

**Managing the Institutional Context for Projects:
Part 2 – Basic research urgently needed**
A commentary by R. Max Wideman, FPMP
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Introduction

In Part 1, we drew attention to a most interesting paper entitled *Managing the Institutional Context for Projects*¹ by Peter Morris and Joana Geraldi² published by the Project Management Institute ("PMI") in its Project Management Journal ("PMJ") of December 2011. As we said, the paper is clear, well researched, well argued and well presented. In all, if you do not have a copy of that PMJ, it is well worth obtaining a copy of the paper from PMI and studying it closely.

In Part 1 of this paper we examined the concept of "organizational levels" described in the Morris and Geraldi paper. In this Part 2 we will raise the need for basic research in project management.

Paper abstract

As background for our observations that follow, the Abstract to the authors' paper states:

"Project management is widely seen as delivering undertakings on time, on budget, and on scope. This conceptualization fails, however, to address the "front end"³ [of a project] and its management. Addressing the front end moves the discipline to a second, more strategic level. This article proposes a third level of conceptualization: the ***institutional level***, where management is focused on creating the conditions to support and foster projects, both in its parent organization and its external environment. Management is done *for* and *on* the project rather than *in* or *to* it. We show that management at this level offers an enlarged research agenda and improvement in performance."⁴ (Emphasis added.)

Last month we discussed the concept of "Levels" and their place relative to the "front end" of projects. This month we tackle the question of project management research as implied by the authors' reference to "an enlarged research agenda".

Search for basic project management research

Under the heading *Analyzing the Institutional Level* and after introducing the concept of "Project Management Levels" (see Part 1 [insert link] of this paper), authors Peter Morris and Joana Geraldi go on to observe:

"The remainder of this article explores the thesis that there is value in seeing the institutional level as a fruitful, powerful unit of analysis in project management practice and research. Our contention is that institutional issues are important in the long-term performance of projects, that there is benefit in recognizing them as a group, and ***that there are theories that apply at this level in ways that are distinctive and useful.***"⁵

That last sentence leapt out at us, prompting us to Email author Peter Morris⁶ with the observation:

"I have no wish to deny that possibility. However, I have never seen anywhere where any 'theories' have been explicitly stated or advanced that are 'distinctive and useful', and that apply to project management at [Level 1]. Quite possibly I am mistaken and, if so, I would be most pleased to be directed to them. Otherwise, in the absence of such theories

I fear that the whole house of cards is on shaky ground."⁷

In response, Peter sent us a list of some 18 examples of research advanced by various authors under a broad range of headings covering: Governance, Strategy, Innovation, Project learning, Commercial and Organizational. While we found this list most interesting and valuable, nevertheless we did not feel satisfied because it did not include any *fundamental* studies of *project management* itself, something that we have been searching for, for some time. This prompted a number of thoughts as described in our next section.

Project and management dissected

If we research the "management" part of project management, then nearly a century ago we come across Henri Fayol's theory of five primary functions of management that states: "To forecast and plan, to organize, to command, to coordinate, and to control".^{8,9} These six functions, or seven activities (if you concede that "control" is two activities consisting of *monitor* and *redirect*) are often reduced to four in many of today's texts, i.e. "(1) planning; (2) organizing; (3) leading; and (4) controlling".¹⁰ Any or all of which the Project Management Institute ("PMI") has somehow managed to mutate into five "process groups", namely: "Initiating; Planning; Executing; Monitoring and Controlling; and Closing".^{11,12}

But in terms of *project* management, has there been any academic research done to test the validity of Fayol's theory as when applied to project work, in whatever form the Fayol theory may be expressed? And what happens if any of those activities are omitted?¹³ There are surely many examples to draw upon in the world of failed projects!

Next we turn to the definition of the word "project", a source of even more confusion in the project management literature. True that PMI has promulgated the definition of "project" as "A temporary endeavor undertaken to create a unique product, service or result."¹⁴ To us, this is a rather wishy-washy definition. But unfortunately there seem to be no generally *agreed* definition of the word, as testified by some thirty-four versions in the latest edition of the Wideman Comparative Glossary of Project Management Terms.¹⁵

Interestingly, most of these definitions are encumbered with a variety of conditions, as is the PMI definition, such as being: A one-time endeavor; Novel or unique in some way; A system or process; Product or delivery oriented; Cost, time or resource constrained; A network or cluster of activities; Organized; Directed toward beneficial change; A temporary organization; A temporary management environment; An investment of effort; The cultivation of an opportunity; A time-constrained operation; A dialectic between thought and reality, and so on. All of these can be found in one or another definition of "project" but most appear to be aspirations rather than de facto definitions.

A project does not have to be time-bound, resource-bound, planned, organized or even unique. A project does not even have to be an "ad hoc, loose flexible structure"¹⁶ or "a fine example of process-driven instrumental rationality"¹⁷. A project can just be chaotic – and sometimes is!

Another perspective

In its most primitive form, a project is simply an attempt to do something. Indeed, you can call it a project or not and you can manage it as a project or just by default as a part of normal operations. Nevertheless, almost all the definitions quoted as examples from the Glossary are biased by some vested interest or predetermined agenda to suit its surrounding context. Why shouldn't a project be a chaotic

venture to some unknown destination – a randomized voyage of discovery with a total absence of management? Shouldn't that also be the subject of academic research?

But as soon as we introduce the notions of a specific product or out come, and the business constraints of effectiveness and efficiency¹⁸ we change the whole picture. To this end, we assembled a number of *First Principles of Project Management* first presented in 2000,¹⁹ published on this web site in 2002,²⁰ and updated in 2009. Interestingly, although we described these as "principles", as Dr. Lauri Koskela and Gregory Howell subsequently pointed out, all of these are really "prescriptions" that form the basis for potential "theories" that should come first.

Indeed, in their Review, Koskela and Howell observe:²¹

"First Principles vs. Theories

We prefer theories to first principles, understanding that theories contain principles, both first and secondary, but also concepts. Before we can formulate any fundamental principle, we must have or must select concepts, which we can use in its formulation. The 'big idea' or conceptualization comes first, principles second. For example, if we view projects as transformation, we can next subscribe to the first principle of that conceptualization, namely the decomposition of the total transformation into sub-transformations and finally into assignable transformations, tasks. To us, this first principle is described in Wideman's Introduction.

To us, the first principles identified in Wideman's paper are rather critical success factors, taking into account that (1) in the Discussion section, on Issue #2 it is stated: "The key criterion is thought to be whether or not the principle is universally fundamental to project success as defined." and (2) there is no prior conceptualization for formulating such principles. One of the two most important functions of a theory is explanation (the other is prediction), and unfortunately critical success factors do not generally provide such an explanation."

In a subsequent paper, *The underlying theory of project management is obsolete*, the authors observed in their *Abstract*:²²

"In prior literature, it has been generally seen that there is no explicit theory of project management. We contend that it is possible to precisely point out that the underlying theoretical foundation of project management as espoused in the PMBOK Guide by PMI and mostly applied in practice. This foundation can be divided into a theory of project and a theory of management. We link theories to the body of knowledge by comparing prescriptions derived from theory to prescriptions presented in the PMBOK. Secondly, we show, by a comparison to competing theories and by an analysis of anomalies (deviations from assumptions or outcomes as implied in the body of knowledge) observed in project management practice, that this foundation is obsolete and has to be substituted by a wider and more powerful theoretical foundations."

And later in their *Introduction*:²³

"We show that project management as practiced today rests on an implicit and narrow theory that must be developed, extended and enriched. Indeed, it is the poverty of current theory that explains the other problems of project management, such as frequent failures (Kharbanda & Pinto 1996), lack of commitment towards project management methods

(Forsberg & al. 1996) and slow rate of methodological renewal (Morris 1994)."

It seems to us that for all the project management pontification in the ten years or so since then, the fundamental position of having a need for an underlying theory that encapsulates the so-called "*First Principles*" that we collected around 2000 has not materially changed. In fact, it may have regressed.

Technology management versus project management

In 2002, we also tried to recognize the difference between technical (technology) management and project management as follows:²⁴

"For purposes of this paper, we see a distinction between technical management and project management. Technical management is the business of managing the technology of the project whereas project management is the business of managing the entire endeavor through its project life cycle process. While we draw this distinction, in the real world the two must be fully integrated."

This should come as no surprise because, as we quoted in Part 1, the PMBOK Guide makes a genuine attempt to make the same distinction by explicitly stating so, thus:²⁵

"The project processes are performed by the project team with stakeholder interaction and generally fall into one of two major categories:

- **Project management processes.** These processes ensure the effective flow of the project throughout its life cycle. These processes encompass the tools and techniques involved in applying the skills and capabilities described in the Knowledge Areas (Sections 4 through 13).
- **Product-oriented processes.** These processes specify and create the project's product. Product-oriented processes are typically defined by the project life cycle (as discussed in Section 2.4) and vary by application area as well as the phase of the product lifecycle. The scope of the project cannot be defined without some basic understanding of how to create the specified product. For example, various construction techniques and tools need to be considered when determining the overall complexity of the house to be built.

The *PMBOK*[®] *Guide* describes only the project management processes. Although product-oriented processes are outside the scope of this document, they should not be ignored by the project manager and project team. Project management processes and product-oriented processes overlap and interact throughout the life of a project."

So, with these thoughts in mind and with great enthusiasm, we leapt upon the list of eighteen references that Peter sent us. Regrettably, but without going into detail, almost all of the references focus on aspects or levels above and beyond what we have been looking for. That is not to say that none had any value. On the contrary, we found them most instructive especially as none had come to our attention previously.

A particularly helpful reference

There was, however, one reference in the list that does deal with the issues being discussed here, namely a book called *Making Projects Critical*, edited by Damian Hodgson and Svetlana Cicmil.²⁶

Interestingly, in their introduction, this book's editors make the point that:²⁷

"As a tentative starting point, therefore, we would pose some fundamental questions, which might guide our reflection on how projects are conceived and how they could be conceived:

- Is there a universal explanation of what projects are and how projects evolve?
- What is the meaning behind the concepts in use, that is, the terms such as 'project', 'project management' and 'project success'?
- What are the implications of the 'mainstream' definitions of 'project' and 'project management' for the nature of knowledge and the intellectual foundations of studies of project-based organising, work and management?
- What are the consequences of project organising as currently prescribed, both for project managers and project workers?
- What alternative perspectives upon projects exist beyond the mainstream?
- Whose interests are being served by the reproduction of the status quo in the field?"

Unfortunately, it did not appear to us that any of the authors contributing subsequent chapters actually tackled the first three bullets. However, under a section headed "Accounting for the failure of project management", the editors also observed:²⁸

"Despite a high level of research enthusiasm against the background of instrumental rationality in decision-making and control, it is increasingly apparent that accepting and applying such orthodoxy does not eliminate project failures, nor does it guarantee project success (Williams, 2004)."

We think it is quite unfair to the project management community to keep harping on the high levels of project failure, when the identification of "failure" (and hence success) is frequently misdirected, or not defined at all. In any case, projects in general have varying levels of risk, which implies risks of failure. If some part of a project has only, say, a 60% probability of success, even though the potential payoff warrants that kind of risk taking, then it follows that some 40% of like undertakings must be expected to fail. Entrepreneurial undertakings, product development and seeking new drugs, to say nothing of modern Olympics, are all good examples of high-risk projects.

A useful postscript

Interestingly, Peter Morris himself wrote an *Afterword* to the book, and in a section titled: "*The model of project management*" he observed:²⁹

"Most [of the authors in the book] take the *PMBOK Guide* (PMI, 2004) as *the* formal model of project management. On the face of it this is not unreasonable; it is the model of the largest professional society. Yet it is simplistic, and has been criticised as such (Morris, 2001; Williams, 2004)."

We are in no rush to defend the PMBOK Guide, but we do suggest that it is this very simplicity that has not been researched simplistically enough. If we do not have a satisfactory and common understanding of what a "project" and "project management" really are, *and* an accepted *theory* to bind the two together, how can we possibly maintain that we have a unique discipline, let alone (heaven forbid) a recognized profession?

Why is this so important? It is important because a solid foundation is essential if we are to teach the subject effectively. And do so without bolstering the subject (as so many authors and lecturers are wont

to do) by transgressing with war stories into the many domains of technology management ranging from engineering and construction to information technology. A true discipline does not require this encumbrance.

We have no quarrel with those who wish to write books of case studies of project successes and failures, or "how-tos" on managing various technologies, these all have valuable insights for the practitioners in their respective areas. However, we do have trouble when tomes are put out under the banner of project management without qualification. We find that information technology "experts" are particularly guilty of this.

But more importantly, we need to get across theory-based concepts of project management to the next generation of students, especially in high schools, such that these concepts are *internalized at an early age*. Only in this way will such ideas as *scope, quality, time and cost monitoring and redirection*, as well as such notions as *research of previous lessons learned before starting* and *risk assessment* become a matter of application and habit. Habits that are applied *instinctively* in any of the areas of project management application. In short, these should be life skills. This should be our road to project management of the future, not just more conferences, papers and books galore.

At the same time, we should be trying to establish what we *should* to be doing, rather than what we *are* currently doing. That includes a more universal understanding of the difference between managing the technology and managing the project and, more particularly, where the boundary between the two is or what it looks like. This would, we think, also solve many of the evident conundrums to be found in the works of many authors.

Of course, some will argue that project and technology management are inseparable. And indeed in practice they really are. But that is the same with the human body. The functioning heart is inseparable from the rest of the body and is clearly meaningless with out it, but that doesn't stop us studying it in exquisite detail.

So we need research to be done to establish just exactly what is meant by "project" and by "project management" – and done at the most fundamental level.

Summary

In support of the need for the suggested research above, we recently came across this statement:³⁰

"As we saw it, one explanation for why Dominant Project Management does not work especially well on most Construction Projects is that the underlying Ideology is intentionally designed for mass appeal: to work for "most projects most of the time,"(2) across any number of disparate Project Types and different industries. These generalities of principle and recommended practices render Dominant Project Management, as a coherent system, far too non-specific to support the intense operational demands of the typical construction project."

Note: "Dominant Project Management" refers to the classic views expressed by established project management associations.

If what the author says is true, and we believe it to apply to many areas of project management application, then this confirms our view that we need to do work to make "Dominant Project Management" much less "non-specific" to projects in most domains. Indeed, we might even end up with

a pared down PMBOK Guide that is of actual practical use.

To this end, perhaps:

1. The editor of PMI's PMJ (or any other institution for that matter) could put out a call for a PMJ research paper that would take a closer look at the fundamentals of "project" and "project management". This would be with a view to proposing a generic or universal theory, or theories, that would be distinctive and useful, that conjoins the two, and from which we may deduce one or more guiding principles for the better management of projects.
2. Similarly, perhaps the PMJ editor would invite a research paper that would examine and support (or refute) the distinction between the "Project management processes" (in our view, the managing of the project) and the "product-oriented processes" (in our view, the managing of the technology) as described in the PMBOK Guide, Fifth Edition, 2013, p47. And if supported, then map the practical boundary between the two in some typical projects as the two streams march forward in lockstep.

Simple, or simplistic, as these two suggestions may sound, we believe that the results would go a long way towards responding to the opening thoughts in the Hodgson and Cicmil book, namely:

- Is there a universal explanation of what projects are and how projects evolve?
- What is the meaning behind the concepts in use, that is, the terms such as 'project', 'project management' and 'project success'?
- What are the implications of the 'mainstream' definitions of 'project' and 'project management' for the nature of knowledge and the intellectual foundations of studies of project-based organising, work and management?

Indeed, we believe that these are essential and long over due steps towards solidifying a common basis for a sound project management discipline, and the improvement of project performance generally. At least this would be valuable for the majority of small to medium sized projects that would not then be confounded by the sometimes excessive and unnecessary complexity of institutionalized "standard" approaches.

R. Max Wideman,
FCSCE, FEIC, FICE, FPMI

¹ Morris, Peter W. G., & Joana Geraldi, *Managing the Institutional Context for Projects*, Project Management Journal, published by the Project Management Institute, Philadelphia, USA, December 2011, pp20-32

² Professor Dr. Peter Morris and Dr. Joana Geraldi are both from the Bartlett School of Construction and Project Management, University College London, London, UK

³ "Front end" refers to that part of the project life span that is at the very beginning, or even just before it, depending on when the organization responsible for the project, deems it to "start".

⁴ Morris, et al, p20

⁵ Ibid, p24

⁶ Dr. Peter Morris is a long-time and respected friend of ours.

⁷ Message sent by Email, July 7, 2012

⁸ Where "control" means to receive feedback (or monitor) and adjust.

⁹ http://en.wikipedia.org/wiki/Henri_Fayol accessed 8/23/12.

¹⁰ Ibid.

¹¹ *A Guide to the Project Management Body of Knowledge*, ("PMBOK" and "PMBOK® Guide") Fourth Edition, Project Management Institute, 2008, p39

¹² A sequence that regrettably is consistently confused with the generic phases of the project life span.

¹³ Such a test would correspond to Stage 3 of the six-stage development of a mature science or discipline.

<http://www.maxwideman.com/musings/scientific.htm> paraphrased from Scientific method:

http://en.wikipedia.org/wiki/Scientific_method both accessed 8/23/12.

¹⁴ PMBOK, p5 and p434

¹⁵ *Wideman Comparative Glossary of Project Management Terms v 5.5* available through PayPal at

http://www.maxwideman.com/pmglossary/new_info.htm accessed 8/23/12

¹⁶ Toffler (1970); Minzberg (1979); Nonaka & Takeuchi (1995)

¹⁷ Weber 1949)

¹⁸ Note that "effectiveness" precedes "efficiency" because *effectiveness* is built into the project during its definition phase before *efficiency* can be achieved in the project's execution.

¹⁹ On the PMForum web site, now defunct.

²⁰ http://www.maxwideman.com/papers/first_principles/principles.htm Accessed 8/23/12

²¹ <http://www.maxwideman.com/guests/pmprinciples/theories.htm> accessed 8/23/12

²² <http://www.leanconstruction.org/pdf/ObsoleteTheory.pdf> accessed 8/23/12

²³ Ibid.

²⁴ <http://www.maxwideman.com/papers/principles/intro.htm> Accessed 8/23/12

²⁵ *PMBOK® Guide Fifth Edition*, Project Management Institute, Philadelphia, USA, 2013, Section 3, pp47-48

²⁶ Hodgson, D., and Cicmil, S., *Making Projects Critical*, Palgrave Macmillan, Hampshire and New York, 2006.

Item #14 in the Appendix. Unhappily, the content of this book is very "unfriendly" due to poor editing and presentation.

²⁷ Ibid, p3

²⁸ Ibid, p6

²⁹ Ibid, p336

³⁰ Woolf, Murray B., *CPM Mechanics: The Critical Path Method of Modeling Project Execution Strategy*, ICS-Publications, <http://www.cpmmechanics.com/>, accessed 8/26/12, p4