FOUNDATIONS OF
PROJECT MANAGEMENT RESEARCH

SHEDDING NEW LIGHT WITH A REFLEXIVE OUTLOOK

Second edition

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Contents

Foreword

In 2012, the Université du Québec en Outaouais awarded me a prize for excellence to underscore my teaching contributions. In May of 2013, the bursary that accompanied this prize allowed me to travel to meet Mats Alvesson and his colleagues at the University of Lund.

This visit to Sweden gave me the opportunity to reinforce a guiding principle of my contributions to the development of graduate studies in management and project management, namely, that one must take a different view of research in these fields, which in turn requires reflexive and creative analyses of the underlying foundations of management and project management.

In order to meet this challenge, researchers must possess, on the one hand, the knowledge required to define the foundational bases of research, and on the other hand, the analytical ability and the willingness to question them. This is why I have divided the present document into 13 chapters (not counting the Conclusion) each of which uses carefully selected texts to deal with different principles that serve as the underlying foundations of project management research. These texts are accompanied by a list of questions that allow readers to properly define these principles, before proceeding to question them based upon different viewpoints.

In this second edition, reading lists have been updated. The first chapter deals with the history and specificity of project management, while Chapter 2 defines the scope of project management's different ontological positions. Chapters 3 to 7 present the different epistemological positions presently in vogue in project management. Since I believe that societal factors shape the manner in which we theorize regarding project management, Chapters 8 to 13 contain a review of the different theoretical perspectives of a project and its management, all of which is also related to the different conceptions of societies. Finally, the Conclusion calls for a summarizing exercise.

1

History and Specificities of Project Management

According to Morris (2013, p. 27), 'Project management as a term seems to first appear in 1952-1953, in the US defence-aerospace sector'. For Bredillet (1999), and among others, project management is a field and discipline distinguished from management or even from operations management by virtue of its dynamic definitions and evolution. The first part of this Chapter gives a list of readings that deal with the history and specificity of project management. In the second part of the Chapter you will find a list of questions that should serve to orient your analytical reflections. For those who subsequently would like to delve more deeply into the issues raised, we offer a third section listing supplementary readings.

Readings

(i) **Project management as a field**

Bredillet, C. (2002). Mapping the dynamic of Project Management Field: Project Management in action. In *Proceedings of PMI Research Conference: Frontiers of Project Management Research and Application*, Project Management Institute, Seattle, Washington.

Kwak, Y. H., & Anbari, F. T. (2009). Availability-impact analysis of project management trends: Perspectives from allied disciplines. *Project Management Journal, 40*(2), 94-103.

Morris, P. W. (2013). *Reconstructing Project Management*. West Sussex, UK: Wiley-Blackwell. (pp. 231-233).

(ii) **The history of project management**

Morris, P. (2010). A Brief History of Project Management. In P. W. G. Morris, J. K. Pinto & J. Söderlund (dir.), *The Oxford Handbook of Project Management* (pp. 15-36). New York, USA: Oxford University Press.

Questions for analytical reflexion

History and specificity of project management

    (1) What is a "field"?

    (2) In what ways does a scientific field differ from other fields of endeavour?

    (3) Should the concepts of "disciplinary" and "domaine" be seen as different from the concept of "scientific field"?

    (4) How would one define the "disciplinary field" or else the "scientific field" (depending on your reflexions on the preceding question) that is project management?

    (5) What about the history of project management?

    (6) In what way does historical analysis cast light on the dynamics and evolution of the disciplinary field of project management?

Strategic analyses of positions occupied within the field of project management

    (7) What strategic position(s) do students occupy in the field of project management?

    (8) Taking into consideration only the project that you wish to undertake, which strategic postion(s) do you feel you occupy in the field of project management?

    (9) If you have a wish or desire to leave the beaten path in terms of project management research, in which strategic positions does this (or would this) place you?

    (10) What conclusion(s) have you reached concerning the strategic direction you should give to your career in project management research?

Supplementary readings

Bredillet, C. N. (2008). Mapping the dynamics of the project management field: Project management in action (part 1). *Project Management journal, 39*(4), 2-4.

Bredillet, C. N. (2009a). Mapping the dynamics of the project management field: Project management in action (part 2). *Project Management journal, 40*(2), 2-6.

Bredillet, C. N. (2009b). Mapping the dynamics of the project management field: Project management in action (part 3). *Project Management journal, 40*(3), 2-5.

Bredillet, C. N. (2009c). Mapping the dynamics of the project management field: Project management in action (part 4). *Project Management journal, 40*(4), 2-5.

Bredillet, C. N. (2010a). Mapping the dynamics of the project management field: Project management in action (part 5). *Project Management journal, 41*(1), 2-4.

Bredillet, C. N. (2010b). Mapping the dynamics of the project management field: Project management in action (part 6). *Project Management journal, 41*(2), 2-4.

Kozak-Holland, M. (2011). *The History of Project Management.* Oshawa, Canada : Multi-Media Publications Inc.

Kwak, Y. H., & Anbari, F. T. (2008). *Impact on project management of allied disciplines: tends and future of project management practices and research.* Newtown Square, USA: PMI.

Morris, P. W. (2013). *Reconstructing Project Management.* West Sussex, UK: Wiley-Blackwell.

Walker, D., & Dart, C. J. (2011). Frontinus – A project Manager From the Roman Empire Era. *Project Management journal, 42*(5), 4-16.

On-line

http://www.lessons-from-history.com/

Section I

THE ONTOLOGICAL FOUNDATIONS

OF PROJECT MANAGEMENT RESEARCH

According to Grix (2002) ontological reflexions must precede those of an epistemological nature. In project management, texts dealing with ontology are far from numerous. However, when we look closely at the various definitions that are proposed for a project and its management, we realize that all of these definitions rest on a postulate regarding reality: the reality of the project exists in itself (it is concrete, stable and universal); it exists for ourselves, etc. Those rare works which deal with project management ontology are difficult to understand. Be adventurous!

Figure 1: The interrelationship between the building blocks of research

| Ontology | → | Epistemology | → | Methodology | → | Methods | → | Sources |

What's out there to know?

What and how can we know about it?

How can we go about acquiring that knowledge?

Which precise procedures can we use to acquire it?

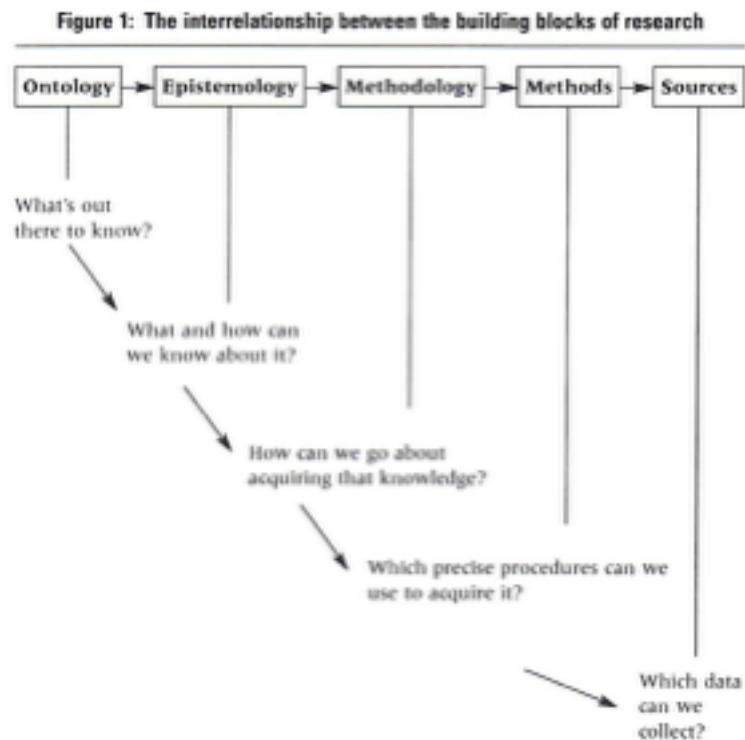Which data can we collect?

Illustration after Grix (2002), p. 180.

2

Ontology in Project Management

The first part of this chapter presents a list of readings that deal with the question of ontology in project management. In the second part, you will find a series of questions designed to spur your analytical efforts. A text by Gauthier and Ika (2012), which seeks to integrate the different ontological postures in project management, is suggested as further reading.

Readings

Blomquist, T., & Lundin, R. A. (2010). Projects - real, virtual of what? *International Journal of Managing Projects in Business, 3*(1), 10-21.

Burrell, G., & Morgan, G. (1979). *Sociological Paradigms and Organizational Analysis*. New York, USA: Heinemann. (p. 4).

Linehan, C., & Kavanagh, D. (2006). From project ontologies to communities of virtue. In D. Hodgson & S. Cicmil (dir.), *Making Projects Critical* (pp. 51-67). New York, USA: Palgrave.

Questions for analytical reflexion

Ontology in project management

(1) What about realism, nominalism (or conventionalism)?

(2) What forms are taken by realist and nominalist ontologies in project management?

(3) What about virtualist ontology in project management?

(4) What about the ontology of being and becoming as applied to project management?

Your research vs. ontological positions in project management

(5) Based on the elements described in this chapter, describe your ontological conception of projects and their management.

(6) When setting up a research problem, one tends, whether implicitly or explicitly, to attribute more importance to certain authors.

    (6.1) Identify one or two authors whose works are important pillars in the building of your research problematic.

    (6.2) What is the ontological position taken by this (or these) author(s)?

    (6.3) Does it tend to match your ontological position?

    (6.4) What are the limits of the ontological positions taken by your preferred author(s)?

Getting project management research off the beaten path : Thinking outside the box

(7) Propose and discuss an "ontological" position that allows you to get your research work off the paths already established by your preferred author(s).

Supplementary readings

Bredillet, C. N. (2010). Blowing Hot and Cold on Project Management. *Project Management Journal*, 41(3), 4-20.

Gauthier, J.-B. & Ika, L. (2012). Foundations of Project Management Research: An Explicit and Six-Facet Ontological Framework. *Project Management Journal, 43*(5), 5-23.

Morris, P. W. (2013). Reconstructing Project Management. West Sussex, UK: Wiley-Blackwell.

Section II

EPISTEMOLOGICAL FOUNDATIONS
OF PROJECT MANAGEMENT RESEARCH

There exists a multitude of discourses regarding scientific knowledge, and they pursue different objectives. Some want to bring forth Truth; others try to identify a demarcation line between scientific knowledge and other forms of knowledge. Others maintain that knowledge is the fruit of human interaction. The list is long. In this section, we shall limit our reflections to those epistemological movements that appear to be central to our discussions regarding project management, namely, inductivism, positivism, neo-positivism, fasificationism (also called critical rationalism), the structure of scientific revolutions, and the various constructivisms.

3

Epistemological Foundations

Epistemology is a subject close to the heart of Christophe Bredillet. But what significance are we to attribute to this notion? Such is the purpose of the present Chapter. The first part of this Chapter offers a list of readings that enter upon the subject of the epistemological foundations of project management research. In the second part of the Chapter, you will find a series of questions that should help direct your reflective exercises.

Readings

(i) What is epistemology?

Johnson, P., & Duberley, J. (2000). *Understanding Management Research : An Introduction to Epistemology*. London, UK: Sage Publications. (pp. 1-10).

(ii) Epistemology and project management

Smyth, H. J., & Morris, P. W. G. (2007). An epistemological evaluation of research into projects and their management: Methodological issues. *International Journal of Project Management*, *25*(4), 423-436.

Bredillet, C. N. (2006). The link research-practice: A matter of "Ingenium" (Part 2). *Project Management Journal*, *371*(5), 3-4.

(iii) Inductivism and empiricism

Chalmers, A. F. (2013). *What is this thing called Sciences ? (4th Edition)*. Indianapolis, USA: Hackett (pp. 38-54).

Questions for analytical reflexion

Epistemology in project management

(1) How should we define epistemology?

(2) What is the importance of an epistemological reflection in the context of generating scientific knowledge about project management (generally speaking) and (more specifically) in the context of your own research?

(3) What linkages can we make between ontology and epistemology?

Inductivism in project management

(4) What does inductivism consist of?

(5) What links should be established in project management between inductivism and scientific knowledge?

(6) What interesting aspect of inductivism allows you to re-examine the object of your research from a new vantage point?

Supplementary readings

Morris, P. W. (2013). *Reconstructing Project Management*. West Sussex, UK: Wiley-Blackwell.

4

Positivisms

In their analyses, Smyth and Morris (2007) put the emphasis on positivism. But what is it? Is the description given by Smyth and Morris a correct one? In this Chapter, we will explore the different positivist movements. The first part of this Chapter offers a list of readings that deal with positivist epistemologies. In a second part of the Chapter, you will find a series of questions that should help direct your reflective exercises.

Readings

(i) Comte's positivism

Turner, J. H., Beeghley, L. & Powers, C. H. (2012). *The Emergence of Sociological Theory (7th Edition)*. Los Angeles, USA: Sage Publications (pp. 19-54).

(ii) Neo-positivism

Hahh, H., Carnap, R. & Neurath, O. (1985). *The Scientific Conception of the World: The Vienna Circle*. In S. Sarkar (Dir.), *Science and Philosophy in the Twentieth Century* (pp. 321-341). Boston, USA: Havard University.

Questions for analytical reflexion

Positivisms in project management

(1) What do the various schools of positive epistemology consist of?

(2) What does each of these schools propose?

(3) Where should one situate positivist epistemologies in relation to inductivism?

(4) What about the importance of positivist epistemological foundations in project management in general?

Getting project management research off the beaten path : Thinking outside the box

(5) What about the importance of positivist epistemological foundations for your research in particular?

(6) (Those who identify with positive epistemological positions are invited to skip over this question to the following one.) What is to be found in the positivist epistemological positions that would allow you to get your research work off the beaten paths already laid down by your preferred author(s)?

(7) How would an "inductivist" epistemological position allow you to get your research work off the beaten paths already laid down by the positivists?

5

Falsificationism

It is quite obvious that the empirical, logical viewpoint is not unanimously accepted. Karl Popper is certainly one of the most famous opponents of logical positivism. In order to make up for the limits of logical positivism, Popper proposes critical rationalism (we still continue to praise reason, the cognitive operator of modernity – see Chapter 8)! Here then is the subject of this fifth chapter. The first part of the chapter offers a list of readings dealing with falsificationism as proposed by Karl Popper. In the second part of the chapter, you will find a series of questions that should help direct your reflective exercises. For those who would like to further delve into the questions raised, the third part of the chapter offers complementary readings.

Readings

Chalmers, A. F. (2013). *What is this thing called Sciences ? (4th Edition).* Indianapolis, USA: Hackett (pp. 55-96).

Questions for analytical reflexion

Falsificationism in project management

    (1) What does falsificationism consist of?

    (2) Where should one situate falsificationism with regard to inductivism and positivisms?

    (3) What about the importance of the epistemological foundations of fasificationism for project management in general?

(4) What about the importance of the epistemological foundations of falsificationism for your research in particular?

(5) (Those who identify with the epistemological falsificationist position are invited to skip over this question to the following question for reflection.) What is to be found in the epistemological "falsificationist" position that would allow you to get your research work off the beaten paths already laid down by your preferred author(s)?

(6) How would an "inductivist" or "positivist" epistemological position allow you to get your research work off the beaten paths already laid down by the positivists?

Supplementary readings

Popper, K. (1959). *The Logic of Scientific Discovery*. Toronto, Canada : University of Toronto press

Popper, K. (1965). *Conjectures and Refutations. The Growth of Scientific Knowledge*. London, UK : Routledge.

6

Constructivisms

The opposition between positivism (here read logical positivism) and constructivism is the subject of many writings that set aside all the other epistemological viewpoints we have examined in the foregoing chapters. Some authors, without compunction, simply reduce positivism to objectivity and constructivism to subjectivity. Others, as for instance Bredillet (2010), distinguish between constructivism and subjectivism. And while positivism is expressed variously by different schools, the same may be said of constructivism. At any rate, we here prefer to speak of constructivisms. Subjectivism, henceforth considered a multi-faceted epistemological approach, may, following Bredillet's example, be repositioned under the label of "constructivism"!

The first part of the present chapter offers a list of readings dealing with constructivisms. In a second part you will find a series of questions that should help direct your reflective exercises. For fear of being accused of ignoring one constructivist school or another, no complimentary readings are suggested. One need only enter the word "constructivism" in a search engine in order to generate a long list of references.

Readings

Lincoln, Y. S. & Guba, E. G. (2013). *The constructivist credo*. Walnut Creek, USA : Left Coast Press, Inc. (pp. 1-82).

Bredillet, C. N. (2010). Blowing Hot and Cold on Project Management. *Project Management Journal, 41*(3), 4-20

Wheelahan, L. (2009). The Problem with Competency-Based Training (and Why Constructivism Make Things Worse!). *Journal of Education and Work, 22*(3), 227-242.

Questions for analytical reflexion

Constructivism in project management

(1) What do the different constructivist epistemologies consist of?

(2) Where should one situate constructivist viewpoints in relation to positivist epistemologies?

(3) What about the importance of constructivist epistemologies for project management in general?

Getting project management research off the beaten path : Thinking outside the box

(4) What about the importance of constructivist epistemologies for your research in particular?

(5) (Those who identify with the constructivist epistemological positions are invited to skip over this question to the following question for reflection.) What is to be found in the constructivist epistemological positions that would allow you to get your research work off the beaten paths already laid down by your preferred author(s)?

(6) How could a "positivist" epistemological position or even a "Popperian" position allow you to get your research work off the beaten paths already laid down by the constructivists?

7

Theories as Scientific Structures

&

Sophisticated Falsificationism

Just as with logical positivism, Karl Popper's critical rationalism also has its detractors. This is the case with the constructivists including Thomas Kuhn who was interested in the construction of science (Nye, 2012). It is interesting to note that Kuhn's ideas encapsulate a principle previously espoused by August Compte: namely, that all areas of knowledge pass through stages of development. Imre Lakatos, for his part, proposes sophisticated falsificationism as a viewpoint that can simultaneously conciliate the logical process of scientific discovery of reality (Popper) with the social construction of science (Kuhn).

The first part of the present Chapter presents a list of readings which deal with Kuhn's viewpoint and with sophisticated falsificationism. In the second part, you will find a series of questions that should help direct your reflective exercises. For those who would like to further delve into the questions raised, the third part of the Chapter offers complementary readings.

Readings

(i) Theories as structures and sophisticated falsificationism in general

Chalmers, A. F. (2013). *What is this thing called Sciences ? (4th Edition).* Indianapolis, USA: Hackett (pp. 97-137).

(i) Theories as structures and sophisticated falsificationism in project management

Anagnostopoulos, K. P. (2004). Project Management: Epistemological Issues and Standardization of Knowledge. *Operational Research, 4*(3), 249-260.

Bredillet, C. N. (2006). The link research-practice: A matter of "Ingenium" (Part 1). *Project Management Journal, 37(*4), 3-4.

Questions for analytical reflection

"Theories as scientific structures" and sophisticated falsificationism in project management.

(1) What are the results of Thomas Kuhn's historical analysis of science?

(2) Where should one situate Kuhn's viewpoint in regards to Karl Popper's falsificationism?

(3) What does Imre Lakatos' viewpoint consist of, and how does it succeed in reconciling Popper's and Kuhn's viewpoints?

(4) What about the importance of the Kuhn viewpoint and of sophisticated falsificationism regarding project management in general ?

Getting project management research off the beaten path : Thinking outside the box

(5) What about the importance of the Kuhn viewpoint and of sophisticated falsificationism for your research in particular?

(6) (Those who identify with the epistemological positions espoused by Kuhn and/or Lakatos are invited to skip over this question to the following question for reflection.) What can one find in the epistemological positions of Kuhn and of Lakatos that would allow you to get your research work off the beaten paths already laid down by your preferred author(s)?

(7) How would an "inductivist" or "positivist" epistemological position or even Popper-style falsificationism allow you to get your research work off the beaten paths already laid down by the supporters of Kuhn and/or Lakatos?

Supplementary readings

Biendenbach, T., & Müller, R. (2011). Paradigms in projects management research : exemples from 15 years in IRNOP conferences. *International Journal of Managing Projects in Business, 4*(1), 82-104.

Kuhn, T. (2012). *The Structure of Scientific Revolutions*. Chicago, USA : The University of Chicago Press Books.

Lakatos, I. (1987). *Criticism and the growth of knowledge : International Colloquium in philosophy of science, Cambridge*, Angleterre : Cambridge University Press.

Pollack, J. (2007). The changing paradigms of project management. *International Journal of Project Management, 25*(3), 266-274.

The Notion of Paradigms

Project management deals a great deal in paradigms. In this respect, project management is no different from the other social sciences since the use of the word "paradigm" in management and project management refers us back to the now-classic essay by Burell and Morgan (1979) Sociological Paradigms and Organizational Analysis as well as, in terms of time and place, to The Structure of Scientific Revolutions by Thomas Kuhn. For Burell and Morgan (1979) the social world can be represented using four paradigms: the "Functionalist", the "Interpretive", the "Radical Humanist" and the "Structuralist" paradigms. Bredillet (2006), for his part, proposes that the concept of paradigm can also be defined in terms of Gestalt.

Section III

THE "THEORETICAL" FOUNDATIONS
OF PROJECT MANAGEMENT RESEARCH

Thinking societal worlds, thinking project management

Over the past few years we have witnessed the publication of different theories that deal specifically with projects and their management. At the beginning of the 2000s, there was a marked absence of theories in project management. Today, in contrast, the piecemeal variety of theories that are put forward leads certain authors to call for the establishment of consensus around homogenous theoretical commonalities. But does that which is labeled a "theory" by project management authors display the characteristics of a real theory? The following chapters are structured around the following principle: namely, that the history of thought in the field of project management is linked to the history of sociological thought.

According to Sutton & Staw (1995), a theory is not. . .

> A collection of references;
> Data;
> A list of variables or a construct;
> A diagram, a drawing or a figure;
> Hypotheses

However, Weick (1995, p. 389) notes that "(t)he process of theorizing consists of activities like abstracting, generalizing, relating, selecting, explaining, synthesizing, and idealizing. The ongoing activities intermittently spin out reference lists, data, lists of variables, diagrams, and lists of hypotheses. Those emergent products summarize progress, give direction, and serve as place markers. They have vestiges of theory but are not themselves theories." For more details on the construction of theories, the reader is invited to consult the following site: http://aom.org/Publications/AMR/Theory-Building-Resources.aspx

8

Modernity and Instrumental Rationality: Tradition in Project Management

Tradition may be defined as that set of practical knowledge and techniques whose objective is to accomplish projects. This collection of knowledge is organized by the cognitive driver of modernity: instrumental rationality. Modernity (and by extension the theories it espouses) rests upon singular ontological, epistemological, and methodological concepts. The first part of this chapter offers a list of readings which deal with tradition in project management. In the second part, you will find a series of questions that should help direct your reflective exercises. Those who wish to develop a deeper understanding of the corpus of knowledge sources will find a helpful listing in the third part of the present chapter.

Readings

Venn, C. & Featherstone, M. (2006). Modernity. *Theory, Culture & Society, 23*(2-3), 457-476.

Ingason, H. T., & Jonasson, H. I. (2009). Contemporary knowledge and skill requirements in project management. *Project Management Journal, 40*(2), 59-69.

Morris, P. W. G., Crawford, L., Hodgson, D., Shepherd, M. M., & Thomas, J. (2006). Exploring the role of formal bodies of knowledge in defining a profession - The case of project management. *International Journal of Project Management, 24*(8), 710-721.

Questions for analytical reflexion

Tradition and modernity in project management

(1) What are the major characteristics of modernity?

(2) What is the architecture of project management tradition?

Getting project management research off the beaten path : Thinking outside the box

(3) On what ontological base does modernity stand?

(4) What is the link between modernity's ontological base and tradition in project management?

(5) (Those who feel their work is based on the concept of tradition are invited to skip to the next reflective question.) What are the strong points of tradition?

(6) What are the limits of tradition?

Supplementary readings

Morris, P. W. (2013). *Reconstructing Project Management*. West Sussex, UK: Wiley-Blackwell.

9

Situational Update on Project Management Research: Is it Breaking Away from Tradition?

In the previous Chapter, we noted that tradition has practical origins and that knowledge is instrumental, having as its objective to optimize the accomplishment of projects. But where should we situate research in relation to all of this? This is an important question because, when we throw ourselves body and soul into producing a paper, we are involving ourselves in research. So it is necessary to understand what our engagement in project management consists of! The first part of the present Chapter presents a list of readings dealing with research in project management. In the second part, you will find a series of questions that should help direct your reflective exercises.

Readings

Kwak, Y. H., & Anbari, F. T. (2009). Analyzing project management research: Perspectives from top management journals. *International Journal of Project Management, 27*(5), 435-446.

Morris, P. W. G., Jamieson, A., & Shepherd, M. M. (2006). Research updating the APM Body of Knowledge 4th ed. *International Journal of Project Management, 24*(6), 461-473.

Söderlund, J. (2002). On the Development of Project Management Research: Schools of Thought and Critique. *International Project Management Journal, 20*(6), 20-31.

Söderlund, J. (2004a). Building theories of project management: past research, questions for the future. *International Journal of Project Management, 22*(3), 183-191.

Söderlund, J. (2004b). On the broadening scope of the research on projects: a review and a model for analysis. *International Journal of Project Management, 22*(8), 655-667.

Shenhar, A. J., & Dvir, D. (2007). Project Management research - The Challenge and Opportunity. *Project Management Journal, 38*(2), 93-99.

Turner, R. J. (2010). Evolution of project management research as evidenced by papers published in the International Journal of Project Management. *International Journal of Project Management, 28*(1), 1-6.

Questions for analytical reflexion

State of project management research

(1) What about project management research?

•Study themes

•Ontological bases

•Epistemological foundations

•Theoretical frameworks

•Methodological approaches

Points of departure from tradition: is project management research getting off the beaten path ?

(2) What does the ontological basis of modernity consist of ?

•Study themes

•Ontological bases

•Epistemological foundations

•Theoretical frameworks

•Methodological approaches

List of Principal Project Management Periodicals

International Journal of Managing Projects in Business

International Journal of Project Organization and Management

International Journal of Project Management

Project management Journal

Projectics

The Journal of Modern Project Management

10

Projects and their Management : Contingency & Scandinavian Schools

Parkendorff (1996) sets out three limitations to project management carried on up to that time (in other words, until 1996!): research is founded on the principle of universality of project management; the absence of empirical studies on projects and the absence of alternative conceptions of projects. This is basically saying that projects are crimped by their environment. Is this sufficient to warrant a break with tradition and a heightened importance for instrumental reason? Whatever the case, the accomplishment of a project, its successful completion, cannot be realized without adjusting its management in response to certain environmental considerations. The first part of this Chapter offers a list of readings that cover the work of leading authors on contingency in project management. In the second part, you will find a series of questions that should help direct your reflective exercises.

Readings

Packendorff, J. (1996). Inquiring into the temporary organization: New directions for Project Management research. *Scandinavian Journal of Management, 1*1(4), 319-334.

Shenhar, A. J. (2001). One size does not fit all projects: exploring classical contingency domains. *Management Science, 47*(3), 394-414.

Engwall, M. (2003). No project is an island: linking projects to history and context. *Research Policy, 32*(5), 789-808.

Sauser, J. J., Reilly, R. R., & Shenhar, A. J. (2009). Why projects fail? How contingency theory can provide new insights - A comparative analysis of NASA'S Mars Climate Orbiter loss. *International Journal of Project Management, 27*(7), 665-679.

Questions for analytical reflexion

Contingency and Scandinavian School in Project Management

(1) How can we define the Scandinavian School beginning with (i) Parkendorff (1996)?

(2) What do the contingency viewpoints of (ii) Shenhar (2001) and Sauser (2009), and (iii) Engwall (2003) consist of?

(3) At which points do the views advanced by these three groups of authors ((i) Parkendorff, (ii) Shenhar & Sauser, (iii) Engwall) converge and diverge?

(4) Upon what epistemological and ontological rationales are the works of the three groups of authors based?

(5) Can contingency theory be considered "modern" in the same way as tradition (and if so why)?

Getting project management research off the beaten path : Thinking outside the box

(6) What are the limits of contingency & Scandinavian School in project management?

(7) (Those who feel their work is based on the concept of contingency or Scandinavian School are invited to skip to the next reflective question.) What is to be found in contingency theory or Scandinavian School that allows you to take your research work off the beaten paths already laid down by your preferred author(s)?

(8) How could tradition allow you to take your research off the beaten paths already laid down by contingency or Scandinavian School?

Supplementary readings

Shenhar, A. J. et Dvir, D. (2007). *Reinventing Project Management.* Boston, USA: Havard Business School Press.

Morris, P. W. (2013). *Reconstructing Project Management.* West Sussex, UK: Wiley-Blackwell.

11

'Making Project Critical' and the critique of tradition in project management

At the beginning of the 2000s a series of 'Making Project Critical' workshops were organized, and based upon these workshops the critical movement in project management was able to establish itself. Sage, Dainty and Brookes (2010) identify two axes in the critical movement. The first axis, anchored in the critical theory of the Frankfort School, criticizes the bureaucratic, rationalist-instrumental, technical and normative frameworks of tradition in project management (Sage, Dainty and Brookes, 2010). The second axis, for its part, regards the practice of project management from the vantage point of tacit knowledge and reflexivity (Sage, Dainty and Brookes, 2010). Chapter 13 will deal with this second axis.

The first part of this chapter offers a list of readings which deal with the works of authors who are in the 'Making Project Critical' (MPC) stream and who adhere to the first axis. In the second part, you will find a series of questions that should help direct your reflective exercises. Supplementary readings are suggested in the third part for those who would like to eventually deepen their understanding of the questions involved.

Readings

Agger, B. (1991). Critical Theory, Postructuralism, Postmodernism: Their Sociological Relevance. *Annu. Rev. Sociol., 17*, 105-111.

Cicmil, S. & Hodgson, D. (2006). Making projects critical: an introduction. In D. Hodgson et S. Cicmil (dir.), *Making Projects Critical* (pp. 1-25). New York, USA: Palgrave.

Hodgson, D., & Cicmil, S. (2007). The Politics of Standard in Modern Management: Making 'The Project' a Reality. *Journal of Management Studies, 44*(3), 431-450.

Questions for analytical reflexion

Critical Theory in Project Management

(1) What does critical theory in social sciences consist of?

(2) What do critical theory and 'Making Project Critical' have in common?

(3) What forms do bureaucratic, rationalist-instrumental, technical and normative criticism of management borrow from project management tradition?

(4) What are the epistemological and ontological rationales upon which 'Making Project Critical' is based?

(5) Can critical theory and the projects of 'Making Project Critical' that follow in its wake be qualified as 'modern' in like manner as tradition? If so, why?

Getting project management research off the beaten path : Thinking outside the box

(6) What are the limits of critical theory in project management?

(7) (Those who consider that their work follows in the wake of critical theory in project management are invited to proceed to the next analysis question.) What is there in project management critical theory that allows you to direct your research work away from the beaten paths already established by the authors that you value?

(8) How does tradition allow research to depart from the beaten paths already established by critical theory in project management?

Supplementary readings

Hodgson, D., & Cicmil, S. (2006). *Making Project Critical*. New York, USA: Palgrave.

Numéro spécial (volume 9, numéro 2) de la revue *Ephemera* ayant pour titre : Project management behind the façade.

12

Postmodernism and Postructuralism:

A Second Iteration of 'Making Project Critical'

Like Guba and Lincoln (1994), Cicmil et al. (2009) stress that the critical movement is a set of perspectives that are alternatives to orthodoxy. Alvsesson and Sköldberg (2009) warn us of the dangers inherent in such syncretism. "Quite apart from the risk of confusion involved in breaking with the dominating usage of the term 'critical theory', it is not particularly helpful to lump together under the same label - as these authors do - a number of highly distinct schools, ranging from neo-Marxism and feminism to postmodernism and poststructualism (p. 177)." This is why we considered it essential to dedicate a session to Postmodernism and Postructuralism.

The first part of this Chapter suggests a series of readings that introduce the works of postmodernist and poststructuralist authors in project management. In the second part, you will find a series of questions designed to spur your analytical efforts. For those who wish to delve more deeply into the questions raised, further readings are suggested in the third part.

Readings

Agger, B. (1991). Critical Theory, Postructuralism, Postmodernism: Their Sociological Relevance. *Annu. Rev. Sociol., 17*, 111-131.

Chalmers, A. F. (2013). *What is this thing called Sciences ? (4th Edition).* Indianapolis, USA: Hackett (pp. 209-226).

Thomas, J. (2006). Problematising project management. In D. Hodgson et S. Cicmil (dir.), *Making Projects Critical* (pp. 90-107). New York, USA: Palgrave.

Questions for analytical reflexion

Postmodernism and poststructuralism in project management

(1) What do postmodernism (PM) and poststructuralism (PS) in project management consist of?

(2) What are the ontological and epistemological foundations of PS/PM in project management?

(3) Can we speak of a renewal in project management?

Getting project management research off the beaten path : Thinking outside the box

(4) How should we situate postmodernism (PM)/poststructuralism (PS) and modern theories of project management?

(5) If we analyse the products of PM/PS based on the principle (« all is but speech ») which is the principle used by these two approaches in dealing with tradition in project management, what conclusions shall we arrive at ?

(6) Given that all speech has camouflaged behind it the expression of some form of power, we can therefore ask: what is hiding behind the speech of 'Making Project Critical'?

(7) How do questions 6 to 9 allow us to direct research off the beaten paths already used by 'Making Project Critical' without falling onto the paths established by tradition?

Supplementary readings

Alvesson, Mats, & Sköldberg, Kaj. (2009). *Reflexive Methodology* (Second ed.). New York: Sage - Chapitre 6.

Buckle, Pamela, & Thomas, Janice. (2003). Deconstructing project management: a gender analysis of project management guidelines. *International Journal of Project Management, 21*(6), 433-441.

Lindgren, Monica, & Packendorff, Johann. (2006). Projects and prisons. In D. Hodgson & S. Cicmil (dirs.), *Making Projects Critical* (pp. 111-131). New York: Palgrave.

Sergi, V. (2010). *Introducing Project Management: Following the Transformation of the PMBOK'S Introduction Chapter*. Paper presented at the 5Th Making Projects Critical Workshop, Bristol, Grande-Bretagne.

Williams, T. (2005). Assessing and Moving on From the Dominant Project Management Discourse in Light of Project Overruns. *IEEE Transactions on Engineering Management, 52*(4), 497-507.

13

Hypermodernity and Project Management: Another Iteration of 'Making Project Critical'

In this thirteenth Chapter, we will not pretend that we can cover all of the works that exist under the banner of hypermodernity. Rather, we will concentrate on those that deal with three inter-related notions that have inspired certain project management authors: social practice (Project-as-Practice), reflexivity (reflexive project manager) and structuration (a new contingency theory in project management). The first part of this chapter presents a list of readings dealing with the works of leading authors on contingency in project management. In the second part, you will find a series of questions that should help direct your reflective exercises. Supplementary readings are suggested in the third part for those who would like to eventually deepen their understanding of the questions involved.

Readings

Armitage, J. (2001). Project(ile)s of Hypermodern(organ)ization. *Ephemera, 1*(2), 131-148.

Cicmil, S. (2006). Understanding Project Management Practice Throught Interpretative and Critical Research Perspectives. *Project Management journal, 37*(2),27-37.

Hällgren, H. et Söderholm, A. (2011). Projects-as-Practice. New approach, New insights. In P. Morris, J. K. Pinto et J. Söderlund (dir.), *The Oxford Handbook of Project Management* (pp. 500-518). New York, USA: Oxford University Press.

Lalonde, P.-L., Bourgault, M., et Findeli, A. (2010). Building Pragmatist Theories of Practice: Theorizing the act of Project Management. *Project Management journal, 41*(5),21-36.

Manning, Stephan. (2008). Embedding projects in multiple contexts - a structuration perspective. *International Journal of Project Management*, 26(1), 30-37.

Questions for analytical reflexion

Practice, reflexivity and structuration in project management

(1) In what way is project management a social practice?

(2) In what way is a project manager a reflexive practitioner?

(3) What does the structuring of a project consist of, and how is it a new way to conceive of contingency in project management?

(4) Is it possible to establish a link between social practice, the practitioner's reflexivity and the structuring of projects?

Getting project management research off the beaten path : Thinking outside the box

(5) What limits are there on: imagining a project as a social practice; on seeing the manager of a project as a reflexive practitioner ; or else on structuration of projects ?

(6) (Those who feel their work is based on contingency theory are invited to skip to the next reflective question.) What is to be found in project management viewed as a social practice, in reflexivity or else in the structuring of projects that would allow you to get your research work off the beaten paths already laid down by your preferred author(s)?

(7) How can tradition or else PS/PM allow one to get research off the beaten paths by putting it into the realm of hypermodernity?

Supplementary readings

Sage, Daniel, Dainty, Andrew, & Brookes, Naomi. (2010). A consideration of reflexive practice withnin the critical projects movement. *International Journal of Project Management, 28*(6), 539-546.

Sydow, J. (2006). Managing projects in network context: a structuration perspective. In D. Hodgson et S. Cicmil (dir.), *Making Projects Critical* (pp. 252-264). New York, USA: Palgrave.

Linde, A. & Linderoth, H. C. J. (2006). An Actor Network Theory perspective on IT projets. In D. Hodgson et S. Cicmil (dir.), *Making Projects Critical* (pp. 155-170). New York, USA: Palgrave.

Conclusion

Wrap up

By way of conclusion, we invite you to put forward a summary (your summary) of the material previously covered. The first part of this chapter contains a list of compulsory readings that deal with the nine (9) theoretical schools of project management. In the second part, you will find a 'Guide' to drafting a summary document. For those who find that the compulsory readings are insufficient for proper analysis or who would like to delve more deeply into the questions raised, we propose further readings in the third part of this chapter.

Readings

Bredillet, C. (2007a). Exploring Research in Project Management - Nine Schools of Project Management Research (Part 1). *Project Management Journal, 38*(2), 3-4.

Bredillet, C. (2007b). Exploring Research in Project Management - Nine Schools of Project Management Research (Part 2). *Project Management Journal, 38*(3), 3-5.

Bredillet, C. (2007c). Exploring Research in Project Management - Nine Schools of Project Management Research (Part 3). *Project Management Journal, 38*(4), 2-4.

Bredillet, C. (2008a). Exploring Research in Project Management - Nine Schools of Project Management Research (Part 4). *Project Management Journal, 39*(1), 2-6.

Bredillet, C. (2008b). Exploring Research in Project Management - Nine Schools of Project Management Research (Part 5). *Project Management Journal, 39*(2), 2-4.

Bredillet, C. (2008c). Exploring Research in Project Management - Nine Schools of Project Management Research (Part 6). *Project Management Journal, 39*(3), 2-5.

Söderlund, J. (2011). Pluralism in Project Management: Navigating the Crossroads of Specialization and Fragmentation. *International Journal of Management Reviews, 13*(2), 153-176.

Guide to Drafting the Summary

Determine the ontological and epistemological foundations of each of the theoretical foundations explored in Section III (tradition, contingency, MPC, postmodernity). In your opinion, to which general image of a project do you think each of the theoretical foundations in Section III refers, and why do you believe this? After having summarized the viewpoints of Bredillet (2007a, b, c, 2008 a, b, c) – of the nine project management schools of thought, and of Söderlund (2002, 2011), endeavour to link the theoretical foundations explored in Section III with the theoretical approaches to project management that emerge from the summary of Bredillet and of Söderlund. You must clearly identify under which label you want your research work to be identified! The following small table should be helpful in structuring your thinking.

	MODERN Project Management		Project Management and the critical school	Project Management and PS/PM	Project management and reflexive, hypermodern practice
	Tradition	Contingency	"Making Project Critical"		
Ontological Foundations					
Epistemological foundations					
Images of the project					
Theoretical schools or viewpoints (resulting from your summary of Bredillet and Söderlund)					

Supplementary readings

Turner, J.R., Anbari, F.T., & Bredillet, C. (2009). *Perspectives on Projects*. New York, USA: Routledge.

Winter, M., & Szczepanek, T. (2009). *Images of projects*. Surrey, USA: Gower.

Reference

Alvesson, M., & Sköldberg, K. (2009). *Reflexive Methodology* (Second ed.). New York, USA: Sage.

Audet, M., & Larouche, V. (1988). Paradigmes, écoles de pensée et théories en relations industrielles. *Relations industrielles, 43*(1), 3-30.

Bredillet, C. (1999). Essai de définition du champ disciplinaire du management de projet et de sa dynamique d'évolution. *Revue Internationale en gestion et management de projet, 4* (2), 6-29.

Bredillet, C. N. (2006). The link research – practice: a matter of "Ingenium" (Part 1). *Project Management Journal, 37*(4), 3-4.

Bredillet, C. N. (2010). Blowing Hot and Cold on Project Management. *Project Management Journal, 41*(3), 4-20

Burrel, G., & Morgan, G. (1979). *Sociological Paradigms and Organizational Analysis*. New York, USA: Heinemann.

Cicmil, S., Hodgson, D., Lindgren, M., & Packendorff, J. (2009). Project management behind the facade. *Ephemera, Theory* & *Politics in organization, 9*(2), 78-92.

Gauthier, J.-B. & Ika, L. (2012). Foundations of Project Management Research: An Explicit and Six-Facet Ontological Framework. *Project Management Journal, 43*(5), 5-23.

Garel, Gilles. (2003). Pour une histoire de la gestion de projet. *Gérer et comprendre* (74), 77-89.

Grix, J. (2002). Introducing students to generic terminology of social research. *Politics, 22*(3), 175-186.

Guba, E., & Lincoln, Y. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (dir.). *Handbook of Qualitative Research* (pp. 105-117). Thousand Oaks, USA: Sage.

Morris, P. W. (2013). *Reconstructing Project Management*. West Sussex, UK: Wiley-Blackwell.

Nye, M. J. (2012/2013). Michael Polanyi and the Social Construction of Science. Tradition& Discovery, 39 (1), 7-17.

Parkendorff, J. (1996). Inquiring into the temporary organization: New directions for Project Management research. *Scandinavian Journal of Management, 1*1(4), 319-334.

Sage, Daniel, Dainty, Andrew, & Brookes, Naomi. (2010). A consideration of reflexive practice withnin the critical projects movement. *International Journal of Project Management, 28*(6), 539-546.

Smyth, H. J., & Morris, P. W. G. (2007). An epistemological evaluation of project and   project management research. *International Journal of Project Management, 25*(4), 423-436.

Sutton, R., & Staw, B. (1995). What Theory is Not. *Administrative Science Quarterly, 40*(3), 371-384.

Weick, K. E. (1995). What Theory is Not, Theorizing Is. *Administrative Science Quarterly, 40*(3), 385-390.

Getting Project Management Research off the Beaten Path

Getting Project Management Research off the Beaten Paths requires us to do more than a simple summary of ontological, epistemological and theoretical bases. By adopting the methods of the Scandinavian school of reflexivity and creativity in research, we, in this document, put forward a procedure that consists of identifying the various foundations in order to subsequently "reflect" them against one another. The reason dialogic exercises are suggested is to break out of habitual patterns (critical examination most often leads from Making Project Critical (MPC) to the "mainstream"). The foundations of the "mainstream" are questioned using the bases of MPC, and the latter are themselves put into question using the bases of the "mainstream". Since we believe that project management did not generate itself independently of society, we add to the aforementioned first group of exercises a second group of exercises designed to identify the links between the history of project management thought and the history of sociological thought. The results of such work allow us to approach the foundations of project management research from a different angle.

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