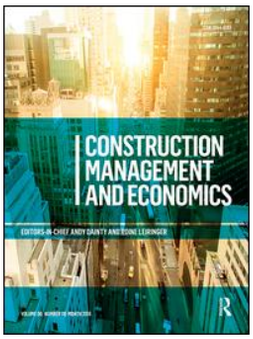

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Construction Management and Economics

ISSN: 0144-6193 (Print) 1466-433X (Online) Journal homepage: www.tandfonline.com/journals/rcme20

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To cite this article: Mike Bresnen (2017) Being careful what we wish for? Challenges and opportunities afforded through engagement with business and management research, Construction Management and Economics, 35:1-2, 24-34, DOI: 10.1080/01446193.2016.1270462

To link to this article: https://doi.org/10.1080/01446193.2016.1270462

CONSTRUCTION MANAGEMENT AND ECONOMICS, 2016
VOL. 35, NOS. 1–2, 24–34
http://dx.doi.org/10.1080/01446193.2016.1270462

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Being careful what we wish for? Challenges and opportunities afforded through engagement with business and management research

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ABSTRACT

Despite the proliferation of work within construction management that draws upon management and organizational theory, two omissions stand out from the body of published work: the absence of any real debate about the values of rigour and relevance in research; and the under-use of dominant perspectives in business and management research (such as institutional theory) to frame construction management and organizational issues. Drawing specifically upon the ideas of institutional logics and institutional work, this paper explores the tensions, ironies and contradictions of the rigour-relevance debate; and the challenges and opportunities facing construction management research (CMR) and its institutions in furthering management and organizational research agendas. In doing so, attention is directed to the complex, contested and changing nature of the knowledge base within the business and management field; as well as key differences between that community of practice and CMR.

ARTICLE HISTORY
Received 3 November 2016
Accepted 5 December 2016

KEYWORDS
Rigour-relevance; institutional theory; management knowledge; communities of practice

Introduction

Despite the substantial and impressive body of work that has appeared in the pages of *Construction Management and Economics* over the past 20 years, there are at least two interesting and, some might say, glaring omissions, when one compares that body of work with wider developments in business and management research (BMR) (or more specifically, that part of it which is directly informed by organizational theory and behaviour – rather than economics, accounting and finance, marketing and operational research). The first of these is the absence of any real debate about the balance between rigour and relevance in construction management research (CMR) (Huff 2000, Hodgkinson 2001, Hessels and van Lente 2008); the second is in the absence, until very recently, of any reference to what is arguably one of the most dominant contemporary perspectives in organizational and management theory – namely, institutional theory (Powell and DiMaggio 1991, Greenwood *et al*. 2008).

It is surprising, first, to find only a few echoes of a debate that has excited (and continues to excite) the business and management academic community (especially in the US). Since the late 1990s/early 2000s, a good deal of explicit attention has been directed towards the question of how to combine rigour and relevance in BMR (Pettigrew 1995, Van de Ven and Johnson 2006, Van de Ven 2007). This has been sparked by several key interventions by leading institutions and figures on both sides of the Atlantic, and has led to what could be described as the *rigour-relevance debate* (Huff 2000, Hodgkinson 2001, Bartunek 2007, Rynes 2007, Shapiro 2016). Underpinning this debate is the idea, propagated in the science research policy field, that we are witnessing a move towards a form of knowledge production associated with more practitioner-influenced problem definition and solution (Gibbons *et al.* 1994, Nowotny *et al*. 2001). Gibbons *et al*. (1994) label this "Mode 2" and their thesis has received a good deal of interest, as well as considerable critical attention (Bresnen and Burrell 2013).

Despite this, with one or two recent exceptions (e.g. Voordijk 2009, Voordijk and Adriaanse 2016), there has been very little attempt to consider this debate in relation to the construction management field – apart, that is, from a number of conference contributions (Bresnen 2001, Fernie and Leiringer 2009, Harty and Leiringer 2007, 2008). There have, of course, been important theoretical and methodological debates that have shaped thinking within the field, such as the debate sparked by Seymour and Rooke's (1995) critique of methods used in CMR (e.g. Raftery *et al*. 1997). There has also been more recent examination of the role of theory in CMR and the use of positivist and interpretivist epistemologies (Schweber 2015). However, any specific examination of fundamental

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questions of rigour and relevance in research has largely been absent from the field – at least in the pages of its leading journal(s).

It may be that the discipline of construction management is sufficiently mature and secure in the extent to which its research base is both rigorous and relevant. Certainly CMR proceeds from the basis of a strong concern for contributing towards the improvement of industry performance and is often based upon highly collaborative partnerships with industry. Arguably, this is in stark contrast to some leading edge management and organizational theory and research (Bartunek 2007, Hodgkinson and Starkey 2011). Moreover, the development of rigorous CMR that this journal (with others) has strongly encouraged over the past 34 years has made a major contribution to the maturation of construction and project management as scientific disciplines (Morris 2013). However, such an omission also arguably reflects a key systemic difference in orientations to theory and research. As Schweber (2015, p. 840) has recently pointed out, construction management as an academic field is more domain focused than discipline based. While this means that it benefits from being issue focused and can draw upon a variety of perspectives in order to address those issues, it also lacks the theoretical coherence that is a feature of more paradigmatic based disciplinary enquiry. This is not to suggest either that CMR is a-theoretical or that academic fields such as business and management are paragons of theoretical coherence. However, it does mean that there are important differences in the underlying logics of theory and research that differentiate the two. The challenge, according to Schweber (2015, p. 841), is for construction management academics to be reflexive in their theoretical positioning and pursuit of research. Taking this recommendation of reflexivity a little further, it could also perhaps be asked what implications these differences in logic have for understanding the prognosis for CMR at a more institutional level. Does CMR have anything to gain (or anything to lose) from engaging further with these debates in BMR? And what are the institutional implications for the field of any greater convergence (or divergence) that may occur as a result?

A second noticeable omission is that there have been virtually no papers informed by institutional theory and its derivatives, despite the importance of this perspective in organizational and management theory and its dominance in the US Academy (DiMaggio and Powell 1983, Powell and DiMaggio 1991, Greenwood *et al*. 2008). The only real exception is the recent article by Gluch and Bosch-Sijtsema (2016) which explores the "institutional work" of environmental experts (cf. Lawrence *et al*. 2011). Whether or not this represents the start of this perspective gaining more traction in the field, it comes some considerable time after it was first recognized how important the effects of institutions and institutionalization were in construction management (Kadefors 1995). It also cannot be adequately explained by any counter-veiling emphasis on alternative major perspectives in organizational theory – such as critical management studies and its many variants (Fournier and Grey 2000, Alvesson and Willmott 2003). Indeed, these are arguably even less well represented in the journal over that same period and, with some important exceptions (e.g. Sage *et al*. 2014), generally more distant from prevailing discourse within the construction management academy.

It is not the intention here to suggest that institutional theory is the only appropriate or legitimate way of framing organizational and management issues. Far from it: contemporary BMR draws upon diverse paradigms and a multitude of theories from the wider social sciences (Burrell and Morgan 1979). Highlighting institutional theory is instead used here to help promote the general argument being developed that CMR has a lot to gain (as well as useful lessons about what to avoid) from a greater cross-fertilization of ideas with business and management researchers, as well as greater engagement in debates within that field. Moreover, institutional theory itself provides a useful apparatus for examining not only the logics of rigour and relevance in research, but also the interplay between underlying logics of research across academic fields and how they relate to wider institutional patterns. Indeed, recently, it has been suggested that there may be some value in taking some of the insights from institutional theory that have hitherto found little direct application in the project/construction management domain (Bresnen 2016). The argument developed in this paper takes that suggestion further by examining what CMR might learn (or usefully avoid) from engaging further with developments in BMR. The argument is that CMR effectively faces a "triple hurdle" in combining not only rigour and relevance (cf. Pettigrew 1995), but in also engaging effectively with what is a highly variegated BMR academic research field. Not only does this create challenges, however, it also opens up opportunities for developing lines of research and for converting the strengths of CMR into even more profound and lasting contributions to BMR. At the same time, it also points to the need for a considerable amount of "institutional work" (Lawrence *et al*. 2011) within the discipline in helping configure CMR in ways that retain its distinctive strengths while promoting its wider impact.

The paper proceeds by first outlining some of the main parameters of the rigour-relevance debate within BMR and considering some of the unresolved tensions, inconsistencies and ironies it creates – particularly when viewed from an institutional logics perspective (e.g. Lounsbury 2007). Attention is then directed to the complex, contested and fluid nature of management knowledge and problems of

translation (Czarniawska and Joerges 1996) between CMR and BMR communities of practice (Boland and Tenkasi 1995). The idea of institutional logics is then used to help explore some of the future challenges and opportunities for CMR research as it progresses and evolves.

Rigour and relevance in management research

Concerns about rigour and relevance in management research have been an important feature of BMR discourse since the mid-late 1990s and reflect prominent debates within the academy about the intrinsic value of academic research and publications, on the one hand, and their impact on policy and practice, on the other. Indeed, the debate seems set to continue, as suggested by the recent presidential address to the Academy of Management that called for greater diversity in ways of assessing academic value than just 4* journal publications (Shapiro 2016); and by the continuing evolution of the "impact agenda" in research assessment in the UK and elsewhere.

Pettigrew (1995) was arguably the first to raise the issue by representing the challenges involved in combining academic rigour and practical relevance as overcoming "double hurdles" in research. The issue became a centre stage concern for BMR academics with a number of key note addresses and other touchstone contributions through the American academy (e.g. Huff and Huff 2001, Bartunek 2007) that were designed to promote debate about the value and impact of management research and the importance of aspiring to more "engaged scholarship" (Van de Ven and Johnson 2006, Van de Ven 2007). For many contributors to this debate, it was not simply a question of there being clear benefits from research that is both rigorous and relevant; there was a fundamental need for the two to go together and avoid the distance created between research and practice by excessive attention on publications in leading business and management journals (Huff 2000, Hodgkinson and Starkey 2011, Bartunek 2007). In other words, the quest for scientific rigour in business and management studies many felt had distorted the original balance in the origins of the discipline that favoured practical relevance.

In both the US and the UK, support for the idea of engaged scholarship was underpinned by work in the science policy research field that proposed the need for a so-called "Mode 2" form of knowledge production (Gibbons *et al*. 1994, Nowotny *et al*. 2001). Mode 2 was contrasted with a traditionally more academically defined Mode 1 form of research. It emphasized instead solving problems that were more practically defined; greater trans-disciplinarity and organizational heterogeneity in research; an emphasis on reflexivity and dialogue with practitioners; and greater social accountability through alternatives to purely academically defined forms of quality control (Nowotny *et al*. 2001). Responses to the original thesis crystallized in a Special Issue of the *British Journal of Management* that centred around a report on the "trans-disciplinary" nature of management research (Tranfield and Starkey 1998, Starkey and Madan 2001). While many contributors argued that the approach perhaps did not go far enough in defining "relevance" (Hodgkinson 2001) or in emphasizing the importance of academic rigour and theory (Pettigrew 2001), there was a good deal of general acceptance of the need for relevance and the principles of Mode 2 (Hodgkinson and Rousseau 2009). This was tempered by the proposal that research needed to address the concerns of a wider range of societal stakeholders than simply business (Huff and Huff 2001). A more detailed review and critique of the elements of this approach has been presented elsewhere and will not be repeated here (see Bresnen and Burrell 2013). Suffice it to say that it resonated loudly with, and supported strongly, the calls within the US academy for greater rigour *and* relevance in management research.

By the same token, it was also subject to the same critical discourse that emerged around the rigour-relevance debate (Hessels and van Lente 2008). Many commentators were quick to point out the challenges in attempting to bridge the "rigour-relevance gap" due, in large measure, to the major differences in perspective and approach that tend to separate academic researchers and practitioners. Indeed, there has been a good deal of debate about whether and how rigour and relevance might be combined (or "Mode 2" made manifest). Although there is certainly a good deal of support for the idea that rigour and relevance can and should be combined (Hodgkinson 2001, Pettigrew 2001, Bartunek 2007, Hodgkinson and Rousseau 2009), there are many who emphasize the enormous difficulties and trade-offs in trying to achieve this (Gulati 2007, Rynes *et al*. 2007, Beech *et al*. 2010). There are also some who stress the incommensurability between academic and practitioner approaches and for whom relevance is only achieved at the expense of rigour (Kieser and Leiner 2009).

In part, these problems reflect a too simplistic dichotomy drawn between types of research. Ziman (1996, 2000), for instance, argues that traditional science has always incorporated problem-driven research and that creativity and innovation have always been important – if not at the core, then certainly at the margins, of scientific disciplines. At the same time, he suggests there is a real question mark over the supposed freedoms and flexibility associated with "post-academic science", given continued disciplinary power over professional goals and career development paths, as well as greater strictures on the use of research funding. In part, too, these problems reflect

the proselytizing that is often at the heart of the debate. As knowledge is socially constructed, not mechanically produced, it inevitably involves contestation and negotiation amongst those with an interest in the formulation of scientific "problems" deemed worthy of investigation (Ziman 2000, pp. 174–175). Despite norms of impartiality, skepticism and scientific "objectivity", continuing (and perhaps exacerbated) conflict over the proprietary control of research under newly emerging forms of knowledge production is just as likely to inhibit the development and spread of knowledge (Ziman 2000).

Learmonth *et al*. (2012) argue that, within BMR, these effects have major consequences for delineating what is taken for granted as "useful" or "useless" research. As Grey (2001) points out, a shift in the balance of stakeholder values and interests associated with greater relevance is no less a political stance on the merits of different forms of scientific research than control by the academy (see also Willmott 2012). Even those committed to a change in the mode of production have acknowledged their "infatuation" with an alternative model of research, fuelled by "the growing stranglehold American journals were coming to have in the management field" (Hodgkinson and Starkey 2011, p. 360). The same authors do still insist, however, on the need for "a trans-disciplinary field of inquiry that can authentically meet the twin imperatives of scholarly rigour and social usefulness" (ibid., p. 355).

Institutional logics and further ironies and contradictions in the rigour-relevance debate

Wherever one sits in the various inter-related debates about rigour/Mode 1 and relevance/Mode 2, it is hard not to see considerable irony in how this debate has progressed within the institutional context it seeks to question and critique. Perhaps most surprising is the sparseness of theorizing around rigour and relevance in general and the failure, in particular, to harness the insights that could be generated from what is, after all, the dominant approach within the US academy – namely, institutional theory.

Moving beyond a traditional interest in the isomorphic pressures (normative, coercive, mimetic) that promote the continuity and reproduction of organizational forms (DiMaggio and Powell 1983, Powell and DiMaggio 1991), (neo-)institutional theory has increasingly focused in recent years upon processes of institutional change. Prominent within this has been the idea that change can occur due to shifts in "institutional logic" in particular institutional fields (Friedland and Alford 1991, Reay and Hinings 2005, Colyvas and Powell 2006, Lounsbury 2007). According to Friedland and Alford (1991), institutional logics refer not simply to structural arrangements (which can quite easily be changed) but also to belief systems and associated practices that define the legitimacy of particular actions or solutions. They therefore encompass the "heightened legitimacy" (socio-political acceptance of a particular logic) as well as the "taken-for-grantedness" (deep embedding of the new logic in practices and routines) that together characterize institutionalization processes (Aldrich and Fiol 1994). Changes in institutional logics therefore involve changes in structures, belief systems and practices (Reay and Hinings 2005, p. 352, Lounsbury 2007, p. 289).

While a change in institutional logics might occur suddenly or gradually as a result of change in exogenous conditions (e.g. shifting markets), recent work has increasingly emphasized the important of endogenous pressures in promoting change (e.g. Reay and Hinings 2005, Colyvas and Powell 2006). Internal fragmentation may allow competing logics to arise and even coexist within the same institutional field (Lounsbury 2007) and this may allow the continuation of seemingly conflicting practices (e.g. Bresnen and Marshall 2010, Swan *et al*. 2010). Alternatively, institutionalization and institutional change can be hotly contested – any change inevitably being associated with the exercise of power and the potential for conflict (Reay and Hinings 2005). Institutional logics in such circumstances may therefore be resisted and the acceptance of new practices may be only partial or superficial. Seo and Creed (2002) propose the mechanism of *praxis*, through which internal contradictions in existing institutional patterns (due to inefficiencies in operation, lack of adaptability, over-elaboration of structures/processes and isomorphic pressures towards conformity) are exploited by influential actors with an interest in promoting an alternative institutional logic (ibid, p. 237).

Returning to the rigour-relevance debate, in fact there have only been a very small number of attempts to explore the institutional logics of rigour and relevance in management research (Kieser 2011, Paterson 2014). Yet, if we apply some of the above thinking to explore how debates about rigour and relevance have proceeded, it points to several ironies and contradictions. Moreover, these play themselves out in ways that, on balance, tend to reinforce the legitimacy and taken-for-grantedness of calls for greater rigour in research (e.g. Swan *et al*. 2010).

If we take, for example, the characteristics of Mode 2 as an indicator of the balance between rigour and relevance, virtually every recent article extolling the virtues of relevance (and rigour) – including those in the many special issues published – bemoans the fact that debates within the field take place some considerable distance away from the *context of application*. Thorpe *et al*. (2011, p. 420), for example, note:

> … the debate on rigour versus relevance … is conducted by academics writing in academic journals, rather than taking action to make their work more relevant … What

> changes are necessary in the professional activities of business and management academics for this debate *not* to merit space in future special editions of the *British Journal of Management* because rigour and relevance have all become the norm?

While some *transdisiplinarity* may characterize the nature of the debate as it has unfolded across academic disciplines, this rarely appears to stretch to the engagement with practitioners so prized by advocates of greater practical relevance. As Bartunek (2007, p. 1328) has pointed out: "engaged scholarship is still limited, because it involves practitioners on academic terms". *Institutional heterogeneity* has of course been widened through more programmatic and focused research funding, research capacity building initiatives and pressures to demonstrate "impact" in management research (Thorpe *et al*. 2011). However, there is arguably no less importance attached to being able to meet the requirements of *objectivity* associated with what is taken for granted as "good science" (Ziman 1996) and this still sits uneasily with the reflexivity and dialogue that is meant to infuse research with relevance (Beech *et al*. 2010). Moreover, attempts to transcend the dualism of rigour and relevance do nothing to assuage concerns about objectivity. So, for example, Thorpe *et al*. (2011) recommend re-conceptualizing knowledge production and application as a "value chain" in which academic knowledge is translated into practice through engagement and generative dialogue. But how does this square with contested notions of what constitutes "value" (cf. Learmonth *et al*. 2012)? Finally, *new forms of quality control* are also comparatively rare, as peer review and editorial gate-keeping continue to be important; although editorial decision-making can vary in the relative emphasis it places on academic and practical contribution (Rynes 2007).

All in all, this is not meant to deny or question the ultimate value of management theory and research in either theoretical or practical terms. However, it does suggest that there are important questions that remain unanswered concerning the reconciliation of the logics of rigour and relevance that are connected with the nature of management knowledge, its origins, formation and status. How these relate to the translation of management knowledge within and between CMR and BMR academic communities and what potential impact that has on CMR is picked up for further discussion in the following sections.

Bridging CMR and BMR communities: Management knowledge as boundary object?

Elsewhere it has been suggested that, to understand better the institutionalization of a discipline such as project management, it is useful perhaps to explore the factors enabling and inhibiting the flows of knowledge and learning within and between the communities of practice that are involved in its development (Bresnen 2016). Thinking and research on communities of practice have long emphasized how the development of particular ways of knowing are associated with communities of practice and how, over time, these are reinforced and reproduced by new members legitimately entering and joining the community of practice (or profession) (Lave and Wenger 1991, Wenger 1998). There has, of course, been a good deal of critique of communities of practice (Amin and Roberts 2008) – especially insofar as attempts are made by businesses or other organizations to cultivate or "manage" them (Wenger *et al*. 2002). However, they remain a useful way of understanding the formation and development of knowledge within particular epistemic communities (Knorr-Cetina 1999).

They are also useful in helping understand differences in ways of knowing between communities of practice that interact with one another. According to Boland and Tenkasi (1995), communities of practice develop particular perspectives or ways of knowing based upon distinct narratives, paradigms and forms of representation. So, for example, principles, concepts and traditions of design along with the methods used by designers to develop and represent their ideas (and to judge others' designs) constitute important elements in the *perspective making* of design professionals. At the same time, design professionals need to interact with others (e.g. clients, builders) and so need to interpret others' contributions to joint activity. Boland and Tenkasi (1995) define this as *perspective taking* and emphasize its highly interpretive nature.

They go on to suggest that boundary objects – defined as shared models, maps, narratives and classification schemes – play an important part in bridging the gap between communities of practice (see also Carlile 2004). According to Star and Griesemer 1989, p. 404), boundary objects are:

> plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites … They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognisable, a means of translation.

As such they have a good deal of interpretative flexibility that enables coordination and the translation of ideas from one particular community of practice to another (Carlile 2002). Design drawings or models, for example, help designers to explain their ideas to clients and builders (and vice versa) – despite the fact that such objects are likely to signal up very different opportunities, constraints and issues for each party. In doing so, they also create possibilities for creative design development through the discursive interaction that "talking through" the look and practicality of the design affords (Ewenstein and Whyte 2009).

Recent work has suggested, however, that boundary objects may obscure just as much as they reveal through the relations of power that are inscribed in them (Oswick and Robertson 2009). Also, that the supposed robustness of boundary objects underestimates their mutability and the different roles they play over the course of collaborative interaction (Nicolini *et al*. 2012). So, for example, design drawings and models not only contain features within them that may constrain particular types of change (presumed load bearing calculations or commercial cost/revenue assumptions, for example); they may also evolve in different ways as the nature and circumstances of interaction change (from being used as a contract-winning device to being seen as the baseline set of detailed design parameters used to direct construction).

Broadening this out to considering *management knowledge* as the "object" that bridges the gap between CMR and BMR communities of practice, the implication is that we need to be aware not only of the different ways in which that knowledge is interpreted and understood by those in different communities (depending upon their frames of reference or ways of knowing); but also how it contains within it the firm imprint of those involved or implicated in its production or (social) *construction*. The management knowledge base that constitutes what is drawn upon by construction management researchers certainly has many of the features and functions of a set of boundary objects (cf. Swan *et al*. 2007). The models, maps, narratives and classification schemes that construction management researchers draw upon (e.g. different models, theories and management tools and techniques) may have originated to some extent in mainstream management thinking and research and been translated into, adopted in and adapted for CMR purposes. However, they have relevance and impact in both "communities of knowing" (Boland and Tenkasi 1995), which represent partially overlapping, yet largely distinct institutional domains. As such, they comprise a body of knowledge that has meaning for quite distinct communities of management theorists and researchers. These distinct communities are, of course, fragmented further by their inherent multidisciplinarity, which promotes quite diverse assumptions about the nature of management knowledge and the main focus of interest (e.g. people, operations, finance), as well as major discursive differences in the forms of management knowledge that are deemed valid (cf. Schweber 2015).

In addition, that common knowledge base is far from being complete, coherent, neutral and uncontested. Not only are there very different theoretical perspectives on management that exist within any particular paradigm (Burrell and Morgan 1979), management knowledge itself is pluralistic, political and hotly contested (Clegg and Palmer 1996). It is also impossible not to underestimate the importance of the impact of multiple social actors in the generation, (co-)production, mediation and reproduction of different forms of management knowledge. Management consultants, in particular, have played an important historical role in co-producing management knowledge and, in doing so, have contributed significantly to the circulation of management ideas (Sturdy 2011, Engwall and Kipping 2013). Examples of the impact of management consultants can be found in numerous management concepts and practices that have had a major impact in the construction management field, such as culture management and lean manufacturing principles. At the same time, major challenges and problems have been identified in translating such commodified management ideas into practice and each has had its fair share of critics (see, for example, Willmott 1993, Green 1999).

Researchers have also stressed that the circulation of management ideas is not itself a neutral process and often involves the transformation of management knowledge as it translates into practice (Czarniawska and Joerges 1996, Sahlin-Andersson and Engwall 2002). Management knowledge is also significantly influenced by the vagaries of fashion and has been shown to follow fairly predictable waves of uptake, adoption and decline (Abrahamson 1996). Managers themselves play an important part in the co-production of management knowledge and so shape how management ideas are accessed, translated into practice, developed, shared, re-produced and recycled. As a common object, management knowledge is therefore not only subject to different readings from different perspectives, it is also constituted in complex and constantly changing ways. The net effect is that management knowledge is highly fragmented, situated, mediated, provisional and contested (cf. Blackler 1995). Yet, it is this knowledge base in its many disparate and contended forms that provides the medium of exchange between CMR and BMR communities of practice.

Challenges and opportunities for CMR

The foregoing discussion has emphasized the continuing, unresolved issues around rigour and relevance in management research, the effects of institutional processes and logics, the kaleidoscopic nature of management knowledge and the challenges of translation across communities of practice. What does all this mean for CMR? What are the implications – at a conceptual and practical level – for how CMR might continue to engage with, learn from and contribute to developments within BMR?

Well, in many ways, the complexity alluded to above throws down additional challenges to construction management researchers in harnessing, adopting, adapting and applying management knowledge to the exploration

of construction and project management problems. The dual challenge represented in the "double hurdles" of achieving rigour and relevance (Pettigrew 1995) is significantly added to by the highly variegated, contested and changing nature of what constitutes management and organizational knowledge in the BMR domain. This added complexity creates a "triple hurdle" for researchers by adding an extra dimension to what rigour and relevance signify – in that they encapsulate very different conceptions of rigour and relevance, based on different ontological and epistemological assumptions extant within the field. This complexity is, of course, no less a problem for management and organizational researchers themselves faced with a myriad of perspectives from which to choose to position their work that take very different theoretical and methodological approaches (from institutional theory, to critical realism, to actor–network theory and so on). However, there are perhaps advantages for business and management researchers in already being embedded within a particular (albeit fragmented) community of practice in which the merits of different perspectives have been long debated and are well understood and rehearsed. For construction management researchers, the challenges is in being able to engage with and mobilize BMR knowledge in a way that avoids too much selectivity and uncritical acceptance in delving into and harnessing management knowledge in what is actually a complex, highly contested and fast-changing domain.

A further challenge, given the ways in which management knowledge and the research on which it is based is constituted is in avoiding too much deference to dominant paradigms or perspectives in BMR and, perhaps more importantly, being careful about management "fads and fashions" (Abrahamson 1996). As noted above, institutional theory is only now emerging as a perspective in CMR and there is certainly much more scope for taking the ideas and examining how they apply further in the CMR field (Bresnen 2016). However, while it is an important approach, it is not the only one. There are many other approaches too that can throw important light upon construction management processes. That includes work within the critical management studies tradition that eschews commitment to managerial agendas and which recognizes instead that organizations encapsulate a wide variety of groups with divergent and legitimate values and interests (Fournier and Grey 2000, Alvesson and Willmott 2003). Such an orientation has already found expression in the project management field through the impact of critical perspectives on projects and project management (Hodgson and Cicmil 2006). There are clearly more opportunities here for CMR that is much more diverse and critical in its core aims, objectives and methods.

Putting that in institutional theory terms, the danger is one of isomorphism, in which what are seen as dominant ways of thinking in BMR (including occasional and highly prominent management "fads and fashions") provide a set of normative prescriptions or templates to imitate that are uncritically seen as the most legitimate ways of exploring management and organizational phenomena and so become increasingly taken for granted in the CMR field (cf. DiMaggio and Powell 1983). Such a critique can be levelled at some attempts to translate lean principles and practices into construction, for example (Green 1999). The corollary of this is not that paradigmatic eclecticism should be the norm; but that there is a need perhaps for continual critical awareness and interrogation of the weaknesses as well as strengths of particular perspectives (cf. Schweber 2015). It also suggests there may be some value in continuing institutional work (Lawrence *et al*. 2011) or praxis (Seo and Creed 2002) that can help challenge prevailing assumptions and so help ensure that research remains fresh, rigorous and relevant.

At the same time, there are a number of opportunities that some distancing from BMR gives to construction management researchers. The most obvious is the opportunity available for greater cross-fertilization of ideas and frameworks between CMR and BMR. Arguably, the direction of travel has so far been predominantly one way, with perspective taking on management knowledge being the primary way in which the CMR community has interacted with developments in the BMR field. However, there remain many significant opportunities for CMR to help further shape and sharpen BMR thinking in a way that also promotes its own research agenda.

This is already happening insofar as issues of organizational transience and temporariness have become increasingly important avenues for organizational theorists and researchers to explore (e.g. Sydow *et al*. 2004). The impact of projects as a contemporary mode of organizing and how this is "projectifying" work and organization (Lundin and Soderholm 1998) also marks out a theme to which CMR continues to have a lot to contribute. Other obvious areas include, *inter alia*, the insights CMR gives us into supply chain governance (Clegg *et al*. 2002), professional service organizations (Winch and Schneider 1993), the role of objects (Ewenstein and Whyte 2009) and changing forms of employment (Dainty *et al*. 2007). The two-way flow of concepts and ideas is of course helped by boundary spanners – including some of the authors mentioned here – whose work bridges the two communities of knowing. However, there are further more direct opportunities for contributions from those more deeply embedded in the CMR community that can effectively help propel both the CMR and BMR agendas forward (e.g. Sage *et al*. 2016).

A further opportunity is the advantage that some distance gives to avoid the dangers of introspection and distraction that, as some of the earlier quotes suggest, has led to an excessive focus on what BMR is and what it can and should do. Of course, this article itself runs the risk of adding to or prompting such introspection, although it is hoped that it will at least spark some debate about the nature and prospects for CMR moving forward. That is the explicit intention. Moreover, there are some important lessons to be learned from experiences within the BMR field that, it is argued here, CMR can benefit from. Not least of these is avoiding the pitfalls of becoming too inward-looking and introspective when considering the prospects for future theorizing, research and practical impact. For CMR researchers, there is an advantage in pursuing a research agenda that already has a concern with relevance at its heart.

Last but not least, the above discussion suggests two further important points about CMR as it moves forward. First, there is some institutional work required (or praxis) that maintains the strengths in the rigour and relevance of CMR, while opening up the opportunities suggested above. As noted, the institutions of the BMR field (its international conferences, leading journals, funding bodies, research assessment regimes and its universities) have played a crucial role not only in providing the forum for debates about rigour and relevance, but in also providing the vehicles through which research has been and is being shaped to meet the challenges of being both rigorous and relevant. This has not been without major and serious debates about the aims and openness of leading journals, the priorities of funding bodies, the appropriateness of research assessment, the governance of academic institutions and the like. Moreover, these debates show no signs of abating. However, it does point to the important role of those institutional bodies – including leading journals in the field such as this publication – in shaping and legitimizing the nature and direction of (construction) management knowledge. As such, there is both an opportunity and an obligation perhaps on the part of journals and their editors to influence the direction of travel of future CMR and the opening up of a discussion such as this is to be heartily welcomed.

However, there are also other important roles for other institutional actors to play in shaping future research. This ties into a second point, namely that, if the forgoing discussion has any value, then the greater reflexivity in research it implies has potential implications for the professional work and *identity work* (Watson 2008) of construction management researchers themselves. Put more simply, if greater engagement with BMR is in any sense the way forward, then construction management researchers are likely to need to become a little bit more like BMR researchers (and BMR researchers more attuned to the distinctive nature and contribution of CMR research). The corollary of that is that the institutions that they inhabit can do a lot either to inhibit or to reinforce these tendencies. For example, by the criteria applied to judging research output, promotion applications, conference attendance bids, research funding applications, providing PhD studentships and training and the like. This applies, of course, both to business schools and to construction management departments. The general point here is that it is not only institutional work or praxis that may be important in helping those within the discipline help ensure that CMR manages to thrive across a number of fronts; there is also potentially some identity work involved by researchers themselves in confronting what it means to be a CMR academic, how that relates to interests that may be informed by wider BMR discourse and, ultimately, how that translates into making theoretical, empirical and practical contributions that achieve individual goals while at the same time meeting institutional imperatives.

Conclusions

Prompted by the call for contributions to this special issue, this paper has tried to contribute towards debates about the future trajectory of construction management theory and research by exploring the nature of the interface, so to speak, between CMR and BMR. The intention has been to draw out and explore the challenges and opportunities associated with the translation of management knowledge within and between those academic/practitioner communities of practice (cf. Sahlin-Andersson and Engwall 2002). To do this, the paper first explored the debate on rigour and relevance in management research that has been prominent in the BMR academy, highlighting the many unresolved issues, tensions and contradictions that it has given rise to (and which still affect the field). The apparatus of institutional theory in the form of institutional logics was then applied as a further way of trying to throw further light on these institutional processes and dynamics of change. The kaleidoscopic, contested and constantly changing nature of management knowledge and research was then highlighted and emphasized as something that poses many challenges, but also opens up some significant opportunities, for construction management researchers, given the complex and fluid institutional contexts within both fields.

While the frameworks of institutional logics and communities of practice have been used to help frame the arguments developed in this paper, this should not be taken to suggest that they provide the only way to explore these issues. Interwoven in the discussion have been strong references to work within a critical management studies

tradition that provides a powerful counterpoint to some of the more utilitarian assumptions that they sometimes convey. However, their use has hopefully shown some of the continuing value in applying such frameworks and ideas to the examination of construction management phenomena – including those related to institutional processes and concerns at the field level (cf. Friedland and Alford 1991).

Borrowing and adapting Pettigrew's (1995) idea of the "double hurdles" facing research, it has been suggested that CMR faces what could perhaps be described as a "triple hurdle" due to the complex and variegated management knowledge base with which it tends to engage. The challenges of recognizing and somehow accommodating this complexity have been set against the alternative risks of too much selectivity or uncritical acceptance of particular paradigms or approaches. At the same time, the dangers of paradigmatic eclecticism and/or introspection have also been brought to the fore. In the process, a number of opportunities and more creative challenges have been signposted. In particular, emphasis has been placed upon the potential for a greater cross-fertilization of ideas between CMR and BMR, and a number of substantive areas have been identified in which CMR continues to make major contributions to BMR thinking.

While developing such work creates many challenges, there is the danger that, if such opportunities for cross-fertilization of ideas and approaches are not exploited more, CMR and BMR will continue their somewhat distant relationship and parallel (if peaceful) co-existence. Institutional pressures may force some common ground (in encouraging more collaborative or applied research, for example). However, institutional differences between the two fields of practice are just as likely to reinforce continued divergence (in what is seen as legitimate forms or outlets for research, for example). Towards the end of the paper, a number of suggestions were made about how CMR institutions might rise to some of these challenges (and how BMR may, in turn, become much more accommodating to domain-based research!). Specific examples might include the promotion of journal editorial policies that promote cross-disciplinary work; or institutional policies on recruitment and promotion that accept contributions beyond the narrow immediate academic field. There are potentially many more. Clearly, any such initiatives are likely to involve a good deal of institutional work. However, they may also add considerable value if they help CMR as a research domain convergence more with the disciplinary logic that underpins fields such as BMR. At the same time, the importance of considering what this means for the identity and identity work of CMR (and also BMR) researchers was also emphasized. Indeed, it could be argued that the reflexivity that Schweber (2015) calls for implies a deeper engagement with one's identity as a researcher. Again, there are many practical ways in which any resulting identity work might manifest itself (through decisions on conference attendance and networking activity, for example). Taking these two themes together suggests that the evolution of CMR is likely to be both an institutional and personal professional journey. It is only hoped that this paper has at least raised some useful questions and suggestions that may provoke further discussion and debate about the form and direction that this journey might take.

Disclosure statement

No potential conflict of interest was reported by the author.

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