



The unsettling of “settled science:” The past and future of the management of projects

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Abstract

As part of the development of his Management of Projects (MoP) perspective, Peter Morris identified a broader, more comprehensive understanding of the principal project management activities and interfaces required for project success. In advancing the MoP framework, Morris offered a wide-ranging critique of the philosophy behind PMI's execution-based model, as developed through their body of knowledge (PMBoK). This paper addresses some of the streams of research that have been influenced by the MoP perspective and how they have “unsettled” research focused on tools and techniques, and normative best practice which we dub the “settled science” of project management. We suggest that it is time to reconsider these research streams in light of Morris' MoP framework, identifying some of the key areas that future research can pursue in reassessing what we think we know about project-based research and key project interfaces.

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1. Introduction

With his introduction of his Management of Projects (MoP) perspective in 1994, Professor Peter Morris proposed a major reconceptualization of theory and practice in the field of project management. This was not a simple reformulation of our understanding of the basic elements in the project management discipline but, once fully understood, required nothing less than a rethinking of the manner in which organizations frame and manage their projects. Morris first developed the framework and summative model in his seminal (Dalcher, 2012) 1987 case studies of major UK projects with George Hough (Morris and Hough, 1987: Fig. 12.1), developed it in his more historically orientated contribution (Morris, 1994: Fig. 46), and revealed its latest incarnation in his valedictory statement (Morris, 2013:

Fig. 4.5). We reproduce this latest version of the summative model in Fig. 1.

We suggest that this model encapsulates the core of Morris' contribution to research and practice in project management. Its fundamental concern is to capture empirically all the activities required to achieve project success, and it led to a critique of the received wisdom in project management theory and practice that focused on its tools and techniques, rather than the organizational requirements of achieving success for the organizations involved in the project. As Morris put it in 1994:

“... while the subject of “project management” is now comparatively mature ... it is in many respects still stuck in a 1960s time warp. Project managers, and particularly those who teach and consult to them, generally only take a middle-management, tools and techniques view of the subject. Few address the larger, more strategic, issues that crucially affect the success of projects” (Morris, 1994; p. 217).

Morris (2012) argues that Cleland and King's (1968) very influential text provided the academic justification for the tools

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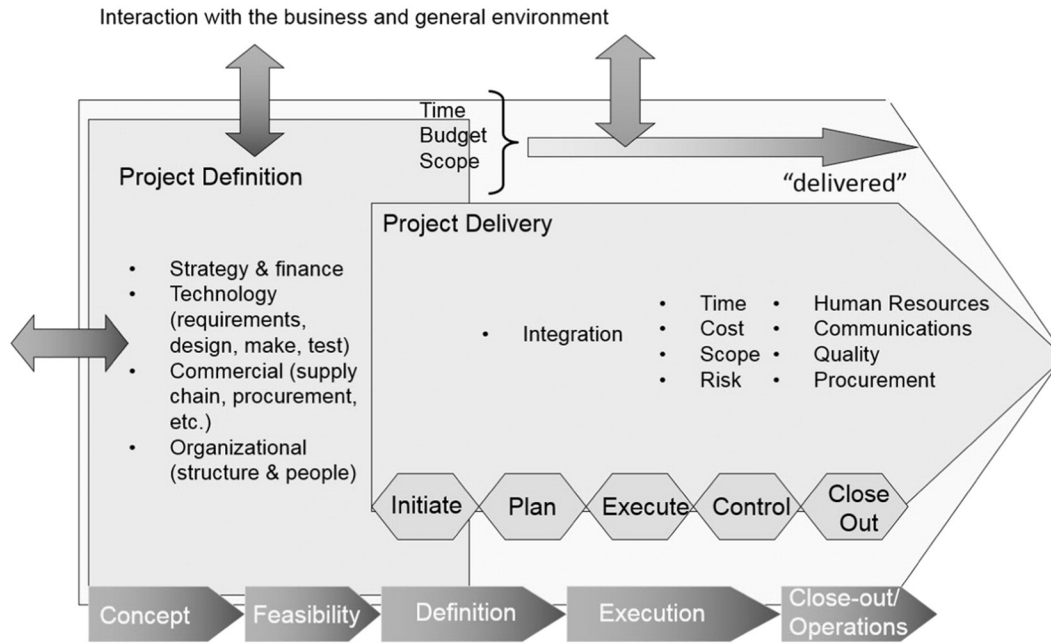


Fig. 1. Management of projects framework (developed from Morris, 2013 Fig. 4.5).

and techniques focus, while in current practice it is embodied in the PMI’s Project Management Body of Knowledge (PMBoK). These contributions we dub as the “settled science” of project management, which Morris sought to unsettle. The PMBoK model establishes an execution-oriented approach to managing projects that misses several key areas, most notably managing the critical front-end activities that can make or break a project’s viability from the outset. In effect, PMBoK focuses so closely on the actual delivery of the project that it comes perilously close to ignoring the larger context within which the project is idealized, validated, and shaped by multiple stakeholder forces.

The purpose of this paper is therefore threefold; first, we seek to examine the research implications embedded in the

Management of Projects perspective, and in particular Morris’ emphasis on the importance of the front end of projects and thence the life-cycle of the project through to successful handover. Second, we will show how Morris has built on the Management of Projects perspective to develop a systematic critique of the settled science which underpins the knowledge frameworks that shape the professionalization of the project management discipline. Finally, this paper serves as our introduction to the special issue, putting the gathered contributions of the various contributing authors listed in Table 1 into the larger context of how their work relates to, and is shaped by, Morris’ work. First, though, we will review the “settled science” of project management that Morris was so keen to critique.

Table 1
The papers in this special issue.

Group A	Front-end definition
Richard Fellows & Anita Liu Karlos Arto, Tuomas Ahola & Valtteri Vartiainen	Sensemaking in the cross-cultural contexts of projects From front end of projects to back end of operations: managing projects for adding value throughout the system lifecycle
Graham Winch and Roine Leiringer	Owner project capabilities for infrastructure development: A review and development of the “Strong Owner” concept
Ole Jonny Klakegg, Terry Williams & Asmamaw Tadege Shiferaw Knut Samset & Gro Host Volden	Taming the trolls: major projects in the making Front-end definition of projects: ten paradoxes and some reflections regarding project management and project governance
Group B	Body of knowledge
Andrew Davies & Tim Brady Mike Bresnen Jennifer Whyte, Angelos Stasis & Carmel Lindkvist	Explicating the dynamics of project capabilities Institutional development, divergence, and change in the discipline of project management Managing change in the delivery of complex projects: configuration management, asset information, and ‘big data’
Damian Hodgson & Steve Paton	Understanding the professional project manager: cosmopolitans, locals, and identity work

1.1. The “settled science” of project management

A fair starting point for any elaboration of the current state of theory and practice in project management is to hearken back to the theoretical underpinnings that have brought us to the current state.¹ Among the more important, seminal early works that helped shape our understanding of project management, what projects are, and how project-based work is integrated within organizational operations is Cleland and King’s *Systems Analysis and Project Management* (1968). In their work, set against the backdrop of massive science and engineering programs like those sponsored by NASA and the U.S. Department of Defense, they made the case that while scheduling primers and technical manuals were beginning to emerge, nowhere had project management yet been fully assimilated into the management mainstream as an integrator function capable of merging the technical challenges of new programs with a mutually-necessary focus on time and cost parameters. Cleland and King’s book spawned a hugely influential, normative, perspective on the emerging field of project management, seeking both to codify the critical functions of the project manager and identifying the necessary skill-set that allow those functions to be given full force (Morris, 2012).

An offshoot of *Systems Analysis and Project Management*’s normative viewpoint was the development of the first emerging professional organizations and their bodies of knowledge. The largest, the Project Management Institute, was created as a volunteer organization in 1969 and first published its body of knowledge—PMBok—in 1987 (Morris, 2013). Now in its fifth edition, and with over three million copies in circulation worldwide, the PMBok has established a standard for the practice of project management in many countries—not least in the US and Canada. PMI identified 10 critical “knowledge areas” that, they argue, define the relevant competencies for project-based operations. Through the introduction of PMBok and emphasis on professional credentialing (such as Project Management Professional certification), PMI gained a first-mover advantage, developing the theoretical anchors and implicitly, at least, serving as the global standard for identifying and managing relevant project knowledge. In the near 30 years since it first appeared, PMI’s PMBok has maintained a dominating presence in the external accreditation of shaping the curricula for university project management courses and programs worldwide.

1.2. Morris’ criticism of the PMBok

Despite its importance in shaping the normative knowledge base for the project management field, Morris has been a pointed critic of several elements of PMBok since its inception, not least its adoption of a viewpoint that, Morris argues, severely and artificially bounds the frame of reference for what constitutes project-based work and subsequently, the relevant management knowledge (Morris, Patel and Wearne,

2000). “The PMBok underplays to the point of almost missing completely management’s role in the development of the project front-end: the establishment of the project definition and targets, precisely the area where evidence shows management needs to concentrate” (Morris, 2013; p. 60). In laying out his critique of the PMBok, Morris (2000; 2002a; 2003) highlights several areas of concern, both in how PMI conceptualized the body of knowledge and how they operationalized (and too narrowly focused, Morris would argue) the relevant knowledge base needed to manage projects. In general, he notes, the philosophy underlying efforts to describe the body of knowledge that is unique to project management imposes a fatal flaw in the resulting PMBok. That is, “the PMBok Guide did not, and still does not, represent the knowledge that is necessary for managing projects successfully but only that which is considered truly unique for project management” (Morris, 2013: p. 54). Thus, the PMBok, in focusing on the uniqueness of the project management undertaking, lacks the necessary prescriptive guidance to successfully manage projects. Morris’ other main criticisms of the PMBok include:

1. It fails to capture the distinct characteristics and challenges of the different project/product development stages through the project life-cycle.
2. Insufficient weight is given to managing the project front-end definition development stage, defining scope, and establishing cost and schedule targets. The focus of the PMBok lies firmly in its “execution” focus without mentioning the manner in which front-end shaping (or its lack) ultimately leads to the success or doom of many projects.
3. The supposed uniqueness of the knowledge for managing projects that the PMBok purports to capture is dubious at best; consider elements (knowledge areas) such as Human Resources, Communications, Stakeholders, or Procurement.
4. With its focus on “uniqueness” as a criterion for inclusion, the PMBok paradoxically excludes many of the most critical elements in the successful management of projects, including leadership and people.

In short, Morris has long criticized the predominant guiding spirit of the PMBok as being essentially “execution-based,” focusing around an initiate – plan – execute – monitor and control – close set of process groups (Morris, 2013). In offering short shrift to other critical elements of the body of knowledge as captured in the MoP paradigm, the PMBok artificially bounds the relevant knowledge of what characterizes projects, how they may be best understood (and studied), and the useful knowledge that can be acquired from them or applied in best managing them. Finally, he notes that of the three major bodies of knowledge—PMI’s, APM’s, and the Japanese, PMBok is the most conceptually out of line with the other two (Morris, 2013).

2. Management of Projects and the organization of this special issue

The Management of Projects perspective actively expands the remit of the project manager along two important

¹ Interestingly, the importance of historiography and its role in shaping the project management field is a theme that has long resonated through Morris’s work.

dimensions (see Fig. 1). First, as we have noted previously, MoP places much greater emphasis on the fundamental importance of the project definition phase, during which strategic alignment issues are considered, technology management undertaken, commercial issues explored, and key organizational elements (structure and people) decided. The inclusion of these definitional elements moves the role of the project manager and their team to one of an active co-determiner of key project parameters, rather than a reactive respondent to the directives that occur in advance of their involvement. The second critical interface in the MoP model occurs at the institutional level, through the project's (and project team's) interaction with the larger business and general environment within which the project is to be undertaken. Thus, the simultaneous broadening and deepening of the project development setting pose some critical implications for both practitioners and researchers. For project management professionals, this model suggests an expansion of the key competencies that project managers and their team members need in order to manage projects. Interfacing with new stakeholders and imperatives (commercial, technology, and so forth) requires a larger skill set than is routinely applied through PMI's model. For researchers, MoP opens up vast new areas for theory development through empirical research and analysis. Moving beyond the execution-based, life cycle model necessarily requires academics to consider numerous new points of interaction among key stakeholders as well as new hypothetical relationships and organizational implications. The requisite variety in unsettling the settled science of project management necessarily requires a broadening of the testable (researchable) constructs, particularly in organization theory and behavioral research.

The papers submitted to this special issue listed in Table 1 reflect the various ways in which Professor Morris' work has shaped our understanding of the field and the nature of its still-unanswered questions. One practical implication of the Management of Projects perspective is that the range of potential interest is very wide, as evinced by the contents pages of the latest book (2013), and the various handbooks and guides on which Morris had led the editorial team (Morris and Pinto, 2004; Morris, Pinto and Söderlund, 2011). Our focus here is on the core contribution identified above around project management knowledge in Group B of Table 1 and the front end definition of projects and programs in Group A.

2.1. Body of knowledge research

“A profession can be characterized *de minimus* as ownership of a distinct body of knowledge: what knowledge one needs in order to practice competently.” (Morris, 2014: 147)

The Management of Projects perspective offers significant insights into addressing some of the key project knowledge areas that identify and formalize the skill sets needed to manage projects successfully. The first and most obvious implication of MoP lies in its broadening of the concept of

what constitutes the responsibilities and hence required competencies of the project manager. We noted earlier that PMI's “delivery” model, with its ten critical knowledge areas (time, cost, scope, risk, etc.) implicitly posits the role of project manager as that of an efficient executor of projects for which they were presumed to have had little input during project definition. Their role is relegated to that of an engaged onlooker who played no role in the critical (“fuzzy”) front-end, when strategic issues are raised, technologies to be used are agreed, supply chains are developed and suppliers vetted, and the parameters of schedule and budget settled. Scholars have criticized this traditional model as one that may have held true at one time and for specific classes of project, such as construction, but modern project management and the wide variety of demands placed on project managers today demonstrate that it is a myopic and far-too-limiting way of viewing the real role of the project manager (Morris, 1994; 2002a; 2013).

MoP challenges the traditional view with a far more comprehensive perspective on the real duties of modern project managers. In his conceptualization, project management is seen as not simply a delivery system, or technique-laden toolbox, but a partner with other managerial disciplines in developing the critical actions and interfaces, both internally and externally, that successful projects require. Morris' argument is cogently expressed in the observation that projects cannot be developed (delivered) without sufficient work being performed to ensure that they are fully defined and linked to critical elements within and without the organization. The MoP model creates a “meta” lifecycle, suggesting that a true representation of project development should be based on the product development life cycle with its concept, feasibility, definition, execution, and close-out stages.

Because, in the updated MoP, project managers' roles are much broader, taking into consideration the need to be involved in previously unaddressed tasks such as supply chain development, contracting, or requirements management, one practical implication of the MoP framework is to require a significant broadening of our understanding regarding what now constitutes the necessary body of knowledge to plan, organize, and deliver projects aimed at maximizing value for stakeholders. Clearly, a larger perspective on the role of the project manager supports an equally broad set of skills and knowledge for project development. The modern project manager is required to become more fully qualified, not only in the technical details of the project but also an individual who can interface with top management and critical stakeholders early in the project's development; in fact, far earlier and with far greater responsibilities than in the outdated execution model. Morris's challenge for the professional and academic fields has been to reconsider critical knowledge, including a renewed outlook on project manager competencies, critical success factors for projects, knowledge management, and so forth. The MoP perspective offers an expansive perspective of the challenge modern project managers face in a complex and rapidly changing commercial environment, by making clear the far broader nature of the challenges they need to address for successful project management.

Morris is highly critical of academia's current contribution to the challenges posed for the development of knowledge in the profession by the MoP perspective. He argues that "project management is like a profession with a hole in its head" (2014: 149) because academic research focuses on particular aspects of the management of projects, rather than on the integrative level of the discipline as a whole. However, this argument would appear to confuse research outputs in refereed journals which in any discipline—including Morris' favorite of medicine—focus on particular advances in knowledge with what goes on in the classroom on degree and executive education programs. Textbooks such as Pinto (2016), Turner (2014), and Winch (2010) do encompass much of the range of the MoP perspective even if they are not structured in exactly the same way. However, there is a broader challenge in Morris' critique. Articulation of the discipline as a whole requires a coherent theoretical perspective on the discipline, otherwise bodies of knowledge become mere lists of areas and sub-areas of knowledge, with little insight into how the areas link to form a coherent set of competencies and how their relative importance varies contingently. While some are pessimistic about the prospects for the emergence of a single theory of project management, (Morris, 2002b) believes that project management knowledge is pluralistic and emerges from multiple sources, as does Söderlund (2004; 2011) who suggests some key questions that will aid the building of theory in project management. We will return to this point later.

Within this special issue, a number of contributions have come from researchers focusing on the manner in which MoP both directly and tacitly influences our understanding of what comprises the unique body of knowledge of project-based work (Group B in Table 1). Jennifer Whyte, Angelos Statis, and Carmel Lindkvist, for example, grapple with the compelling question of configuration management in the age of "big data." With the advances in mechanisms for acquisition, availability, and use of big data as an enhanced analytical opportunity (think also of recent developments of the rise of Building Information Modeling—"BIM"), this paper addresses a key issue in enhancing the body of knowledge. Andrew Davies and Tim Brady extend their important work on the dynamics of project capabilities in their paper. Just how does the "ambidextrous" organization affect our understanding of the body of relevant project management knowledge? Dynamic and project capabilities demonstrate clear opportunities to push out the boundaries of our current knowledge base as well, encompassing a superior vision for managing project-based work. The paper by Mike Bresnen continues in this vein, probing how institutional development and pressures for subsequent change represent, in a microcosm, the larger question of validating and updating (to radical degrees, if necessary) our understanding of what passes for the critical, relevant, and useful knowledge in managing projects. Damian Hodgson and Steve Paton round out the contributors whose work addresses aspects of the body of knowledge. What is the knowledge that characterizes an "expert profession," and shapes our recognition of the cosmopolitans and

locals managing projects? The dynamic tension between necessary "domain knowledge" combined with local familiarity versus a broader notion of global competence raises a number of critical questions about what the body of knowledge *should* support and how its structure shapes the best professional paths forward for practicing project managers.

2.2. Project definition research

A large and fruitful arena has been the opening in research on the front-end, definitional stage of projects; Morris' position here has been widely accepted and nowhere seriously challenged. There is now a significant body around what has become known as the "shaping" of project front ends, most of which draws explicitly on Morris' seminal (Dalcher, 2012) work with George Hough. A team led by Miller and Lessard (2000) explored strategic management on an international sample of large-scale engineering projects showing how projects are shaped by multiple institutional factors and actor interactions. Flyvbjerg and colleagues (e.g. Flyvbjerg, 2011; Flyvbjerg et al., 2003) have examined the nature of large infrastructure project failures and identified systematic errors occurring during the definition stage that lead to subsequent overruns of time and cost, or object failures in scope realization. They suggested that "strategic misrepresentation" of the business cases for project underlay these failures in many cases. More recently, Merrow (2011) has shown on the basis of regression analysis of project performance in the oil and gas sector how important front end definition is to project success. These authors have highlighted the importance of identifying the critical activities necessary to correctly define the project, link it with the strategy of the sponsoring organization and so shape the development of the project prior to its subsequent execution. More recent work along the same lines has focused on decision-making under uncertainty (e.g., Priemus et al., 2008; Williams et al., 2009) as well as behavioral aspects (e.g. Pinto, 2014; Winch, 2013).

Research on managing the front-end of projects, including reference to the "fuzzy" front-end, can be traced back to the work of Morgan (1987). Managing the front-end is one aspect of the definition stage but it directly links to a number of other functions, as Morris identifies (see Fig. 1). Among these activities are: 1) commercial assessment—the need to develop secure supply chain partners and procurement processes; 2) technology management—including steps to conduct adequate requirements analysis, as well as design and testing; 3) strategy and financing—aligning corporate strategic goals with project goals and securing funding sources; and 4) organizational accommodations for the project—new structural models, recruitment and training, and other human resource requirements. All these elements should be configured as part of an expansive and comprehensive front-end definition process, setting the stage for subsequent project delivery.

It should be readily apparent that the list of project definition initiatives organizations have to undertake have important implications for stakeholder management, as the necessity of

developing supply chain partners, requirements management, and project sponsorship all directly highlight the importance of relationship management in projects. Thus, stakeholder management relates in MoP both to the critical front-end of project definition as well as linking to important institutional level and environmental actors that can influence project development. Project managers under the MoP framework are forced to recognize, early in the process, that their success is likely to be directly linked to their ability to create and sustain profitable and constructive relationships with a number of critical project stakeholders (Bresnen and Marshall, 2011; Gil, Pinto and Smyth, 2011). Thus, it has been encouraging to observe the heightened interest, as demonstrated by current research trends, of work that addresses aspects of relationship building, including research on trust (Gil et al., 2011; Pryke and Smyth, 2006), contracting (Clegg et al., 2011), and network construction (Cova and Salle, 2011).

A number of the contributions to this Festschrift move forward our understanding of the importance of front end definition on major projects in particular (see Table 1 Group A). We start our review with a metaphor from Nordic folklore that captures the spirit of all the papers in this special issue addressing the management of mega-projects—“taming the trolls” is the essence of what megaproject management research is about. As any fan of *The Lord of the Rings* knows, trolls are big, mean, and very difficult to tame. Nevertheless, progress requires that we keep on trying. Ole Jonny Klakegg, Terry Williams, and Asmamaw Tadege Shiferaw explore the development of project governance arrangements in Norway, The Netherlands and the UK and show their contribution to taming the trolls. Graham Winch and Roine Leiringer explore another aspect of troll-taming—the development of the strong, capable owner organization—across the same range of countries as well as Denmark and Sweden. Moving in an easterly direction, research from Finland by Karlos Arto, Tuomas Ahola, and Valtteri Vartiainen show how the emphasis upon the front end definition should not be at the cost of thinking about the back end of the project which is where the potential value generated by the project is actually realized. Richard Fellows and Anita Liu bring a cultural dimension to front end definition, arguing that it is a cognitive problem, and therefore shaped by cultural values. Finally, we return to the land of the trolls where Knut Samset and Gro Holst Volden draw on the rich vein of work in the Norwegian Concept research program to distil 10 paradoxes of project front end definition.

2.3. *The developing Management of Projects research agenda*

Morris has made a seminal contribution to research and teaching in project management. We have shown how his work has influenced the research agenda over the last 30 years; the aim of this section is to indicate how the research agenda over the next 20 years might develop from his work. Our argument will focus on three particular issues:

- The prospects for theory in project management

- New conceptualizations of the field of project management research
- Developing an empirical research agenda in project shaping

As discussed above, Morris and others point to the pluralistic nature of theory development in project management. We likewise prefer not to give up on Wilemon and Cicero’s aspiration for a “general theory of project management” (1970: 282). Söderlund (2011) reviews the variety of “schools of thought” in project management: however, these are not clustered theoretically but rather by topic of interest. Here we suggest some of the perspectives from organization theory which we believe lend themselves to the challenge of developing theory in and of project management with the intent of identifying some of the different theoretical perspectives which might form the basis of a more general theory of project management:

- Research on projects as network organizations (e.g. Manning and Sydow, 2011; Pauget and Wild, 2013; Pryke, 2012; Sydow and Windeler, 1998) provides a distinctive and insightful empirical approach to explore both formal inter-organizational relationships and informal interpersonal relationships in project organizations. Research from this perspective can also be aligned with institutional approaches to research.
- Research on projects as a problem in information is formalized in Winch (2015) and given extended treatment in Winch (2010). This perspective draws deeply on the Carnegie and more recent neo-Carnegie (Gavetti et al., 2007) perspectives, particularly the work by Galbraith (1970) on Boeing which also influenced Morris (2013). This perspective has the benefit of theoretically integrating research on commercial management (via transaction cost economics) with that on project management. It also places uncertainty and complexity at the core of the problem of information, (Winch and Maytorena, 2011) and thereby integrates research on project risk management and complex project management into an organizational perspective.
- Research from a critical management studies perspective provides many additional insights (Hodgson and Cicmil, 2006). These include work on future-perfect thinking (Pitsis et al., 2003) influenced by Schutz and relationships (e.g. Clegg et al., 2002; 2011) influenced by Foucault; work on stakeholder relationships from a social construction of technology and actor-network theory perspective (e.g. Harvey and Knox, 2015; Law and Callon, 1992; Winch and Bonke, 2002); and advocacy of a practice approach to project management research (Hällgren and Söderholm, 2011; O’Leary and Williams, 2013).
- Finally, research on projects from an institutionalist perspective is starting to emerge (or re-emerge). Selznick (2011) is a classic of “old institutionalism” showing how projects are “coopted” to existing institutional interests, while the projects as events perspective Maoret et al., (2011) and the work of Lampel on Hollywood (2011) indicates how research on project strategy could be aligned with “new institutionalism”. Currie’s work (2012) on the institutional isomorphism and

large IT systems extends the analysis. The potential here for underpinning the theoretical development of Morris and Geraldi's (2011) level 3 of project management is significant.

Research in the project management field has already stimulated one distinctive contribution to organization theory more generally—the theory of the temporary organization (Bakker, 2010; Bryman et al., 1987; Goodman and Goodman, 1976; Lundin and Söderholm, 1995; Lundin et al., 2015). However, this approach, in effect, theorizes PMI's definition of a project as “a temporary endeavor undertaken to create a unique product, service or result.” It is, therefore, inadequate from the MoP perspective. Two recent developments have developed critiques of temporary organization theory and management, and thereby begun to flesh out theoretically the MoP perspective and to take on board Engwall's (2003) contention that “no project is an island”. Specifically, we are referring to the:

- Organizational project management perspective
- Three domains perspective

The *organizational project management* perspective grew out of research on Project Management Offices (Aubry et al., 2007), and has developed into a broader articulation of project management as a “function” within the overall organization (Aubry et al., 2012). This perspective thereby emphasizes issues such as the relationship between the overall strategy of the organization and its projects (Killen et al., 2012), levels of maturity in project capabilities (Grant and Pennypacker, 2006), the importance of portfolio management (Unger et al., 2012), governance (Müller, 2011) and the role of project sponsors (Kloppenborg and Tesch, 2015; Pinto and Patanakul, 2015). It also implicitly raises, but has not yet investigated, how the project management function relates to other organizational functions such as human resources. More broadly it raises interesting questions around the “projectification” (Lundin et al., 2015; Midler, 1995) of organizations, and their transition to managing by projects (Winch et al., 2012).

The *three domains perspective* (Winch, 2014) grew more directly from Morris' MoP perspective and addresses the agency issues that underlie much research on project management, and Morris' model (Fig. 1) in particular. It is not clear in the model who does what and how—that is to say, which organizations in the project coalition act as investors and operators of the asset being created by the project; which organizations supply the services required to deliver the project; and how these both relate in their different ways to the temporary organization that is the project. Thus the three domains model focuses on the interfaces between the coalition of organizations that contribute to the overall management of the project or program and the differing project capabilities that they bring to the overall endeavor with a particular emphasis on dynamic capabilities.

Arguably, these two perspectives are largely complementary with organizational project management focusing more on the internal organization of members of the project coalition, while the

three domains perspective focuses more on the relationships between the different organizations that make up the project coalition and the differing business models that those organizations have.

As part of our efforts to understand the impact that an MoP perspective can have on our understanding of the current state of “settled science” in project-based work, it would also be highly instructive and professionally useful to revisit some avenues of research that have shaped our understanding of the field over the past decades. For example, a recent issue of *International Journal of Managing Projects in Business* highlighted a number of “classics” in project management theory and research (2012). While many of these theories undoubtedly informed our current understanding of the field, it would be useful and appropriate to consider how the *context* underlying these works shaped the theories in their own time. Some examples that spring to mind are the critical success factor (CSF) research, embodied in the work of Pinto and colleagues (c.f., Pinto and Slevin, 1987) or the organizational (and project) interdependencies formulation of Sayles and Chandler (1971). Much of their work exploring these dynamics of project management took, either explicitly or implicitly, PMI's four-stage, execution model life cycle as their contextual backdrop. Given our perspective in this paper (and mirroring Morris's long-standing critique), a critical reassessment of many of these “classics” seems well-warranted.

Project shaping research has not developed particularly well over the last 20 years. We have identified some of the key contributions, but the actual processes of shaping remain somewhat mysterious—project shaping remains a black box. Although Miller and Lessard (2000) are based on case studies, it relied mainly on cross-case analysis at a fairly abstract level, and did not provide rich case insight into the dynamics involved. Both Flyvbjerg's (e.g. Flyvbjerg et al., 2003) and Merrow's contributions rely upon quantitative analysis with all the strengths and weaknesses of that approach, and gives us relatively little insight into the processes of project shaping, and the role of strategic misrepresentation within that. With some notable exceptions (e.g. Cusin and Passebois-Ducros, in press), we need largely to rely on narrative accounts of high profile major projects such as Greiman (2013) for insights.

The black box of project shaping needs to be opened up by more researchers working within a rich case research mode. Important questions to be addressed include:

- To what extent are investment appraisal tools such as cost–benefit analysis “performative” (Cabantous and Gond, 2011; Callon, 1998) in that they shape the investment decision outcome rather than merely providing “objective” criteria for selection between alternatives?
- What are the stakeholder dynamics that both enable and constrain “strategic misrepresentation” (Flyvbjerg et al., 2003) of the investment case for projects?
- How do regulatory environments such as the UK's regulated asset base (RAB) approach for utility companies (Helm, 2013), or the post-crash regulatory requirements for the finance sector shape investment decision-making?

More generally, there needs to be much more effort put into exploring the link between projects and strategy. Although most project management academics would follow Morris and Jamieson (2005) lead in aligning the front end of projects with the overall strategy of the organization, the strategic management community is blissfully unaware of the need for this alignment—one of the principal reference books in strategic management (Faulkner and Campbell, 2003) makes no mention of this link. Hopefully the thoughtful review here by Davies and Brady of the applicability of the dynamic capabilities concept to project organizing in this special issue will provide the basis for changing that situation.

In his paper, “Researching the unanswered questions in project management,” Morris (2000) observed that, “project management is too often inadequately focused, concentrating on middle management tools and techniques and organizational issues and not sufficiently on the things that deliver real business benefit” (p. 87). His development of the MoP framework is simultaneously his response to this misdirected energy and a call for a broader, more inclusive perspective on what it takes to successfully manage projects. Academics, too, can benefit from reorienting our frame of reference away from the long-accepted execution-based project delivery model, with its natural boundaries, toward one that embraces a fuller and more intellectually exciting context. This introduction to the special issue discusses both the manner in which MoP can influence our current research but equally importantly, it holds up to closer scrutiny the assumed “settled science” that was the domain of previous research on project management. When we replace our traditional, execution-based project conceptualization with the MoP perspective, we immediately stand to reap the benefits of more fruitful research because we are fashioning a context that is broader and a more accurate reflection of exactly what project organizations do and the challenges they face.

Conflict of interest

There is no conflict of interest associated with this editors’ introduction.

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