

The Politics of Standards in Modern Management: Making ‘The Project’ a Reality*

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ABSTRACT In this paper, we explore the standardization of contemporary management knowledge, focusing in particular upon the role of ‘standards’ in creating and reifying ‘organizational objects’, with powerful consequences and with often unrecognized ethical implications. It is our argument that modernist beliefs in ‘general, abstract and timeless ideas’ (Brunsson et al., 2000, p. 173), enshrined in a universal and abstract rationality, results in the marginalization of more reflexive forms of rationality and the suppression of autonomy, creativity and discretion in organizations. To investigate the consequences of standardization, we take as the focus of our analysis a specific management model which has a significant and growing impact on many sectors of contemporary industry; that of project management. Drawing on the work of Timmermans and Berg (1997), Bowker and Star (1999) and Brunsson et al. (2000), we draw attention to the reification of the object of management; in this case, the project itself, as a transhistorical, ‘real world’ object. By tracing efforts to establish and institutionalize ‘standards’ in this and other fields of management, in particular through the creation and dissemination of a universal ‘body of knowledge’ for this field, we draw attention to the political and moral significance of the ‘blackboxing’ of knowledge. It is our broader intention here to help to denaturalize this organizational object, to legitimize other modes of knowledge and practice in the field, and thereby to reopen debate in this and other arenas of standardization.

INTRODUCTION

Management system standards are important because they guide alignment and ensure conformity of policy deployment. They are being increasingly recognized as best practice guides and even as potential frameworks for regulators. However, the voluntary nature of management system standards makes them particularly compelling. (Trevor Smith, Chair of ISO 9000 Technical Committee)

Civilizations in decline are consistently characterized by a tendency towards standardization and uniformity. (Arnold J. Toynbee, *A Study of History*, 1947, p. 617)

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The creation and promotion of universal models of management, ‘disembedded from their country-specific and time-specific contexts . . . distanced and disconnected from time and space and rendered generalizable’ (Brunsson et al., 2000, p. 107) has been identified as a distinct characteristic of twentieth century modernity (Giddens, 1990; Toulmin, 1990; Townley, 2002; Vann, 2004), and arguably, as reflecting the enduring impact of Fordist process of rationalization upon contemporary management (Shenhav, 1999; Yates, 1989). Our intention in this paper is to critically examine such standardized management models through an analysis of one particular model, and sub-discipline of management, which is both rapidly expanding and (so far) neglected in terms of critical attention; that of project management. In particular, we see the significant effort to develop and institutionalize ‘standards’ in this and other areas of management as a source of significant concern, with dangerous implications for autonomy, creativity and discretion in contemporary organizations. Our argument is that the creation and naturalization of such fixed standards, as part of the establishment of a ‘Body of Knowledge’, tends to support a technicist and instrumental rationality in management which focuses upon means–ends logic and an ideology of predictability and control. In addition, we would wish to raise a broader concern with management models of all varieties formed in the image of a Cartesian worldview, ‘informed with a strong belief in general, abstract and timeless ideas, in experts and the knowledge possessed by experts’ (Brunsson et al., 2000, p. 173).

We develop our argument in the context of the increasing reliance on projects in organizations and the use of associated project management techniques as a fundamental building block in organizations (Morris, 1997). The standardization of practices between projects is reliant upon a conception of projects as ‘real’ and of the practices by which projects are managed as therefore universal and consistent. We do not see the study of projects and of their management as a question of ‘discovery’; instead, it is a process of invention. Rather than asking ‘What is a project?’, we would pose the question in these terms: ‘What do we do when we call something “a project”?’ In the place of a self-evident ‘project’ to be explored, we are instead interested in the ongoing discursive construction of what is to be understood and accepted as ‘the project’ (Linehan and Kavanagh, 2006). Our intention in this paper is therefore to challenge the accepted conception of ‘the project’ by ‘unravelling’ the project as it has been gradually constituted, reified and naturalized over time, as a ‘documentary reality’ (Silverman, 1997). To do this, we direct our analysis towards the Project Management Body of Knowledge (henceforth, the PMBOK) of the largest professional organization in this area, the Project Management Institute (PMI), highlighting the PMBOK’s role in constructing ‘standards’ for the field of project management. It is our contention in this paper that the PMBOK, in collaboration with a range of ancillary documents and the wider efforts of a network of agencies, is a key element in the ongoing naturalization of ‘the project’ as a taken-for-granted object through the institutionalization of standards. Where such standards take on an unassailable ‘reality’ and form the basis for widely accepted and implemented structures of management, their power effects become unmistakable. By doing so, we intend to take a first step towards bringing into question the specific forms of project management knowledge based around the standards which the PMBOK invokes and legitimizes.^[1]

As Bowker and Star note, this is a process with moral and ethical implications:

Each standard and each category valorises some point of view and silences another. This is not inherently a bad thing – indeed it is inescapable. But it is an ethical choice, and as such it is dangerous – not bad, but dangerous. (Bowker and Star, 1999, pp. 5–6)

In light of these arguments, we consider the implications of this reification of the project for practitioner communities^[2] and the implications for power relations within and between organizations and industries. In particular, we have concerns about the ‘black-boxing’ of PM knowledge, the elevation of universal, abstract rationality over embodied and reflexive rationality, and the constraining effects this has upon the action of individuals who work within and manage projects. Through a critical examination of the construction of ‘the project’ itself, we hope to open the way to alternatives to technicism and instrumentalism, a wider integration of ethical concerns and a shift towards an embodied and enacted rationality in the management of projects and indeed, in management more generally. We conclude by underlining the wider political and ethical implications of this tendency in contemporary management.

THE NATURE AND ROLE OF STANDARDS IN MANAGEMENT

The construction of standards and the consequences of standardization have only recently begun to undergo sustained academic scrutiny (Bowker and Star, 1999; Brunsson et al., 2000; Vann, 2004), although the process is closely related to more familiar themes in social science, such as rationalization and bureaucracy, and has thus been touched upon in fields ranging from technology studies (e.g. Pinch and Bijker, 1984) to neo-institutionalist approaches to organization studies (e.g. Scott and Meyer, 1994). Standards, it is argued, constitute ‘rules about what those who adopt them should do’ (Brunsson et al., 2000, p. 2), and the creation of standards, it is argued, enables ‘control at a distance’ (Law, 1986; Yates, 1989), although the adoption of standards is typically presented as voluntary. This distinguishes standards from alternative means to regulate fields; through tacit social norms, on one hand, or through legally enforced directives, on the other.^[3] The emphasis on voluntarism here has two important implications: it underlines firstly that standards need to be ‘sold’ in terms of their advantages to adopters; and secondly that the establishment of standards is never automatic, and typically involves a struggle, against either competing standards, against concerns about the precise definition, or against the belief that no standard is necessary. Furthermore, the global reach of standardization, and the extent to which standardization takes place at a remove from its impact, are both worth emphasizing from the outset; as Brunsson et al. (2000) note, ‘standardization is done at a distance in time and space from both the people and the situations concerned’. Hence Harvey argues in *The Condition of Postmodernity* (1990), that a key dimension of globalization is the establishment of universal standards which coordinate activity worldwide; in terms of international law, the metric and imperial systems, the Gregorian calendar, Greenwich Mean Time, etc. Proponents of standardization, including the numerous standardizing agencies which exist both nationally and internationally, would point out the efficiencies in communication, the ease of co-ordination, the simplification through reducing alternatives and the dissemination of

best practice afforded by standardization, as well as the benefits for international trade and global prosperity (Brunsson et al., 2000).

Bowker and Star (1999, p. 14) take the discussion further, arguing that ‘a “standard” is any set of agreed-upon rules for the production of (textual or material) objects’. They go on to provide an overview of the characteristics of arguing that standards:

- ‘cover more than one community of practice, over time’
- ‘enable action/cooperation over distance and heterogeneity’
- ‘tend to be enforced by legal bodies’
- ‘do not reflect any natural law that the “best” will win’
- ‘possess inertia and are therefore difficult/expensive to change’ (Bowker and Star, 1999, p. 14).

From this perspective, the fundamental step in the creation of a discipline or field of knowledge is the establishment, standardization and ‘naturalization’ of the object(s) around which the discipline is organized. In more positivist or realist accounts, this process is typically represented as the ‘discovery’ of ‘real-life’ objects which may be studied, measured and provide the basis for standardized definitions and generally-accepted means to deal with or manage such objects. Since *The Archaeology of Knowledge* (Foucault, 1972), however, it has become increasingly difficult to maintain that objects of all kinds *precede* the emergence of a field of study; rather, it is argued that objects of knowledge are constructed by and through the creation of a body of knowledge. Foucault argues forcefully that objects of knowledge do not consist of a ‘silent, self-enclosed truth’; instead, an object of knowledge is *constituted by* ‘all that was said in all the statements that named it, divided it up, described it, explained it, traced its developments, indicated its various correlations, judged it’ (Foucault, 1972, p. 35). Thus objects as diverse as ‘madness’, ‘intelligence’, ‘leadership’, ‘quarks’, ‘gender’, and ‘homosexuality’ have been analysed in terms of their construction by discourse, rather than their ‘discovery’ by a field of knowledge. This reverses the taken-for-granted order of events; rather than a discourse emerging *because* of the existence of an object of interest, it is argued instead that the discourse *brings the object into existence*, and thus reifies and naturalizes the object in question.

Hence implicit in the creation of standards are the related processes of the reification of organizational objects, and their naturalization through embedding in everyday life. Reification is succinctly defined by Berger and Luckmann as ‘the apprehension of the products of human activity *as if* they were something other than human products’ (1966, p. 106), and the consequence of this process has been described by Robert Chia as the phenomenon of ‘false concreteness’. False concreteness, according to Chia, is an inheritance of positivism which:

Often begins with the production of documents speculating on notions about . . . the existence of a particular object which then forms the legitimate focus of investigation. At this stage a speculated object begins to take on a life of its own (reification) and is increasingly perceived as being separate and independent of our apprehension of it. Next . . . the impression is given that it is in fact the existence of the object which first

stimulated our attention towards it. Finally researchers become so accustomed to talking in these inverted terms that the initial stages of conceiving, reifying and inverting of the observer/observed relationship are forgotten or strongly denied. (Chia, 1995, p. 589, in Johnson and Duberley, 2000, p. 99)

A vital process in this reification is the naturalization of the object through the systematic suppression of alternative representations/classifications of the phenomenon in question. Such naturalized objects also provide the basis for an *epistemic community* 'united by a belief in the truth of their model, and by a commitment to translate this truth into public policy, in the conviction that human welfare will be enhanced as a result' (Haas, 1990, p. 41). The membership of such communities can be understood as the experience of encountering objects and being in an increasingly naturalized relationship with them. Thus, the creation of 'naturalized objects' is central to the creation of 'epistemic communities' for whom 'the taken-for-grantedness of artefacts and organizational arrangements is a *sine qua non* of membership' (Bowker and Star, 1999, p. 295). It is in that process of learning-as-membership and participation, i.e. increasing familiarity with the classes of action, tools, symbols, etc proprietary to the given community that one loses sight of the idiosyncratic and contingent nature of objects and standards when seen by an outsider. So in the same process, objects assume an unchallengeable status within a community or indeed across multiple epistemic communities as a boundary object. Where this is achieved:

The more naturalized an object becomes, the more unquestioning the relationship of the community to it; the more invisible the contingent and historical circumstances of its birth, the more it sinks into the community's routinely forgotten memory. (Bowker and Star, 1999, p. 299)

Authors as diverse as Bloor, Latour and Douglas have drawn our attention to the material and political consequences of objects upon the world as experienced. Latour sums up the recursive effect of this reification process, arguing that the acceptance of such objects as 'out there' and therefore real allows us no choice but to model our society in line with such 'realities'. (Latour, 1993, quoted in Bowker and Star, 1999, p. 60). They cannot be questioned or resisted – they must instead be accommodated in our policies and our everyday conduct. However, as McLean and Hassard insist, 'No matter how dry and formal standards and classifications may appear, their development and maintenance is always a site for political decision-making and struggle' (2004, p. 512). One would argue therefore that objects and standards constitute the landscape in, on, and through which we act, which influences and frames our moral, scientific, and aesthetic choices. It is therefore vital, politically and ethically, to recognize how 'seemingly purely technical issues like how to name things and how to store data in fact constitute much of human interaction and much of what we come to know as natural.' (Bowker and Star, 1999, p. 326).

Naturalization, we should emphasize, is not a natural process – it clearly requires significant organized effort among a network of agencies acting co-operatively, and occurs over significant periods of time. It may therefore be altered, opposed and arguably transformed. However, where organizational objects do become reified and naturalized,

it often requires intensive work to recapture and re-establish their contingency, and even just to maintain an awareness of other possibilities, of 'routes not taken' in the construction of the object. The challenge therefore is to uncover and illuminate the efforts towards reification which underpin and construct such objects and standards, so as to provide an insight into the construction of apparently universal and eternal objects. While this is clearly a difficult challenge, given the tendency of standards to become embedded and to disappear from sight, one possible approach is through *denaturalization*, by making clear the contingent and political nature of all categorizations, and the constructed nature of all organizational objects. The key aim of this paper is to attempt this 'denaturalization' by identifying 'the traces of bureaucratic struggles, differences in world view and systematic erasures' (Bowker and Star, 1999, p. 55) which remain in widely accepted standards in the field of management.

To frame this analysis, the following section will introduce the important and influential sub-discipline of management which takes as its touchstone the nature of 'the project'. We will then go on to analyse and to some extent to problematize the efforts of the major professional organization in this area, through the composition of an explicit body of knowledge, the PMBOK, to establish incontrovertible standards within and across communities with regard to the 'recognition' and existence of projects (and associated concepts, such as subprojects, programmes, etc). We will then return to the notions of membership, naturalization and the politics of the project as an object and the danger of standardization.

THE REIFICATION AND NATURALIZATION OF THE PROJECT

Numerous commentators have noted the contemporary explosion of interest in project organizing and project management outside of its traditional heartlands in construction and engineering (Frame, 1999; Maylor, 2001; Meredith and Mantel, 2003; Whittington et al., 1999; Winch 1996; Young, 1998). This shift is explained by many of its proponents by reference to the increasing recognition of 'the project' as a versatile, flexible and predictable form of work organization, offering a distinctive break with bureaucratic modes of organizing. Some commentators have more recently begun to speak of the 'projectification of society' (Lundin and Söderholm, 1998; Midler, 1995); such that for many, project-related principles, rules, techniques and procedures form a new 'iron cage' of project rationality by which their work and their careers are organized. Informing these developments, many texts and documents in the field of project management, from textbooks and manuals to academic articles, are implicated both explicitly and implicitly in the *reification* of the project. For most project management writers, 'the project' is a universal and transhistorical phenomenon – from the construction of the pyramids at Giza to the Allied landings in Normandy in 1945, 'projects' have always existed; so for instance, prominent authors argue:

Of course there is nothing new about undertaking projects in organizations. Anyone who doubts this need merely visit Machu Picchu in the Andes or the Hangzhou canal in China or the Coliseum in Rome. (Frame, 1999, p. 3)

In an offhand manner, typical of introductory paragraphs of textbooks, such statements emphasize what the authors take so much for granted that it is hardly worth mentioning: that projects have always been with us; that the human race has only achieved all that it has achieved through 'projects'; even that 'the project' is a universal feature of human existence. The consequences of the throwaway statements are, in our view, serious – invoking an ahistorical concatenation of pre-historical work organization, Adam Smith's division of labour, Taylorism, Cold War project methodologies and the contemporary techniques and technologies associated with the discipline of project management. Such statements serve as a subtle legitimation of contemporary formulations of the project management, in its principles and techniques, as somehow universal and timeless. Such writers also make it clear that the establishment of boundaries for Project Management as a discipline depends upon efforts to establish what the project *really is*; 'This all is possible if we succeed in *clarifying* the nature of a project and *determining* how it differs from the other activities that are conducted in organizations' (Meredith and Mantel, 2003, p. 8; emphasis added). In this sense, 'the project' may be seen to be akin to the 'epistemic object' of Knorr-Cetina (1997), acting as a generator of new conceptions and new solutions in the area.

It can be argued that the efforts of the field of project management to discover the 'true' nature of projects serve instead to further the 'reification' of the project (and typically the systematic elimination of alternative representations/classifications of the phenomenon in question). The consequence of this reification is the establishment of 'institutionalized conceptions of what a "project" really is, conceptions that influence what happens in project organizations' (Packendorff, 1995, p. 329).

Against this consensus, a minority of writers have begun to dig at the foundations 'beneath' the discourse of project management (see, e.g. Cicmil, 2001; Clegg and Courpasson, 2004; Hodgson, 2002, 2004; Hodgson and Cicmil, 2006; Kreiner, 1995; Lindgren and Packendorff, 2006; Packendorff, 1995; Räsänen and Linde, 2001; Sahlin-Andersson and Söderholm, 2002). In one of the earliest contributions of this nature, Kreiner makes explicit queries over the ontological status of 'the project', arguing forcefully that '(projects) do not exist ready-made for us to scrutinize and classify. They are of course enacted, and thus "constituted by the actions of interdependent actors"' (Weick, 1969: 27) (Kreiner, 1995, p. 344).

The establishment of 'the project' as a reality, and the suppression of conflicting definitions of 'the project', is thus for many a vital foundation for the discipline of 'project management'. As project management relies upon the naturalization of 'the project' itself as both focus and *raison d'être*, to critique project management we must start to question the ontological foundations of 'the project', drawing on perspectives which would instead see 'the project' as a constructed entity, with powerful and often unrecognized consequences for the management of what we label as 'projects' in contemporary organizations.

Furthermore, it has been noted in the emergent critical literature on project management that such objects contained and promoted by the PMBOK carry with them particular 'project management best practices'. These practices tend to reflect principles of job fragmentation, intensive surveillance and enhanced accountability, based upon

interlocking systems of ideational, system and structural control (Hodgson, 2002; Metcalfe, 1997).

METHODOLOGY AND METHODS

The approach we take builds upon other critical work (Miller, 1992; Miller and O'Leary, 1987; Townley, 2002) which sees management disciplines as socially and historically contingent discourses 'which socially construct and certify particular meaningful versions of reality that are taken to be neutral and thereby accorded scientific status' (Johnson and Duberley, 2000, p. 101). We argue that accounts of the creation of the PMBOK, in addition to the PMBOK itself, can be subjected to analysis to discover the inherent contradictions, layers of meaning and what is unsaid or suppressed in the account. This method draws some inspiration from Derrida's notion of deconstruction and treats texts as organized narrative, attempting to analyse the narrative structures in order to expose the underlying assumptions underlying the 'construction' of the PMBOK as well as related project management texts. The approach is based upon the notion that, in an epistemological sense, any body of knowledge can be treated as a text which 'contain taken-for-granted ideas which depend upon the exclusion of something' (Johnson and Duberley, 2000, p. 100).

As noted above, our intention is to examine the constitution of an organizational object and related standards via the analysis of a 'generative document' relating to the field of project management. To this end, the PMBOK and supporting publications, including academic publications explaining and defending the process by which the PMBOK was developed, are analysed rhetorically as formalized and objectifying descriptions of the phenomena they address. This involves a close, critical reading of the PMBOK itself, paying attention to the framing of the text, issues of style and semantics, rhetorical claims, and the gradual evolution of the document through its various versions. For example, the focus is on the words and phrases used in the document under analysis, what terms are used and what are avoided, how the language structures create a particular impression about the phenomenon, etc. This analysis also encompasses a consideration of the journal articles and other papers and publications, in both paper and electronic form, which document and attempt to legitimize the project through a defence of the process of production of the PMBOK. In particular, the editorials, articles and debates circulated by the *Project Management Journal*, published by the PMI, and also certain publications in the *International Journal of Project Management* addressing the PMBOK are particularly relevant. Throughout, the aim is to problematize the taken-for-granted, and to direct attention to the unsaid and the effaced/obscured in this particular construction of reality. Attention is not paid directly to how the document is used in practice. By omitting this, we do not mean to imply that such documents and standards are absorbed critically or unthinkingly by users – indeed, our initial empirical work into this issue suggests quite the contrary. However, given the complexity of the relationship between user and body of knowledge in any discipline, we see this as a larger project which this paper will hopefully encourage by laying some necessary foundations.

THE PMBOK AND STANDARDIZATION IN PROJECT MANAGEMENT

While there exist numerous documents, texts, guides, etc in the field of project management which attempt to define and classify projects, *A Guide to the Project Management Body of Knowledge* (PMI, 1996, 2000, 2004) has a particularly influential position. In the case of project management, the most powerful attempt to establish the ‘real nature’ of projects is through the creation and dissemination of a coherent and universal body of knowledge by the PMI. The PMBOK was first developed and published by the US-based PMI in 1987; however, the PMI draws a distinction between the ‘The Project Management Body of Knowledge’ published in 1987 and the broadly similar ‘*Guide to the Project Management Body of Knowledge*’,^[4] published in 1996 and since revised and republished twice, in 2000 and 2004. Across these versions, the goals of the PMBOK remain broadly the same: to provide a common lexicon; to put in place a structure for professional development programmes; to provide a framework for the refereeing and selection process for the *Project Management Journal*; and to facilitate knowledge transfer and management technology transfer across industries and national borders, with the overarching mission of promoting the professionalization of project management (Duncan, 1995). While the various revisions entail slightly different contents, sections and emphases, the fundamental structure of the PMBOK remains the same, establishing standard concepts and practices grouped in nine knowledge areas.^[3]

Constituting a Professional PM Knowledge System

The realist and reifying perspective of many in mainstream project management reflects an enduring theme of management theory; the belief that its study is analogous to natural science, i.e. discovering universal laws and fundamental properties of objects which (pre)exist ‘out there’, in the ‘real world’. Hence the PMBOK draws inspiration from the eternal presence of projects through human history, as illustrated in the preceding sections.

From this realist perspective, many writers on project management feel able to present their field as gradually converging on a generic model of the project management process, complete with common ontology and a standardized terminology globally recognized by professional project managers.

The chairman overseeing the production of the first edition of the PMBOK, Max Wideman, asserts in a landmark 1995 article addressing the ongoing work towards the second edition that constructing the ‘body of knowledge’ of any professional discipline is a ‘scientific’ mission, the purpose of which should be defined as the first step of the methodological process. This broadly reflects the prevailing position among mainstream project management writers that the PMBOK should be a standalone concept based on objective and publicly-testable knowledge based on proven facts (see Morris, 1999; Morris et al., 2000; Turner, 1999; Wideman, 1995), although opinions differ about how it is to be achieved. Wideman argues that a structured approach to knowledge requirements of a project management professional defined by sound, clear and accepted criteria should lead ‘to a model of the PMBOK which enables the contained knowledge to be organized so that it can be examined systematically and its scope can be evaluated’

(Wideman, 1995, p. 72). The dominance of the scientific frame of reference has resulted in the belief that project management can be conceptualized in a technical way creating an illusion of neutrality by agreeing on terminology and meaning. The debate around the concept of professional PMBOK is based on such assumptions. Morris et al. (2000) and Wideman (1995), for example, stipulate the need to define and generally agree on basic project-management terminology 'in order to establish a common understanding and facilitate effective communication and learning' (Wideman, 1995, p. 74).

In this time, through extensive dissemination, the PMI PMBOK has established itself as 'the *de facto* standard in the field' (Blomquist and Söderholm, 2002, p. 35). Such claims are supported by the role of the PMBOK as cornerstone to the PMI, which is by some measure the largest professional association in the field of project management. The increasing influence of PMI is partly indicated by the increase in PMI membership in recent years, from 8817 in 1992 to over 200,000 by 2005, of which almost 130,000 are PMI-certified 'project management professionals'. The key purpose of the PMBOK is described as follows: 'to identify and describe that subset of the project management body of knowledge that is generally recognized as good practice . . . [which] means that the knowledge and practices described are applicable to most projects most of the time, and that there is widespread consensus about their value and usefulness' (PMI, 2004, p. 3).

The notion that there exists a core to PMBOK knowledge and practices which is more or less universal is a key component in arguments for standardization across projects which underpin the concept of project management. It is evident that the foundation of universal standards is a key goal of the PMBOK, and indeed the PMI itself. It is stated in the 1996 PMBOK that:

PMI was founded in 1969 on the premise that there were many management practices that were common to projects in application areas as diverse as construction and pharmaceuticals. By the time of the Montreal Seminar/Symposium in 1976, *the idea that such common practices might be documented as 'standards' began to be widely discussed.* (PMI, 1996, p. 139; emphasis added)

The PMI Project Management Standards Program was later established to advance this standardization; the mission of the programme is to pursue 'Worldwide Excellence in the Practice of Project Management through Standards which are Widely Recognized and Consistently Applied' (PMI, 2005). The American National Standards Institute (ANSI) approved PMBOK as a standard in 1999, and efforts are in progress to attain ISO (International Organization for Standardization) recognition. The success in establishing quality assurance and quality management as ISO standards through the ISO9000 family may be seen to indicate the potential for project management in this direction. Our argument is that the creation of such 'standards' enables the establishment of an object which embodies the political and managerial imperatives which underpin its discursive construction. In particular, the technicism and instrumental rationality which characterizes the PMBOK has vital implications for how projects are implemented and judged throughout work organizations. As Bowker and Star note (1999, p. 15), 'every successful standard imposes a classification system, at the very least between good and bad ways of organizing actions or things'.

For the 1996 version, the change of title (from ‘The Project Management Body of Knowledge’ to ‘A Guide to the Project Management Body of Knowledge’) reflects the acceptance that while the knowledge contained may be objective and based on facts, one document cannot contain ‘all those topics, subject areas, and intellectual processes which are involved in the application of sound management principles to . . . projects’ (PMI, 1996, p. vii). Instead, the PMBOK in 1996 claims to ‘identify and describe that subset of the PMBOK that is generally accepted on most projects, most of the time’ (PMI, 1996, p. 3) and later this claim is further diluted to ‘that subset . . . that is generally recognized as good practice on most projects, most of the time’ (PMI, 2004, p. vii). It is also worth noting that the later versions explicitly espouse a more pragmatic ‘consensus theory of truth’; that is, that the PMBOK includes knowledge and practices with ‘widespread consensus about their value and usefulness’ (PMI, 2004, p. vii). It is important to pay attention to this statement which subtly indicates the uncertainties that afflict the creators of the PMBOK which cannot be captured in the document without ‘compromising’ the belief in the normative/rational basis of that knowledge system:

Generally accepted does not mean that the knowledge and practices described are or should be applied *uniformly* on all projects; the project management team is always *responsible* for determining *what is appropriate for any given* project. . . . The full body of knowledge concerning project management is that which resides with the practitioners and academics that apply and advance it. (PMI, 2000, p. 3; emphasis added)

Legitimizing the Standard

However, it is not stated anywhere in the document what skills, knowledge and competences are required in order to ‘competently’ determine and decide what is appropriate for any given project, or what the implications of the assertion that the project management team is always responsible for the above decision might mean in the world of practice.

However, the PMI’s definition of the PMBOK is not merely a definition, description and model of ‘the project’. In defining ‘the project’ it incorporates knowledge of related techniques (such as Activity Duration Estimating, Qualitative and Quantitative Risk Analysis, etc) deemed necessary for the manipulation of the project. Through authoritative statements which define the ‘project’, certain assumptions about project management become legitimized, clearly supporting the ‘control’-driven interest in deciding about what counts as ‘proper’ project management knowledge and practice. Counter to the naïve realist view of certain proponents of the various PMBOKs, standards do not prevail because of their innate superiority, in terms of greater accuracy, simplicity or other qualities. As convention rather than natural law predominates here, it is the combined effect over time of the sedimentation of prior standards and accepted wisdom. Notwithstanding the comments above on the anachronistic view of projects espoused by many project management writers, the current PMBOK inherits many elements from its historical precursors; the influence of scientific management is reflected in the continued use of techniques of job fragmentation and work-study in work breakdown and Gantt charts. As Barley and Kunda point out, the Critical Path Method (CPM) and the

Program Evaluation and Review Technique (PERT) ‘popularized by operations researchers in the 1960s, were direct extensions of the Gantt chart developed by Henry Gantt in the early 1900s’ (Barley and Kunda, 1992, p. 379). More recently, the influence of TQM and BPR methodologies is implicit in the process-based focus since the 1996 version of PMBOK. All of these form an ‘installed base’ which project management mobilizes and exploits to secure legitimacy in certain communities. As will be discussed below, such techniques and the instrumental rationality which underpin them are deep-rooted in the PMBOK and therefore hard to resist in the ideology of project management.

In the PMBOK, the link between the definition of ‘the project’ and the relevant stock of project management knowledge is visibly made. In the introductory sections the point is made about strategic importance of projects and their unquestioned objective existence in the modern business world. Instrumental rationality is reinforced by distinguishing between strategic planning and the ‘means of achieving an organization’s strategic plan’ (PMI, 2000, p. 4) which is presented as the critical role of projects. Hence:

For many organizations, *projects are means* to respond to those requests that cannot be addressed within the organization’s normal operational limits. . . . Projects are critical to the realization of the performing organization’s business strategy because *projects are means* by which strategy is implemented. (PMI, 2000, p. 4; emphasis added)

These authoritative statements reinforce two things: they insist on the separation between thinking and doing/planning and implementation; and they promote and reinforce the view of rational, purposeful, thinking, and professional project manager, ‘the one in charge’.

Given the importance of standard setting, it is no surprise to see that the PMBOK is officially authored by a collective entity known as the PMI Standards Committee. In common with most official documents and guides, it is delivered in an impersonal passive tone which both effaces the author and thereby guarantees the ‘objectivity’ of the knowledge contained therein; as Silverman indicates, ‘anonymity is part of the official production of documentary reality’ (1997, p. 58). This rhetorical device is necessary (but of course not sufficient) to establish that the contents accurately reflect ‘a reality that exists independently of any individual observer, interpreter or writer’ (Silverman, 1997, p. 59). In doing so, it can be seen as an attempt to rise above the petty interpersonal differences which exist between writers and provide an authoritative definition of the disciplinary area. That said, the PMBOK is not however an entirely anonymized document; although the authorship is credited to a committee, there is some recognition that PMBOK exists as a collective effort. For the sake of transparency and in recognition of their efforts, the membership of the Standards Committee is also listed in an appendix to the 1996 edition, as well as a full list of 96 reviewers and their institutions, which is dominated by names of corporations such as AT&T. In a similar way to academic referencing, this appendix can be seen to be invoking a network of allies (Latour, 1987) to strengthen the truth claims of the document itself. This can be seen as the co-production of the authority and the object; through their involvement in the composition of the document, the reputation of academics and organizations is built at the same

time as the contents are legitimized as the verdict of 'the great and the good', the expert authorities in this field.

CONSEQUENCES: THE PMBOK AND THE COMMUNITY OF PRACTICE

While the establishment of 'standards' is thus a key objective of the PMI in creating the PMBOK, merely writing and distributing such a document is a small step in the naturalization and reification of a particular understanding of 'the project'. The naturalization of a specific instrumental understanding of the project, and the circulation of standards both take place as a result of the significant efforts of PMI to institutionalize the PMBOK as a 'basic reference about project management knowledge and practices for its professional development programs' (PMI, 2000, p. 4), forming the basis for *certification* of project management professionals and *accreditation* of educational programmes in project management. The PMBOK itself defines its readership as 'Project Managers and other team members; Managers of project managers; Project customers and other project stakeholders; Functional managers with employees assigned to project teams; Educators teaching project management and related subjects; Consultants and other specialists in project management and related fields; Trainers developing project management educational programs' (PMI, 1996, p. 3). Increasingly, in PMI discourse, reference is made to the desirability of establishing a community of practice (Lave and Wenger, 1991) for project management, one that cuts across formal organizations and national boundaries, and unifies people doing things in terms of their activities, objects, and routines. In such a community, belonging depends upon becoming conversant and comfortable with elements of the field to the extent that they become 'taken for granted', self-evident and thus both fundamental and beyond debate. The role PMI explicitly targets is that of regulating membership of the profession through control of the conditioning of the individual joining the profession. This can be done via the establishment of standardized training, examination, and certification processes, procedures, and mechanisms, based on the PMBOK infrastructure. Organizations and their senior management, in turn, use such a prescription to differentiate, rank, and exercise power over, individuals aspiring to membership of PM community of practice.

Moreover, it should be emphasized that as a consequence of this institutionalization, standards 'possess inertia and are therefore difficult/expensive to change' (Bowker and Star, 1999, p. 14). The long-term goal of PMI is certainly the *naturalization* of such standards, through their embedding in the subjectivities of the associations membership, related documents, IT applications such that they eventually constitute an invisible foundation to the disciplinary area, tied intimately to techniques, procedures and other arrangements. The 'embeddedness' of the PMBOK can be seen reflected in the increasing number of businesses/organizations adopting PMBOK-based training and certification courses to create a pool of professional project managers to manage projects and project-based arrangements. The PMBOK is also built into other business procedures – HRM, operations, the adoption of information system and software installation, management standards, prescriptions, check lists and documentation, evaluation and audit practices. Thus the use of the PMBOK in the ISO Technical Report on managing software projects, and its adaptation by the Institute of Electrical and Electronics Engi-

neers (IEEE), indicates the interpenetration of infrastructure. More subtly, the terminology and language standardized through the PMBOK permeates into other documents and discourses within individual organizations and networks of organizations. The infrastructure as defined by PMI (2000) aspires to gradually 'invading' wider social environments by targeting project stakeholders, education sector, and consultancy activities, an invasion which is harder to resist due to its subtle and apparently technical nature.

An illustrative example would be the importance given to standardized terminology and language proprietary to the project management discipline. It is stated in the PMBOK that the document provides a '... common lexicon within the profession and practice for talking and writing about project management' (PMI, 2000, p. 3), compiled on the basis of agreement over terms that are either unique to project management discourse or else carry specific meaning in the project management context compared with everyday usage. A key objective of PMBOK is the establishment and reinforcement of a globally accepted terminology, indeed ontology, for the field of project management. As Morris et al. (2000, p. 156) perceptively note, 'The Body of Knowledge . . . reflects the ontology of the profession; the set of words, relationships and meanings that describe the philosophy of project management'. Clearly, the PMBOK is based upon the key question 'What is a Project', defined on the second page of the document, as well as core definitions of the associated concepts of the 'Program' and the 'Sub-Project'. More broadly, though, the increasing scope of the PMBOK Glossary (which has increased in size from 15 pages in the first edition to now 34 pages in the latest edition) indicates the growing reach of this 'complete' lexicon for the discipline, a 'legend' to the PMBOK's map of the project management terrain. Emergent empirical work in this area (see, e.g. Hodgson, 2002; Räsänen and Linde, 2001) indicates the way in which standardized terminology and vocabulary penetrates conventional communication in practice. More importantly, the enforcement of this lexicon is typically used to allow a distinction to be made between legitimate/professional vs. illegitimate/incompetent, enforcing a particular use of language upon practitioners who wish to be 'taken seriously'.

Part of the mission of the PMI is to expand its formal membership, drawing on all of these groups to build the core 'community'. However, within and beyond these categories, there is greater diversity; by their very nature, projects are intended to draw together and co-ordinate/control the activities of a heterogeneous group of actors, and interdisciplinarity is the rule rather than the exception. Indeed, it is to overcome this heterogeneity that the PMBOK exists – to provide/impose a common language and common conceptual apparatus across a huge diversity of participants, from electrical engineers and IT specialists to research scientists and construction managers, to school administrators and social workers. Thus an article of faith is that an effective PMBOK can (and should) be used by different communities of practices, across different organizations, sectors and nations as a guide for standard practice. In practice, this means a certain ambiguity in the composition of the PMBOK, and the tensions between the diverse communities and their perceived requirements count for much of the debate within the mainstream project management field over the PMBOK (see, e.g. Curling, 1995; Morris, 1999; Morris et al., 2000; Pharro, 1997; Turner, 1999, 2000; Walta, 1995; Wideman, 1995).

There is moreover a global dimension to this, in keeping with the requirements of multinational companies and inter-organizational projects. So, with the PMBOK, an explicit aim is to 'standardize' the communications, interpretations and actions of participants regardless of background, profession, or nationality – as part of the mission of professionalization (Cabanis, 1999). As explained by one member of the PMI Standards Member Advisory Group, 'PMI standards are critical to the survival of companies marketing to multiple nations' (Holtzman, 1999, p. 13). The long-term goal of the PMI is the enforcement of their standards by national and international legal institutions. While the recognition of the PMBOK by the *American National Standards Institute* (ANSI) in 1999 was a key step, the long-term goal is global institutionalization, primarily through certification, such that membership of a professional body (such as PMI) is required to practice as project manager. This would entail affording legal status to the standards embodied within the PMI's PMBOK. Thus, global institutionalization of PMBOK, through, say, ISO recognition, and global conformity to these standards represents a core criterion of success for the PMBOK and for the PMI more generally.

STANDARDIZATION: FACING THE CONSEQUENCES

While it is perhaps thought-provoking to consider the ways in which the PMBOK as an artefact attempts to establish standards and an infrastructure for an increasingly influential sub-discipline of management, this would be of little more than idle interest were it not for the powerful material consequences of such entities. As is the case in similar fields such as accounting and quality management, we would concur with Bowker and Star that the establishment of standards, categories, and infrastructure 'should be recognized as the significant site of political and ethical work that they are' (1999, p. 319). With some notable exceptions, the lack of attention paid to the politics of standardization in mainstream management journals reflects an enduring blind spot in our understanding of technologies of control in the contemporary workplace. While there is no lack of proponents to extol the virtues of standardization in organizations, far less attention has been paid to the costs and dangers of this process.

We would first of all argue that the establishment of universal knowledge of this kind implies a loss of a reflexive and embodied rationality in favour of abstract principles and blind faith in universal techniques (Townley, 2002). Bowker and Star (1999, p. 319) argue that classification 'tie(s) a person into an infrastructure – into a set of work practices, beliefs, narratives, and organizational routines'. In this way, following Vann (2004, p. 259), one might understand the kind of 'transcendental ordering' attempted through the PMBOK as 'inscriptions of the labour process', which bear upon workplace identities, the time/location and the specific activities engaged in when organizing through projects. A key way in which standardization impacts upon practice relates to the way in which the standardization of knowledge areas, concepts, competencies, tools and techniques restricts the discursive resources available to a practitioner who wishes to be accepted. Thus the cost of membership to a professional community may well be the acceptance of the PMI's conception of the nature of a project, as well as associated assumptions and technologies on the management of project work. Similarly, the effects of professionalization upon project managers themselves, as is the case with many other

occupational groups, can often involve increased self-disciplinary control (Fournier, 1999; Hodgson, 2002). In this and other areas of management, standards thereby prove a effective and typically unrecognized vehicle for regulating discourse, action and arguably thought across borders and industrial sectors. In this sense, our arguments regarding project management extend beyond this bounded field, and pertain to broader tendencies in management knowledge, from the approaches to quality management embodied by the ISO9000 family of standards to a more general belief in universality in management knowledge.

We would secondly argue that the 'blackboxing' of knowledge in this area, as definitions, techniques and procedures become set in stone, effectively removes ethical and political questions from the agenda. The responsibility of the manager, in this case the project manager, becomes centred upon following 'best practice' as enshrined in the authorized 'body of knowledge'. As noted elsewhere (Hodgson, 2002; Metcalfe, 1997), the technologies within PMBOK show a distinct tendency towards a Taylorist direct control, intensive surveillance and heightened visibility and accountability. The moral consequences of this approach to the management of projects, in terms of alienation, work intensification and stress, as well as impacts upon non-work aspects of life, are routinely ignored within the project management literature (Lindgren and Packendorff, 2006) as these both fall outside what project management is 'about', according to the PMBOK, and moreover, because they are the inevitable consequences of efficient and effective 'best practice' project management.

There is a danger, however, in presenting too deterministic and monolithic picture of standardization in this field, and by implication in others – where perhaps more common is the situation 'where uniformity should hold and where variation may be allowed' (Brunsson et al., 2000, p. 56). The reification and standardization of 'the project' and project management through the construction of PMBOK is far from an accomplished fact, and is the subject of ongoing struggle. In fact, as debates around the key issues continue, a global synchronization of the 'global' PMBOK with many national/sectoral variants has not been achieved, and the persistence of competing 'versions' remains a major obstacle to the 'universality' of ISO recognition. In one sense, however, this is a limited challenge, in that it arises from competing associations who in turn wish to promote/impose their own standardized conception of project management. However, it does lend force to the argument that, due to local/global tension and competition between standardizing bodies, 'true universality is necessarily always out of reach' (Bowker and Star, 1999, p. 108).^[6]

More importantly, there is also space for discretion and contestation within any power-knowledge regime, and PMBOK is no exception here. This in one sense is fundamental to all standards as they are 'in some sense idealized. They embody goals of practice and production that are never fully realized, like Plato's triangles' (Bowker and Star, 1999, p. 15). The 'invisibility' of project management is therefore constantly undermined by the inability of its elements to capture the variety of practice, to transfer seamlessly across contexts and to achieve the efficacy claimed by its proponents. We should therefore not make little of the difficulty facing the institutions behind the PMBOK in their attempt to establish 'universal characteristics' across different types of projects, industries, structures, societies, etc. On the other hand, we would also empha-

size that 'any given classification provides surfaces of resistances (where the real resists its definition), blocks against certain agendas, and smooth roads for others' (Bowker and Star, 1999, p. 324). Bowker and Star, although underlining that negotiations are inevitable in any standardization project, focus largely upon the agendas and power interests at play and pay less attention to 'the local improvisations' (Rolland and Monteiro, 2002, p. 90), the ongoing, daily processual adaptations by which individuals cope with the impossibility of universality. We would argue that it is precisely in these local improvisations that alternative practices and alternative knowledge must be founded.

The question then becomes, how can we make best use of these surfaces of resistance, to oppose universality and to support embodied, situated rationality, and to reintroduce moral and ethical questions to management and managers? A modest start, in our scholarship and pedagogy (Cicmil and Hodgson, 2005), is to underline the contingency of what is accepted, enforced and institutionalized as standard in the project management field, starting with the foundational object of 'the project' itself. The broader goal is to draw attention to what is effaced or ignored by current reified and objectified knowledge in the field of project management, by giving voice to practitioner accounts and empirical work which address power, autonomy, alienation, creativity, oppression, autonomy, and other obscured issues in current project discourse. This endeavour is supported by the promotion of critical work which challenges reified and objectified knowledge in the field of project management, by opening up project working to alternative perspectives by problematizing the basis of current technologies and techniques, and by highlighting the political and ethical imperatives embedded within current 'taken-for-granted' conceptions of the project. In doing so, we hope to provide further discursive resources for dissenting voices among both the practitioner and indeed the academic communities in this field. It is important to underline that such an undertaking is by necessity engaged in the political realities of organizational life, and relies fundamentally upon giving voice and legitimacy to the existing (covert) practice of many in the field, as they negotiate between standardized protocols and procedures, the specifics of their particular location and personal commitments, relationships and values. This tension is summarized in Brunsson et al.'s (2000) distinction between 'changing practice' and 'changing the presentation of practice' to match standards, where individuals and organizations frequently pay no more than lip service to the strictures of standards, but in doing so fail to challenge the principle of standardized knowledge. As Timmermans and Berg suggest, the reality of 'workarounds' and other forms of local discretion, rather than challenging standardization, may instead allow the standard to continue, officially 'unchallenged', and thus represent the 'sine qua non for the functioning of a (standardized) protocol in the first place' (Timmermans and Berg, 1997, p. 291). The challenge therefore is to provide intellectual and political resources for the reflective and ethical practitioner to move beyond this position of silent adaptation to imposed standardization, and to imagine and construct both projects and their management differently.

NOTES

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- [1] What is not undertaken in this paper is an empirical investigation of the use of the PMBOK in practice. Instead, we hope to provide the foundations and set out the terms for such a study.
- [2] The political implications of the burgeoning Community of Practice (CoP) literature (Lave and Wenger, 1991), both academic and consultant, have been critiqued in various quarters (e.g. Contu and Willmott, 2003; Handley et al., 2006; Roberts, 2006; Vann and Bowker, 2001). Here, we would see the project management community that PMBOK aspires to form as closer to the 'epistemic community' of Haas (1990) 'united by a belief in the truth of their model, and by a commitment to translate this truth into public policy, in the conviction that human welfare will be enhanced as a result'.
- [3] A full discussion of alternatives to standards falls beyond the limits of this paper. See Brunsson et al. (2000) for an overview.
- [4] Henceforth, we will follow convention by referring to both 'The Project Management Body of Knowledge' (PMI, 1987) and the subsequent 'Guides to the Project Management Body of Knowledge' (PMI, 1996, 2000, 2004) as the PMBOK.
- [5] The nine areas in PMBOK (2000) (PMI, 2000) include one addition to the eight areas in PMBOK (1996) (PMI, 1996): Project Integration.
- [6] It is also instructive to consider the recent study (Morris et al., 2000) of responses generated within the UK communities of practice (academics and practitioners engaged in the field of management of projects) on the efforts to professionalize the project management discipline. Morris and his colleagues note that 'valid questionnaire returns were only received from 6% of those polled: many stated that they were unable to respond adequately because they did not really understand what the purpose of a BoK was' (Morris et al., 2000, p. 158).

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