkanasy, 2007; Craig, 2003; Denyer and Neely, 2004; Ellaway et al., 2001; Greenhalgh et al., 2003; Hewison, 2004; Leseure et al., 2004; McLaughlin, 2001; Pfeffer and Sutton, 2006; Pittaway et al., 2004; Rousseau, 2006; Rousseau and McCarthy, 2007; Walshe and Rundall, 2001).

It would be misleading and overly simplistic to claim that all those pursuing 'evidence based' approaches were of one mind. Indeed, they are not even of one label: some eschew the label evidence based and prefer sanitized variants such as 'evidence informed' or 'evidence aware' for presentational or rhetorical purposes. However, reading across the 'pro' evidence based texts cited above, the claims underpinning evidence based approaches can be understood as a shared narrative about the relationship of management research to management practice. This narrative promotes certain modes of research and forms of knowledge production. It is shared to a sufficient degree for the evidence based approach to be considered a 'school' (McKinley et al., 1999); though some proponents of evidence based approaches refer to it as a 'movement' (Pfeffer, 2007). As well as consensus over the content of this narrative, it is important to consider the ways in which it is relayed or 'told'. The power and influence of key actors and networks is such as to support and legitimize the narrative, and to contribute to its being retold in different settings. This is noteworthy because, over and above the inherent appeal of any theory, such contextual factors underpin the likelihood of a school becoming dominant (Ofori-Dankwa and Julian, 2005). Given the development of a technical argot, the actors working within the narrative can also be described as a nascent 'language community' (Bennett, 1989, p. 51). More broadly, as a movement, the complex of actors, texts and organizations constitutes a form of regime, in Foucault's terms, a 'regime of truth' (Foucault, 1980). Perhaps more pertinent to this phenomenon though is Haas' 'epistemic community' (Haas, 1989): a constellation of specialists, research institutes, funding bodies and political organizations with a common world view, who are powerful because of their shared belief that a particular form of knowledge production is applicable to social problems (Ladi, 2005). The categories 'school', 'regime' and 'community' are methodologically compatible with understanding narratives as social phenomena: as 'language games' (Rudrum, 2005; Wittgenstein, 1953).

This 'epistemic community' shares a common world view that is framed in terms of three basic commitments. I claim that certain ideological strands in the nascent literature on evidence based management (pragmatism, progress, systematization, technique, accumulation) can be traced to these. First, in terms of beliefs about the nature of reality, there is a commitment to positivism. Positivism, following Comte, holds that we can learn progressively more about the social world through experiment, and that we can aspire to make research into the social more scientific (in the sense that the methods in the social sciences will increasingly bear comparison with those in the hard sciences). In the narrative of evidence based management, this is explicit in the goal of building an evidence base or knowledge 'stocks', and seeking to aggregate evidence about the social

world (Hammersley, 2001). It is also implicit in the aspirational attachment to medicine, a comparison with a higher prestige, hard science discipline with greater paradigmatic consensus. The ideological strands of 'progress' and 'accumulation' can be traced to this commitment to positivism. Second, in terms of beliefs about the relationship between research and practice, there is a commitment to a rational account of the application of evidence characteristic of 'Enlightenment' ideals (Hope, 2004; Lewis and Kelemen, 2002). Advocates of evidence based approaches emphasize the intention of carrying out research to inform practice. Claiming this as a point of emphasis downplays that this is already a goal common to other forms of research in management, and simultaneously implies that *the* way to do this is through an evidence based approach. Though there are diverse accounts of the relationship between research and practice within this epistemic community (e.g. Young et al., 2002), a common belief is that 'evidence' is key to encouraging the adoption of practices by policy makers, or other practitioners. The ideological strand of 'pragmatism' can be traced to this rational account of the application of evidence. Third, there is the commitment to, and development of, a common language with the cooption and redefinition of key terms: 'thorough', 'objective', 'transparent', 'rigorous', 'systematic' – and 'narrative'. In these moves lie the origins of the ideological strands of 'technique' and 'systematization'. It is in this third area where existing criticism has overlooked shortcomings in the evidence based literature, yet it is here where – to cite Huxley again – arbitrary oversimplification and 'restraint and regimentation' have political and moral implications that can lead to 'the curtailment of liberty'.

NARRATIVE

Different approaches to examining texts critically are sometimes grouped under broad banners, such as discourse analysis. As Alvesson and Karreman identify, often such catch-words can be, 'a smokescreen for an unclear and ambivalent view on language' (Alvesson and Karreman, 2000, p. 1145). This paper uses narrative theory to develop a polemical critique of the ideas generated by those in the evidence based school (Barry and Elmes, 1997). Research using narrative in the social sciences is still in its infancy (Gabriel and Griffiths, 2004) but has several advantages. It offers ready access to a number of terms associated with narratives: subtexts, fantasy, epic, heroines etc. These are simple and can be useful given their coherence and familiarity. As well as being useful in identifying underlying themes, studying narrative draws attention to the importance of rhetoric: the ways in which linguistic elements are organized to persuasive effect (rather than the pejorative sense of rhetoric as 'mere words' (Fairclough, 1995, p. viii)). A further benefit is that it underlines the point that technical or scientific documents are still fictions, in the sense that they are authored, contingent to a large degree, and – typically – created with an audience in mind (Morrell, 2006a). Lastly it is worthwhile pointing out two other benefits of a narrative approach which are serendipitous given the topic. First, using this approach instances an alternative mode of review to the 'systematic review'. Second, it reclaims 'narrative' as an analytical category that goes beyond its narrow sense in the straw man phrase 'narrative review' deployed by advocates of evidence based approaches (below).

The roots of narrative theory can be traced to Russian Formalism, 'a school in literary scholarship which originated in 1915–16, had its heyday in the early twenties and was suppressed about 1930' (Erlich, 1980, p. 11). Proponents of Formalism (Schklovski, Jakobson, Tynjanov, Eikhenbaum and others) advanced an extremely influential and innovative approach to studying literature (Onega and Landa, 1996), but their analyses also incorporated political speeches and texts that were 'non-fiction': formalist critique was a sociological as well as aesthetic endeavour (Greenfeld, 1987). Though Schklovski considered literature a distinct category, other proponents of Formalism, were more concerned with the degree to which works of different kinds, including scientific writing, exhibited 'literariness' (Bennett, 1989). Eikhenbaum, in 1929, described the heterogeneous nature of literature as follows:

> There is no uniform literature, stable and homogeneous, characterized by some chemical formula. Literary fact and literary epoch are complex and changeable concepts . . . Today literature is a circle of dilettantes who gather together to read their poems . . . Tomorrow it is a fat 'socioliterary' journal with an editorial board and a bookkeeping office. Today it is the lofty service of the Muses, carefully kept away from the street noises; tomorrow it is a petty press, a feuilleton, an essay. (Greenfeld, 1987, p. 43)

In Jakobson's and Tynjanov's variant of Formalism, the goal of criticism is to examine across different genres, how devices are deployed to achieve effective narrative (Any, 1990; Steiner, 1984). Effective narratives have two characteristics: they are credible, and they accomplish defamiliarization (Barry and Elmes, 1997). This paper argues that the literature on evidence based management achieves credibility by drawing comparisons with the higher prestige discipline of 'medical science', whilst defamiliarization is accomplished by coopting or reinventing key terms, for example, 'systematic', 'narrative', 'transparency' and 'evidence'. Five strands within the narrative of evidence based management (pragmatism, progress, systematization, technique and accumulation) can be understood as the means by which this narrative achieves credibility and accomplishes defamiliarization.

THE NARRATIVE OF EVIDENCE BASED MANAGEMENT

Pragmatism

One means by which evidence based approaches achieve credibility is through appeals to a more *pragmatic* approach to policy and a concern with best value, or 'what works' (Craig, 2003; Davies et al., 2000; Lewis and Hartley, 2001; Nutley et al., 2003) (please note, no reference to the philosophical school of Pragmatism is intended here – thanks to two anonymous reviewers for warning of potential ambiguity on this point). 'Evidence based' appeals to adopt changes to practice can be portrayed as delivering value-free assessment in line with particular outcomes, such as targets, rather than guided by free market, communitarian, or other ideologies. Solesbury (2002, p. 91) argues that evidence based approaches among non-governmental bodies can be understood as part of the

Utilitarian turn in research; as is shown by the 'increasingly instrumental' attitudes to research of funding bodies such as the Joseph Rowntree Foundation, the ESRC and the Nuffield Foundation. In the USA, a recent edited text by Denzin and Giardina describes the challenges of carrying out qualitative research in a climate of conservatism. Political conservatism can translate into methodological conservatism and infringements on academic freedom as funding bodies only sanction some kinds of inquiry (Denzin and Giardina, 2006).

There are some difficulties in claiming that pragmatism should guide research and thereby influence practice. A distinctive feature of academic research is that its goals have intrinsic worth, and values are embedded within practices. Polanyi (in Thorpe, 2001, p. 27) shows how 'scientific objectivity', is itself value-laden, 'submission of self to collective and transcendent ideals is the source of scientific objectivity . . . duty [and] ethics . . . are incorporated into the very nature of scientific objectivity'. Aspiring to more 'objective' modes of working is itself an ideological stance. Further, the notion that there can be value-free research is erroneous because the way in which we study and represent social phenomena has important ethical consequences (Ghoshal, 2005; Morrell, 2004). If a study involves social phenomena, the belief that a pragmatic criterion can simplify the moral playing field is erroneous. There are many features to life that involve alternative principles; for example, the belief that people have some basic rights. This suggests that studies which address outcomes but pay little heed to processes, are likely to be in conflict with these principles (Holinshead et al., 1999; Morrell, 2006a).

As well as working in their chosen area, management scholars work in a wider cultural and political arena. This is also the case for scholars in other disciplines, but in management research, the influence of this wider arena is harder to disentangle from the actual topic or nature of the research (Nowotny et al., 2001). In some senses this is because one of the 'double hurdles' of management research is that it needs to be relevant (Pettigrew, 1997). Furthermore, the influence of cultural and political pressures is heightened by the uncertainties surrounding the nature of management as an academic discipline. Although political considerations influence many if not all research bids, given the lack of consensus about method it is more likely to be the case in management research that these influence the way researchers represent their *methodology*. The shared assumptions of positivism (knowledge as accumulation of empirical facts derived from sense-data) and evidence based management (research can be aggregated, and knowledge can be stockpiled) suggest it will be advantageous for researchers to draw out, or build in, positivist elements in research bids, given the popularity of evidence based approaches among funding bodies. This may be the simplest way of communicating a willingness and ability to engage with a pragmatic ideology. If funds follow, the methodology may be represented differently to academic audiences who are on the whole more sceptical about 'positivistic' language, even where they adopt its underlying assumptions (Gartrell and Gartrell, 2002). One implication of this is that some modes of research are privileged as useful, because they share assumptions with evidence based management. Another implication is that the dilemmas involved in how research is represented become less like Pettigrew's double hurdles (satisfying different stakeholders) and more like mental gymnastics (reconciling different methodologies).

Progress

The pragmatic aspect to the narrative of evidence based management can be usefully contrasted with claims to *progress*. In this sense, evidence based management is still historically and socially contingent, but instead of being a political artefact, its credibility may rest on its being portrayed as state of the art, following on the heels of recent scientific advances. This resonates with the current debate on research in Modes 1, 2 and 3 (Nowotny et al., 2001; Starkey, 2001). Those advocating new forms of engagement challenge divisions between academics and organizations, pointing to an increasingly complicated socio-political context, and to changes in the relations between the academy and this wider context. These structural complexities mirror complexities in conducting research problems, which to an extent greater than ever before, are debated in public arenas (Nowotny et al., 2001). For example, concerns over genetic modification (GM) technology, and resulting disruptive protests, raise a range of issues relating to the interface between the academy, commerce and the public (Tester, 2003). Given the complexities of such issues, and the need to address the concerns of various stakeholders, evidence based management could be cast as one way to negotiate interactions between the academic community, policy makers, practitioners and the public.

The emphasis on evidentially derived interventions seemingly simplifies the relationship between the academy and policy makers. Related ideals such as the diffusion and utilization of evidence based learning (Nutley et al., 2003) seemingly simplify relations with practitioners and the public. One problem with this representation is that it assumes a *telos*, progress along an axis of continuing improvement or understanding. Though progress is an appealing ideal, it is not clear that our ability to understand social problems has developed in the same way that our understanding of technology has (Allen, 2003; Bradley et al., 2000). In part this is because technological advancements create new problems (Tester, 2003), but it is also a feature of the complex nature of social phenomena and management studies.

'Management' includes a few activities that can be carried out in such a way that, 'the intentions of individual actors can be ignored' (Ghoshal, 2005, p. 78); for example, some (though by no means all) aspects of logistics, production management or operations management. On the whole though, behaviour in organizations is epistemologically murky because, in Ghoshal's words, 'intentions matter'. Since intentions are mental phenomena, assigning causal explanations is more problematic (Dennett, 1991, pp. 76–7). The way we frame accounts of actions also involves consideration of the role of ethics (Morrell, 2004), and involves relational complexities summarized in Giddens' account of the 'double hermeneutic': the reciprocal interaction between labels of social phenomena, and the effect of using those labels (Giddens, 1984). As an area of research, 'management studies' can also include activities where intentions may be ignored; for example, in large scale studies where there are clear conventions, and shared assumptions about methods and epistemology; and some (but by no means all) studies in econometrics, or applied psychology. Taken as a whole though, there is no consensus in management studies (Donaldson, 1996; Pfeffer, 1993, 1995; Van Maanen, 1995; Zald, 1996). The resulting proliferation of theories, schools, models and mantras look like a Jackson Pollock, rather than a Mondrian. Comparisons by scholars between manage-

ment studies and other disciplines can appear wistful (Osigweh, 1989) suggesting management scholars are drawn towards 'normal science' (Kuhn, 1962), where there is little debate over first principles, and a high degree of paradigmatic consensus. Pfeffer argues such consensus is needed for management studies to make progress, or 'advance' (Pfeffer, 1995). Sometimes referred to as physics envy, in this context the evidence based school displays 'physician envy'.

The assumption of progress, or a *telos* can be criticized as misguided adherence to modernity and 'Enlightenment' ideals (Lewis and Kelemen, 2002). Setting aside this rather sweeping challenge, organizational theorists report that even within clinical medicine, where there is higher consensus, the adoption of promising practices is not governed by the principles of evidence; 'robust, scientific evidence is not, of itself, sufficient to ensure diffusion . . . There is no one fact, which can be seen as "the evidence". There are simply bodies of evidence, usually competing bodies of evidence' (Fitzgerald et al., 2002, p. 1437). This is consistent with findings in healthcare more generally (Dopson, 2006). Within management studies, scepticism as to the way in which 'evidence' is understood and operationalized can be found in Guest and King's (2004, p. 414) reporting that 'CEOs often seem more impressed by the "telling case", particularly one that is directly relevant to their organization, than by more general facts and figures'.

Systematization

Pursuing an evidence based approach to studying management leads to the *systematization* of research practices. In this sense its advocates can claim credibility where the rationale for systematization is expressed in terms of the need to organize knowledge in response to contemporary concerns. Systematization can also be justified in terms of a need to improve scholarship, or 'thoroughness' (Tranfield et al., 2003, p. 207). One benefit of a systematic approach can be that it provides a framework for carrying out research, in an analogous way to the presence of common assumptions, or paradigmatic consensus (Pfeffer, 1993, 1995). However, systems can constrain and limit the effectiveness of research activity, and curtail liberty (Huxley, 1947). The presence of a privileged system can devalue or silence alternative approaches (Foucault, 2002). Kelly et al. (2002), writing on behalf of the Healthcare Development Agency (now part of NICE), identify how systematic reviews privileged certain types of empirical study:

> Systematic and other reviews of effectiveness readily available to inform the development of the first Evidence Based Briefing Documents . . . tend to be weighted towards a relatively narrow spectrum of potential evidence – that which is mostly drawn from randomized controlled trials and/or sits easily within traditional evidence hierarchies. (Kelly et al., 2002)

One can also critique the logic of systematization by comparing the context for evidence based *medicine* with that of management. This provides a basis for assessing the extent to which it is legitimate, or sensible to translate certain norms: identifying and evaluating evidence using a replicable, systematic procedure and clear evaluative criteria; accumulating knowledge. Initially, this involves consideration of the nature of

management studies, and the extent to which management studies can be developed as a science (Cole, 1983; Pawson, 2001; Sayer, 1992; Tsang and Kwan, 1999). Weick's (1999) phrase 'paradigm wars' references the continuing lack of consensus on this point, but catchy though this label is, it is an oversimplification since researchers approach the field from various vantage points, rather than falling into discrete camps. There is also a complex relationship between the way in which we frame the social world and the effect of such framing (Giddens, 1984). Management scholars who acknowledge the possibility of growing understanding of the social world may still be troubled by an approach derived from a completely different paradigm.

Leading scholars have expressed concern about the influence and effects of 'economics language and assumptions' (Ferraro et al., 2005), and the dominance of modes of theorizing that privilege functional or causal accounts of behaviour at the expense of recognizing intentionality (Ghoshal, 2005). This suggests that a project of systematization for evidence based management faces serious challenges. It is a normative model for research whose roots lie in medicine, where randomized controlled trials are at the apex of a hierarchy of evidence. Anxiety about the reductionism implicit in this approach to research is likely to be exacerbated if the procedure is advocated wholesale, irrespective of the nature of the problem, and where the emphases on situated expertise, and ethics in evidence based *medicine* are downplayed, or ignored.

Accumulation

Given the proliferation of social science research methods, and the vast range of theoretical approaches that may be brought to bear on a particular question, there are problems facing any project of building an evidence base, particularly where the systematic review assumes 'just one possible relationship among different studies: an additive one' (Hammersley, 2001, p. 548). To give one example, the design and execution of an ethnographic, participant observation project bears little comparison to the design and execution of an applied psychology study using a remotely administered survey; yet both may be appropriate and worthwhile ways to address the same problem in management studies. It is also difficult to see how to accumulate insights from research at different levels of analysis (individual, team, organization, sector). To aggregate these different studies implies a common metric, or process of commensuration which is at odds with the interpretivist principles that underpin ethnography. The act of commensuration itself is the exercise of a 'mode of power' (Espeland and Stevens, 1998).

Though we may be able to identify criteria for *appraising* and *evaluating* qualitative research (Tranfield et al., 2003, p. 216), it is harder to see how we could *accumulate* the findings from such research into a 'reliable knowledge stock' (Tranfield et al., 2003, p. 207). This is partly because there is less scope to talk of an ordered hierarchy of evidence for qualitative data, but also because of the epistemological diversity inherent in qualitative approaches (Dixon-Woods et al., 2004). Although these authors and others (Evans and Pearson, 2001; Greenhalgh et al., 2003; Petticrew, 2003) acknowledge that different types of research may feature in an evidence based approach, no agreed framework exists to compare the relative merits of findings from these, or more

fundamentally, to compare studies conducted from different research paradigms. In short, there is no convention in management that bears comparison with the medical model of a 'great chain of evidence' (Mulrow and Cook, 1997).

One cultural pressure influencing research is the evaluative preferences exercised in decisions on publication (Young et al., 2002). A challenge arising from this in terms of evidence based management is the ambiguous status of replication research (Neuliep, 1991). Acar et al. (2003, p. 1226) suggest that 'the need for replication studies is periodically rediscovered', and though ostensibly valued by leading journals (Eden, 2002), there is evidence to suggest that replications, or repeated tests of theory, are rare, and harder to publish, since they may be criticized as being unimaginative (Hubbard et al., 1998; Neuliep, 1991). This makes conducting replication research something of a gamble, and suggests that there are cultural barriers inhibiting any programmes designed to accumulate knowledge 'stocks'.

This point is illustrated by considering the nature of a contribution in management studies. Paradoxically perhaps, a replication study that corroborates a theory is less of a contribution because it reveals nothing new: that is, it does not restrict the scope within which prior theory was generalizable (Bornstein, 1990). On the other hand, if it fails to corroborate, this 'null result' is only valuable if the original theory has been closely followed; in other words, where the 'same measurement and analysis' are used (following Tsang and Kwan, 1999). This is because with a non-exact replication it is impossible to know whether failure to corroborate is down to inadequacies in the original theory, or because of changes made prior to the repeated test.

This briefly expresses the tension between theory development and testing in terms of a simple dichotomy: 'literal', or 'exact' versus non-exact replications (Hendrick, 1991), but it is worth noting that the number of ways in which subsequent tests may differ from the original is theoretically infinite (Glass, 2000). This indeterminacy makes it difficult to secure consensus about the contribution of a replication study, and makes carrying out this kind of research a risky business. Since the contribution depends partly on the outcome, it implies management researchers designing replication studies need a degree of prescience, or perhaps 'pre'-science. As a consequence the incentives to develop new theory are higher (Mone and McKinley, 1993). Knowledge accumulation is only possible given a degree of consensus and certain shared assumptions. However, even basic epistemological consensus (e.g. on theories of truth, ontology etc), of the sort enjoyed by an epistemic community (Ladi, 2005) does not extend to judgments about the extent to which a replication is new, or constitutes a contribution. Given the lack of a unified view of the field, and the paucity of replication studies, there are powerful cultural disincentives to participating in an approach that seeks to aggregate evidence.

Technique

Perhaps the key strand in the narrative on evidence based management is the role of technique in conducting evidence based research. Most obviously this involves the use of a 'systematic review' of the literature (Petticrew, 2001, 2003; Tranfield et al., 2003). There are some difficulties with the label 'systematic'. Within the evidence based narrative, the meaning of 'systematic' is conventional and problematic on at least three

fronts. First, its use conflates descriptive and normative senses. As a description of a particular procedure the term systematic is defensible. However, when this procedure is represented as superior by virtue of being 'systematic' rather than, say, limiting, it is contentious. Organizing these senses under the one label is an act of defamiliarization that makes it harder to separate descriptive from normative senses. Second, the credibility of the label 'systematic' is bolstered by reference to another discipline. Deploying it in the context of management studies is a mixture of a hijack (its original, well-established use was in medicine) and a mugging (it has been sprung on a discipline with little consensus by a powerful regime over a short period). Third, there is no limit to the number of ways in which a review (even one that did not seek to aggregate evidence) could be designed so as to be 'systematic'.[1] Accordingly is worth pointing out that alternative labels to describe this form of systematization are as, or more, sensible – though less appealing to its advocates: 'technocratic', 'bureaucratic', 'regimented', etc.

There is considerable overlap between the techniques used in systematic reviews and the wider literature on replication and meta-analysis (Eden, 2002; Glass, 2000; Hubbard et al., 1998). Rather than acknowledging that such techniques as meta-analysis and replication are often only appropriate in certain disciplines, or to particular questions, the more hawkish advocates of an evidence based approach offer wide ranging prescriptions for the application of a systematic review. For example, Walshe and Rundall describe the 'paradigm-shift' to evidence based management, moving from 'ad-hoc, piece meal, small scale, poor-quality research' to 'coherent research programmes made up of well planned, longer research projects of high quality' (Walshe and Rundall, 2001, p. 432). Tranfield et al. (2003) decry non-systematic, 'narrative' reviews, that 'frequently lack thoroughness . . . and often lack rigour' (Tranfield et al., 2003, p. 207). Such arguments for 'systematic reviews' are intriguing, self-referential paradoxes. They follow a traditional 'narrative' review format, whilst simultaneously calling the value of such research into question.

Criticisms of this sort buttress the case for evidence based approaches because selective, descriptive criticism contrasts powerfully with a normative, superior alternative (Legge, 1995, p. 36). If systematic reviews become a widespread feature of management research they will not automatically result in research that is 'thorough' and 'rigorous', but this is implicit in the juxtaposition of a (poorly conducted) narrative review and a (ideal form) systematic review. Though not particularly subtle, the contrast is rhetorically more effective because of concurrent acts of defamiliarization. The term 'narrative' becomes a pejorative, 'older' or obsolete technology, while 'systematic' becomes the aspirational, 'new' default mode for research. Contrasts and other powerful rhetorical devices are at the heart of any political struggle for power (Morrell, 2006a), or indeed any effective speech (Greatbatch and Clark, 2003; Morrell, 2006b). In this case there is a clash between form (narrative review) and function (decrying narrative reviews): the metaphysical equivalent of pulling oneself up by one's shoelaces.

Other instances of defamiliarization, for example the cooption and reinvention of the term 'transparency', illustrate how core normative ideals in the evidence based narrative cannot be realized in a straightforward manner. Presenting a transparent, replicable process for identifying relevant literature is not the same thing as 'making explicit the values and assumptions underpinning a review' for instance (Tranfield et al., 2003,

p. 208). Transparency in this wider sense is not achievable by technique, but requires an appreciation of the inescapably dilemmatic nature of being in the world (Heidegger, 1973; Sartre, 1996). The way we choose to interpret social phenomena is a fundamental, or first order, problem. This precedes second order considerations of what technique is appropriate. Such first order choices are value-laden and have manifold assumptions (Ghoshal, 2005; McGrath, 1982). Not all of this prejudice will be transparent to our selves, let alone to our audience.

LANGUAGE AND EVIDENCE

Contemporary management studies displays a fascination with language (see Green, 2004, for an excellent review). This can be partly understood as the legacy of 20th century philosophy, but also a consequence of more recent, applied forms of study, which share a concern with the way language is situated, occasioned and deployed as a resource (Fairclough, 1995; Potter and Wetherell, 1987; Stubbs, 1983). These approaches can be traced in part to the more ancient study of rhetoric (Aristotle, 350 BCE), but central to the linguistic turn is the idea that language is a shared activity (Wittgenstein, 1953), that forms one basis for exercising power (Foucault, 2002). As such, the role of language is central in the study of management (Alvesson and Karreman, 2000; Green, 2004; Oswick et al., 2000). It is relevant in understanding: how new practices are disseminated and interpreted (Abrahamson and Fairchild, 1999; Clark, 2004; Giroux, 2006; Green, 2004); how actions and expectations are legitimized and authored (Benjamin and Goclaw, 2005; Chreim, 2005; Mueller and Carter, 2005); how people make sense of social phenomena (Barry and Elmes, 1997; Boje, 1991; Weick, 1995); and how the practice of management is carried out (Alvesson and Sveningsson, 2003; Minzberg, 1973; Watson, 1995).

The role of language is also central in understanding the relationship between the study of management and management itself. For example, in describing the legacy of 'bad management theories', Ghoshal argues that a 'gloomy vision' of management studies has been propagated within business schools. Inspired by amoral, instrumentalist accounts of human behaviour, this has shaped the thinking and practice of managers, and 'actively freed . . . students from any sense of moral responsibility' (Ghoshal, 2005, p. 76). Similarly Ferraro et al. explain the influence of 'economics language' on management studies in terms of the broader phenomenon of the self-fulfilling prophecy, or 'Pygmalion effect' – a process where labels and descriptors shape norms, expectations and actions (Ferraro et al., 2005; Merton, 1948). In each of these instances there is an interplay between the theories and labels used to describe social phenomena, and the effect of the use of such descriptors, a 'double hermeneutic' (Giddens, 1984).

The extant literature on evidence based management largely overlooks the relationship between knowledge production and power (McLaughlin, 2001). This relationship is articulated in Foucault's analysis of a discursive practice (Foucault, 2002); where knowledge is seen as constructed in a context, and reflecting the practices and functions of a particular community, rather than having a transcendental status. The practices of a given community are situated and evolve as the community develops ways of represent-

ing truths and legitimizing their own authority (Locke, 2001). Since these truths are constructed, there is a basic interrelation between claims to authority and expert knowledge, and the exercise of power.

The strands within the narrative of evidence based management (pragmatism, progress, systematization, accumulation, technique) sanction the exercise of power because they appear to reference independent and transcendent ideals (Foucault, 2002, pp. 196–208). However, such appeals can be interpreted as moves in a language game (Mauws and Phillips, 1995). In other words, rather than referring to an objective standard of truth, they become seen as part of a local, situated way of talking. 'The meaning of words is specified by rules of intelligibility embedded in the institutional context' (Astley and Zammuto, 1992, p. 444). Such moves often serve as self-evident means of legitimation (Lyotard, 1984, p. 41).

The label 'evidence based management' is itself emblematic of such self-referential sanction and legitimation. As well as laying claim to 'evidence' – rather than a particular form of evidence and associated mode of knowledge production – the label serves as a rhetorical precursor. 'Evidence based' has a superficial coherence that glosses over the fragmentary nature of 'management'. Within this narrative terms such as 'thorough', 'transparent', 'systematic' – and 'narrative' of course – take on new and unfamiliar senses. This is a process of defamiliarization and is one means by which the narrative told about evidence based research is made compelling. The meaning of these terms is arbitrary since they are defined locally, in a self-referential and circular manner. However, they retain their appeal and credibility because their use is buttressed by regimented procedure: following a particular protocol becomes *de facto* 'systematic', and relegates other modes of review to non-systematic status. In a similarly arbitrary fashion, certain forms of research are privileged because they share the assumptions of the evidence based approach. Credibility is further accomplished by coupling with 'medical science', a manifestation of the status anxiety endemic to management research (Mitchell and James, 2001).

In what at first glance seems paradoxical, advocates of evidence based approaches often offer compelling summaries of the reasons that medicine is *inappropriate* as a model for management research, typically listing ontological (for which one can read inescapable) points of difference (e.g. Tranfield et al., 2003, pp. 212–14). However, in narrative terms there is no paradox, since such a summary is perfectly consistent with the goal of constructing a powerful and compelling narrative. In broad 'epic' terms these could be seen as the necessary hurdles that must be overcome (Gabriel, 2000). More particularly, these summaries do excellent rhetorical work in two ways. First, within the body of a particular paper, and within the wider evidence based narrative, subsequent arguments for applying evidence based principles can be justified by this earlier apparent 'groundwork'. To use Learmonth and Harding's phrase, this de-radicalizes dispute (Learmonth and Harding, 2006). The implied trajectory is consistent with Enlightenment ideals, suggesting 'progress', and consistent with the belief that rationality can solve social problems. Such readings overlook the truism that describing a problem is not the same as solving it. A second rhetorical benefit is that raising potential problems can silence would be critics. Though pre-empting and foreclosing criticism is a typical feature of a piece of academic work, at an ecological or field level the cumulative effect of such summaries by a *regime*, is to kill off criticism even where there are manifest and unresolved

problems. Consider for instance, Rousseau's (2006) response to a series of deep seated challenges to the EBM model (Learmonth, 2006). Learmonth identifies the centrality of ideological issues, the role of politics and the rhetoric of 'science'. In the response by Rousseau, this radical and antithetical stance to EBM was repackaged and reinvented. These deep seated challenges were described as raising concerns about a 'metaissue', or shared concern as to how exactly, 'evidence-based management (EBM) might be most effectively designed and implemented'. The scale of activity by the evidence based school, and the preoccupation of academic research with 'uniqueness' (Mone and McKinley, 1993), means it is increasingly difficult to sustain critique of fundamental problems with an evidence based approach because there has been a precursory discussion, or simply identification, of limitations or challenges. For example, though acknowledging that, 'theoretical controversy [is] generally welcomed as an indication of intellectual health' (Young et al., 2002, p. 223) in the social sciences, Young et al. decry 'the increasingly tired debate about the extent to which medical and social knowledge differ' (2002, p. 219).

More recent work by those active in the evidence based school is less cautious about any differences; '[w]hilst differences between medical science and management research requires adaptation of the systematic review methodology, it can be applied to the management field in order to produce a reliable knowledge stock' (Pittaway et al., 2004, p. 20). This brushes aside earlier careful qualifications of the limits of systematic reviews; 'it is now widely recognized that the meta-analysis approach of evidence based medicine cannot provide a model for systematic review that will be as effective in other policy domains' (Pawson, 2002, pp. 1–2). Having foreclosed potential criticism, the pronouncements of this community are likely to become more strident: the methodological equivalent of 'mission creep'.

Another apparent paradox is that whilst keen to make comparisons and contrasts with medicine, advocates of evidence based management continue to overlook two of medicine's central features: situated judgment and a concern with ethics. Again in narrative terms, this downplaying of ethics and judgment is not paradoxical, but eminently sensible. Though concerns about ethics and judgment are core to management, neither of these are readily codified. This means that including consideration of ethics and judgment would result in a less coherent and compelling narrative. Almost axiomatically, 'ethics' runs counter to pragmatism. Again, almost axiomatically, 'situated judgment' runs counter to systematization. Neither applying judgment nor grappling with an ethical problem is a matter of technique.

An advantage of a critical approach to evidence based management is to allow the treatment of 'technical discourse as ideological, as mere rhetoric [and to] assert the epistemological or ontological primacy of so-called "social" factors over other factors in the determination of scientific knowledge' (Locke, 2001, p. 12). For example, injunctions to follow evidence based principles can circumscribe the discretion exercised by professionals, reducing their status to technicians (McLaughlin, 2001, p. 352). Relatedly, an emphasis on following generic procedures is likely to have the effect of devaluing local judgment and situated expertise, and downplay the significance of ethics. Regimes and technocracies lead to a devaluing of the role of individual judgment and the curtailment of individual liberty. This could harm the academic community. Formalism itself was

suppressed by a regime who benefited from a 'shrunken scholarly arena' (Any, 1990, p. 426). Analogously, advocates of evidence based research decry non-systematic reviews as 'narrative', shrinking the space for alternative accounts.

Developments such as the Campbell Collaboration and the Evidence Network, and the current emphasis on best value in public sector management suggest that the influence of the evidence based narrative on the development of social policy is likely to continue. Recent work indicates this is going to be an important theme within management research (Denyer and Neely, 2004; Leseure et al., 2004; Pittaway et al., 2004; Rousseau, 2006; Tranfield et al., 2003). The polemic above illustrates a number of ways in which this narrative can be understood together with some fundamental political and moral implications. In contemporary discussions of evidence based management, more attention has been paid to epistemological and practical considerations, than to the issue of how power is exercised, both in terms of particular interventions, and in the relationship between research and practice. The evidence based narrative advances a consensus view about how power should be exercised in the governance of this relationship. Consensus is worth scrutinizing and challenging for its own sake; particularly perhaps in management studies, where McMullen and Shepherd (2006, p. 1644) describe it as a bias that 'plagues' the field. The approach here is an attempt to challenge any consensus about how the relationship between research and practice should be governed, since this is as Huxley (1947) warns, a 'curtailment of liberty'.

REPRISE

This paper can itself be treated as a narrative of course. The declared aim is to scrutinize the evidence based approach and in doing so highlight the political and moral implications for management as research and management as practice: for me, it is a work of *science*. However, the subtext could be interpreted as an *epic* and satirized accordingly, where the self-styled hero sets out to battle the evidence based giant. Even less charitably it could be characterized as *quixotic fantasy* if the evidence based giant were simply a windmill, or as a *conspiracy theory* if the description of a regime is deluded. Assuming the paper escapes such readings, a dose of scepticism about its implications are necessary, otherwise it would still appear to be *divertissement* rather than a substantive contribution. I will briefly address each of these before further reflection on the method.

The identification of a large and influential constellation of actors, institutions and texts does suggest there is something powerful and formidable about the evidence based school, which would make the quixotic quest and conspiracy theory readings hard to sustain. On that basis alone, counterpoint and critique are justified to allow for what Mill refers to in *On Liberty* as the need for, 'fair play to all sides of the truth'. A less palatable (though perhaps more compelling) defence to any 'heroic' reading is that my motives are partly selfish. I am not acting heroically in pursuit of a pure and noble quest – that much can be inferred from my desire to have this narrative accredited and published in a leading journal. This leaves the divertissement charge, which, admittedly, is harder to respond to. For instance, this argument will be ignored by those who are happy to pitch for and then churn out systematic reviews. It is also clear that a more direct way of trying to influence the opinions of funders would be by campaigning, lobbying and other forms

of activism which, for instance, the International Association of Qualitative Inquiry advocates (IAQI, 2006). My defence for this paper, which makes it more than an interlude, is that there is a role for polemical contributions, and that it is in that very area where academic journals come into their own. These are arenas where, as Learmonth and Harding (2006) suggest, we can 're-radicalize debate', and sustain commentary on fundamental issues that are brushed aside elsewhere. They remain forums where research activity can be what Fox argues it *should* be, 'constitutive of difference' (Fox, 2003, p. 81). Furthermore, polemic (which can be science) is a useful device for 'questioning the legitimation and repression of particular aspects of the world' (Fox, 2003). This is central to the relationship between research and practice.

Adherents to 'systematic reviews' are likely to criticize the approach taken here for not being transparent – in the narrow sense that no procedure for reproducing this literature review is offered.[2] So, for example, the choice of five ideological strands (pragmatism, progress, systematization, technique, accumulation) could be described as arbitrary and principally an assertion, rather than empirical abstraction: other categories could feature in an alternative account. This criticism has merit, but it also raises a basic problem. No way of framing a sociological phenomenon can be derived in purely empirical terms. No matter what the weight of evidence, when it comes to summary and characterization, there will always be a point at which the reader has to evaluate the sense and persuasiveness of any such framework for themselves. As well as underlining a limitation with evidence based approaches, this basic problem also illustrates why there should, on occasion, be some space given over to polemical work where, 'the argument's validity depends on "being perceived", rather than on claims to a body of evidence or data' (Keenoy, 1999, p. 2). In the context of this paper there is an additional counter to this criticism. To rely on inductive, empiricist logic would be incoherent precisely because the paper is a polemic against an 'evidence based' approach. These counterarguments are perhaps insufficient justification on their own for the choice of categories, but they do lend credence to the idea that something more than an evidence based approach is needed to inform category selection. The paper addressed this in offering theoretical justification up front (in terms of the three commitments: to positivism, to a rational account of the application of evidence, and to the development of a common language) for this way of framing the evidence based narrative.

A more important point, as argued above, is that it does not follow that adhering to given techniques and procedures results in a more transparent review. In a more substantive sense, pursuing the goal of polemic does make the paper transparent and the values and assumptions underpinning it are also apparent through the identification of a particular aesthetic. Invoking narrative theory could be depicted as a retrograde or Luddite step, though any accusation that the approach taken here is anti-realist would be erroneous. The model of criticism used, Russian Formalism, is a realist approach to literature in that it eschews the importance of authorial intention, and focuses on the text(s). Because of this, the term 'Formalism' was originally coined as a pejorative label by opponents to that school who positioned themselves as less naïve (Erlich, 1980). As a mode of criticism, Formalism can scrutinize how power is established – one reason it was suppressed during the Stalinist regime. Explicit discussion of the importance of power, language and ethics signals a willingness to make values more transparent.

CONCLUSION

This review offers a wide ranging and critical perspective on evidence based management, arguing that current attempts to translate the principles of evidence based *medicine* to management, have overlooked the role of ethics and judgment (Sackett et al., 1996). Using narrative theory, the paper identified and criticized five strands within the narrative of evidence based management; stating the various challenges these pose for management as research and management as practice. The paper also described contextual challenges that are features of management research, and have a bearing on the credibility of an evidence based narrative in management (McGrath, 1982; Mitchell and James, 2001; Pfeffer, 1995; Van Maanen, 1995). There are signs within the policy context, and in the academic literature, that evidence based approaches to management will become increasingly influential. There is a growing number of government bodies, funding councils, practitioners and academics, all of whom have a shared interest in pursuing evidence based approaches. Acknowledging this interest does not imply any failing on the part of individual authors, or impute any unethical motives, but the common ground shared across various texts and by different actors can be understood as one type of regime: an epistemic community (Haas, 1989). Since the curtailment of liberty is a feature of regimes (Huxley, 1947), this suggests there is a need for continued caution in relation to the evidence based narrative. This review articulates some problems with this narrative using an aesthetic mode of criticism to highlight political and moral implications. These are important given the relationship between claims to knowledge and the use of power; and the interaction between management as theory, and management as practice. The momentum behind the evidence based school is considerable and shows no signs of diminishing despite enduring epistemological concerns and, ironically, in the face of evidence from other fields that pursuit of an evidence based approach may be to the detriment of practice (Evans and Pearson, 2001; McLaughlin, 2001). In this light a polemic is both warranted and timely.

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NOTES

[1] Examples of systematic criteria for a literature review: only include authors whose surname begins with A–M; exclude authors who write in French; only include journals published on a Tuesday or Thursday; exclude papers written before a given date (two of these are typical features of systematic reviews).
[2] Since it is difficult to persuade management scholars to replicate empirical research (because it is so hard to get replication studies published), inviting someone to replicate a literature review does seem a 'heroic' aspiration.

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