This article was downloaded by: [Copenhagen Business School]
On: 09 August 2012, At: 04:26
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK

Construction Management and Economics
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/rcme20

Perspectives on Projects

Kjell Tryggestad [a]
[a] Copenhagen Business School, Denmark

Version of record first published: 30 Apr 2012

To cite this article: Kjell Tryggestad (2012): Perspectives on Projects, Construction Management and Economics, 30:5, 416-420

To link to this article: http://dx.doi.org/10.1080/01446193.2012.667568

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

others, but the feeling of being short-changed persists, nevertheless. This is due in part to the narrow range of images presented. The images and case studies used in the book stem primarily from the authors' own experience as consultants and so have a predominantly practical rather than theoretical focus and aim. Although this focus is congruent with the overall mission of the book, which is to encourage practising managers to reflect on the images they use in managing projects, some readers will feel that theoretical issues are too lightly dealt with as a result.

What is presented in terms of theory is already well established and although there is no harm in reminding us of the great contributions made by Morgan (1997), Checkland (1981) and de Bono (1971), the book does not go beyond these contributions. It certainly does not try to update their work. As a result the book also skirts around nagging theoretical issues. A question that concerned me throughout the book was the actual leverage that metaphors and images have in practical terms to shape actions. For example, does adopting the language of 'value' by project managers necessarily lead to them to focus doggedly on value, while at the same time suppressing their awareness of other aspects of the project, such as its politics or its execution as an act of intervention? The assumption that cognitive metaphors *do* have powerful shaping effects on cognition is implicit throughout the text, but never demonstrated empirically. For this reason the book needs to come with the proviso that it is itself shaped by certain assumptions about cognition——namely that cognition is malleable and vulnerable to shaping by language. It may transpire that some managers are indeed the playthings of the linguistic constructs they have adopted, but there may be just as many who can juggle and switch between project images as circumstances and expediency require. Ultimately, it cannot be assumed that there is any shaping effect on action from holding particular metaphors and images and the book provides no evidence that there is, or is not. I would go so far as to suggest that in crossing the divide between academic and practical usefulness, the authors have strayed too far from academic usefulness.

This certainly does not mean that the book is not useful, far from it. It offers an excellent structured approach for students and managers to work through and confront the different images they hold. It is an advanced project management teaching text, best suited to post-experience students, that pushes beyond 'how to' approaches into methods for thinking-though, and indeed rethinking, projects and their processes. The strength or weakness of the effects of the images suggested can also of course be debated in class.

The hardback copy of the book is expensive, although I would envisage university libraries being the biggest customer for it. I would certainly recommend it to teachers, trainers and consultants of change and project management and will, I am sure, be using it myself in the future.

References

Checkland, P. (1981) *Systems Thinking, Systems Practice*, Wiley Chichester.

de Bono (1971) *Lateral Thinking for Management*, McGraw-Hill, New York.

Morgan, G. (1997) *Images of Organization*, 2nd edn, Sage, London.

Chris Ivory
Newcastle University Business School, UK
© 2012, Chris Ivory
http://dx.doi.org/10.1080/01446193.2012.667137

Perspectives on Projects
Rodney Turner, Martina Huemann, Frank Anbari and Christophe Bredillet, Routledge, London, 2010
368 pp, ISBN 978 0 415 99374 6, £29.99 (pb)

This book is dedicated to the project management profession and the academic discipline that supports it. The book is generic in the sense of having a broad scope and aim of supporting project managers within and across different industries and sectors, including construction and engineering. But the ambition is higher as the authors also seek to offer new perspectives, metaphors and understandings. To this end they take inspiration from Gareth Morgan's book, *Images of Organization* (1997). As noted by Morgan, all theories of organization and management are based on images and metaphors that frame our way of thinking and understanding. For example the use of the machine metaphor, with its origin in mass production and operations research, creates a particular way of seeing the project and temporary organization as goal-directed and rational, with an emphasis on the appropriate selection of methods and means to reach the goal, upfront planning (foresight), efficiency, optimization, clearly defined tasks, clear lines of communication, monitoring and control during execution in order to detect and eliminate deviations from the set goal and plan. As Morgan further argues, 'These and similar ideas are often ingrained in our way of thinking about organization and the way we evaluate organizational practice' (p. 26). But he also argued

Downloaded by [Copenhagen Business School] at 04:26 09 August 2012

Downloaded by [Copenhagen Business School] at 04:26 09 August 2012

that the metaphor is a way of '*not* seeing' (emphasis in original, p. 5). Thus, when reviewing the book I decided to go along with the premise set by Turner *et al*. by inquiring into the metaphors and assumptions that govern their book and argument, and the implications for how readers might understand, see and not see the construction project and the management challenges. I will qualify my review by drawing upon some research contributions and ideas that concern the book's topic such as the project management role and methods, project goals and evaluation of success (and failure). I will end the review by providing a recommendation for the prospective buyer.

The book includes nine different perspectives and schools, each dedicated a chapter. Chapter 2 introduces the first perspective and school on project optimization, and is followed by Chapter 3: Modelling, Chapter 4: Success, Chapter 5: Governance, Chapter 6: Behavior, Chapter 7: Marketing, Chapter 8: Process, Chapter 9: Decision, and Chapter 10: Contingency. The title and metaphor for the chapter on optimization is to the point: 'The project as a machine'. It provides a nice introduction to the historical roots and development of the modern project management discipline from within operations research after World War II. The introductory Chapter 1 presents the authors' generic project management theory, and like Chapter 2 it promises the reader that there is more to project management than optimization within the triple constraints (time, cost, quality). It is good that the authors, in this way, seek to challenge the machine metaphor and some of the 'best practice' assumptions within the project management discipline. The empirical cases at the end of the book (Chapters 12–14) also provide some suggestive illustrations of this possibility when describing the practical management challenges and the need to be flexible in adjusting plans, approaches and project organization when unexpected events and changing conditions prevail.

When conceptualizing the role of project management Turner *et al*. seem inspired by the machine metaphor, 'The project manager […] is the person responsible for managing the implementation of the project, and monitoring and controlling the work to deliver the desired output at a time and at a cost to make the profit for the parent organization' (Chapter 5 on project governance, p. 116). In more general terms the role of project management is about making the project less complex and uncertain, 'to manage the reduction of uncertainty' (Preface), 'reduce complexity and uncertainty' (Chapter 10 on contingency, p. 257).

The authors' perspective on complexity and uncertainty does not challenge the machine metaphor. However, in addition to Morgan (1997) there are several contributions within management and organization research that have formulated alternative perspectives. Snowdon and Boone (2007) argue that reductions and simplifications can be costly in terms of rendering organizational performance less robust and reliable. Instead of simplifying by reverting to the 'plan, monitoring and control' approach, managers are encouraged to *complexify* themselves in order to be prepared for the unexpected (Weick and Sutcliffe, 2001; Coutu, 2003). Reducing uncertainty through more upfront planning is not always good to strive for. More upfront planning requires further investment, can delay necessary actions and result in a false sense of certainty. The knowledge condition is always uncertain, especially at the beginning of the temporary project when few actions have been taken and relatively little is known. Kreiner (1995), Lundin and Söderholm (1995), Engwall (2002), Jönsson (2004) and Atkinson *et al*. (2006) have emphasized the contextual complexity, uncertainty and ambiguity in temporary project settings. Winch (2002) noted the existence of wicked problems in construction projects. These are problems that are uncertain in the sense of being ill-defined and without an optimal solution. Turner *et al*. help the reader to recognize the contingent and more or less uncertain projects and conditions in the fourfold matrix on methods and goals (on p. 27), but the argument is not well developed and integrated throughout the book.

Turner *et al*.'s approach to project methods and goals appears to be more about their well-defined features: 'Methods of monitoring cost and time. CPA and earned value (Section 2.2), are so well developed that during execution you know how long the project will take and how much it will cost, and you can find yourself managing your way towards known failure that you have no influence over' (Chapter 9, Decision, p. 225). The assumption here is that time (schedules), cost (budget), earned value management and other methods and tools will play their role and assist project management in reducing complexity and uncertainty, provided that the upfront planning and decisions are done appropriately. While this assumption might be quite common in 'best practice' project management bodies of knowledge, it has also been questioned. Maylor (2010) questioned conventional time and planning methods such as CPA and PERT for their lack of robustness. Critical approaches to project management have questioned the neutrality of the methods and tools by pointing to their power effects and role as managerial instruments for domination (e.g. Cicmil and Hodgson 2006; Sage *et al*., 2010). Georg and Tryggestad (2009) showed that common devices and methods used in construction projects such as budgets and design drawings can

Downloaded by [Copenhagen Business School] at 04:26 09 August 2012

shape the management role in unexpected ways. During execution and interaction with the devices and methods, new knowledge about the building's structural design requirements were produced which prompted construction management to question previous design decisions and assumptions. A (simple) control response to bring the project back on track would have been inappropriate. Instead, project management had to exercise qualitative judgment and re-evaluate goals, plans, design specifications, business models and previous calculations of time, cost (budget) and value. Their concept of a 'qualculative role' for project management summarized these findings. We need more research on methods such as budgets, time scheduling techniques and design tools, their textual-material character and complex role in visualizing and shaping projects and outcomes (Kreiner and Tryggestad, 2002; Corvellec and Risberg, 2008; Justesen and Mouritsen, 2009; Schweber and Harty, 2010; Whyte and Levitt, 2011; Morris *et al.*, 2011).

The reader is told (in Chapter 9, Decision) that projects should have smart goals and objectives——'they should be Specific, Measurable, Achievable, Realistic, and Time-lined' (p. 239). Smart goals and objectives resonate with the optimization perspective and the machine metaphor (Chapter 2). In Chapter 3, the reader learns about the modelling school that added scope and project organization to the optimization school's triple constraints. The guiding metaphor in Chapter 3 is the 'mirror' where the model reflects the project and the metaphor also aptly summarizes the core assumption: that the modelling and model do not actively shape realities such as goals and purposes for the temporary project organization, but merely represent/mirror them. Chapter 4 (on success and evaluation) and Chapter 5 (on governance) consider project objectives and goals, but do not really challenge the assumption that the project goals and objectives are independent of project management. In the authors' theory of the management of projects there is a clear cause–effect link between independent project goals and objectives on the one hand and the role, tasks and responsibilities of project management on the other. The link is simple and unidirectional in this sense, but also hierarchical top-down since there appears to be little or no role for project management in defining the project goals and objectives. There is no such active (strategic) role for project management. Instead the role for project management is subordinate and more narrowly defined as operational, 'project managers should concentrate on doing the work of the project and not be diverted by the bright light of strategy. That should be left to other governance roles such as the project sponsor' (p. 238). It seems that the project and project management are there to serve as an implementation mechanism for (strategic) goals and objectives formulated elsewhere. Maylor (2010) points out that this is the traditional understanding of the strategic link and Arrto *et al.* (2008) have added a more complex understanding by situating it as one out of four different strategies and links between the project and the stakeholder environment.

We need to develop our understanding of the more complex dynamic links between goals and the roles and challenges for project management. The challenges of managing innovative projects involving new complex processes, products and services are examples to the point (Akrich *et al.*, 2002; Harty, 2008; Brady and Hobday, 2011). These projects might be in a better condition if managed according to a 'technology of foolishness' that facilitates exploration rather than exploitation according to a 'best practice' technology of rational choice (March, 1971). Complex, innovative projects tend to undergo unexpected changes due to learning and knowledge production during the project and highlight the importance of flexibility in reconsidering project goals, methods and approaches. The methods, materials and objects used by the project team can play an active role in the knowledge production (Enberg *et al.*, 2006; Kjellberg, 2010; Schweber and Harty, 2010; Tryggestad *et al.*, 2010; Whyte and Lobo, 2010). Knowledge- and technology-intensive projects also highlight the limitations of formal structures and hierarchical approaches and the importance of entrepreneurial actions and networking that transgress the legal (contractual) project boundaries (Kreiner, 1995; Lundin and Söderholm, 1995; Akrich *et al.*, 2002; Bresnen, 2010; Clegg *et al.*, 2011). This, in turn, can have further implications for the question of project success criteria and evaluation.

Concerning the question of project success and evaluation (Chapter 4), Turner *et al.* rightly point to the triple constraints as providing a limited view. The chapter refines and complements the triple constraints by elaborating on short, medium and long-term evaluation (after completion) and by promoting the use of a limited set of key performance indicators to track and monitor project progress. The authors argue that only a limited set of success criteria and indicators should be used and they should be clearly defined and agreed upon by all the stakeholders before the project starts and maintained throughout the project. Further, the authors claim that this approach is a 'necessary condition for project success' (p. 98). However, there are research contributions that suggest that this approach is too static and that more flexible approaches are more relevant and valuable. An early and clear 'spec freeze' of a project's performance and output can undermine project relevance and support (Kreiner, 1995; Engwall, 2002) and

eventually contribute to false learning (Kreiner, 2006) and failure. Atkinson (1999) argued that a too limited set of success criteria could result in a Type II error. For example the project might do things right according to a pre-defined smart goal and success criteria but still fail in doing the right things. Tryggestad *et al*. (2010) argued that such failures can be integral to the static approach and emphasized the importance of considering more robust and flexible approaches that could take account of the importance of adapting project goals and the evaluation of success to changing project conditions as new valuable knowledge emerges during the project.

While I fully agree with Turner *et al*. that we need to go beyond the machine metaphor and develop new conceptualizations to support the practical challenge of managing the temporary project organization, it appears that the authors' good ambitions seem somewhat curtailed by this metaphor.

If you are looking for a nice overview of the generic and most common contemporary approaches to project management, or if you are quite sure that you are managing fairly well-known projects with little uncertainty, the book by Turner *et al*. will be a good choice. If you are uncertain about what type of project you are dealing with, or consider that the project could turn into a more uncertain and complex one, then it will probably be wise to complement the book with other readings. More specifically, if you are engaged in the management of construction and engineering projects that are characterized by substantial materiality, complexity, uncertainty and ambiguity the task and challenge will most likely require more dedicated books and readings.

Downloaded by [Copenhagen Business School] at 04:26 09 August 2012

References

Akrich, M., Callon, M. and Latour, B. (2002) The key to success in innovation Part I: the art of interessement. *International Journal of Innovation Management*, **6**(2), 187–206.

Artto, K., Martinsuo, M., Dietrich, P. and Kujala, J. (2008) Project strategy: strategy types and their contents in innovation projects. *International Journal of Managing Projects in Business*, **1**, 49–70.

Atkinson, R. (1999) Project management: cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria. *International Journal of Project Management*, **17**(6), 337–42.

Atkinson, R., Crawford, L. and Ward, S. (2006) Fundamental uncertainties in projects and the scope of project management. *International Journal of Project Management*, **24**, 687–98.

Brady, T. and Hobday, M. (2011) Projects and innovation: innovation and project, in Morris, P., Pinto, J. and Söderlund, J. (eds) *The Oxford Handbook of Project Management*, Oxford University Press, Oxford, pp. 273–94.

Bresnen, M. (2010) Keeping it real? Constituting partnering through boundary objects. *Construction Management and Economics*, **28**(6), 615–28.

Cicmil, S. and Hodgson, D. (2006) Making projects critical: an introduction, in Hodgson, D. and Cicmil, S. (eds) *Making Projects Critical*, Palgrave Macmillan, New York, pp. 1–28.

Clegg, S., Bjørkeng, K. and Pitsis, T. (2011) Innovating the practice of normative control in project management contractual relations, in Morris, P., Pinto, J. and Söderlund, J. (eds) *The Oxford Handbook of Project Management*, Oxford University Press, Oxford, pp. 410–37.

Corvellec, H. and Risberg, A. (2007) Sensegiving as mise-en-sens——the case of wind power development. *Scandinavian Journal of Management*, **23**(3), 306–26.

Coutu, D. (2003) Sense and reliability: a conversation with celebrated psychologist Karl E. Weick. *Harvard Business Review*, **81**(4), 84–90.

Enberg, C., Lindkvist, L. and Tell, F. (2006) Exploring the dynamics of knowledge integration——acting and interacting in project teams. *Management Learning*, **37**(2), 143–65.

Engwall, M. (2002) The futile dream of the perfect goal, in SahlinAndersson, K. and Söderholm, A. (eds) *Beyond Project Management: New Perspectives on the Temporary–Permanent Dilemma*, Liber, Abstrakt, CBS Press, Malmö, pp. 261–77.

Georg, S. and Tryggestad, K. (2009) On the emergence of roles in construction: the qualculative role of project management. *Construction Management and Economics*, **27**, 969–81.

Harty, C. (2008) Implementing innovation in construction: contexts, relative boundedness and actor-network theory. *Construction Management and Economics*, **26**, 1029–41.

Jönsson, S. (2004) *Product Development: Work for Premium Values*, Liber and Copenhagen Business School Press, Malmö, Sweden.

Justesen, L. and Mouritsen, J. (2009) The triple visual: translations between photographs, 3-D visualizations and calculations. *Accounting, Auditing and Accountability Journal*, **22**(6), 973–90.

Kjellberg, H. (2010) Struggling to perform a warehouse: buildings as symbols and tools. *Construction Management and Economics*, **28**(6), 675–94.

Kreiner, K. (1995) In search of relevance: project management in drifting environments. *Scandinavian Journal of Management*, **11**(4), 335–46.

Kreiner, K. (2006) Double-loop false learning: the micro-processes of learning under uncertainty. Paper presented at the 22nd EGOS Colloquium, Sub-theme 35: The Social Complexity of Organizational Learning: Dynamics of Micro-Practices, Processes and Routines, Bergen, Norway, 6-8 July.

Kreiner, K. and Tryggestad, K. (2002) The co-production of chip and society: unpacking packaged knowledge. *Scandinavian Journal of Management*, **18**, 421–49.

Lundin, R.A. and Söderholm, A. (1995) A theory of the temporary organization. *Scandinavian Journal of Management*, **11**(4), 437–55.

March, J.G. (1971) The technology of foolishness. *Civiløkonomen* (Copenhagen), **18**(4), 4–12.

Maylor, H. (2010) *Project Management*, Prentice Hall and Pearson Education, Harlow.

Morgan, G. (1997) *Images of Organization*, Sage, London.

Morris, P., Pinto, J. and Söderlund, J. (2011) Introduction, in Morris, P., Pinto, J. and Söderlund, J. (eds) *The Oxford Handbook of Project Management*, Oxford University Press, Oxford, pp. 1–11.

Sage, D.J., Dainty, A.R.J. and Brookes, N. (2010) Who reads the project file? Exploring the power effects of knowledge tools in construction project management. *Construction Management and Economics*, **28**(6), 629–39.

Schweber, L. and Harty, C. (2010) Actors and objects: a socio-technical networks approach to technology uptake in the construction sector. *Construction Management and Economics*, **28**(6), 657–74.

Snowden, D. and Boone, M. (2007) A leader's framework for decision making. *Harvard Business Review*, **85**(11), 68–76.

Tryggestad, K., Georg, S. and Hernes, T. (2010) Constructing buildings and design ambitions. *Construction Management and Economics*, **28**(6), 695–705.

Weick, K. and Sutcliffe, K. (2001) *Managing the Unexpected*, Jossey-Bass, San Francisco.

Whyte, J. and Levitt, R. (2011) Information management and the management of projects, in Morris, P., Pinto, J. and Söderlund, J. (eds) *The Oxford Handbook of Project Management*, Oxford University Press, Oxford, pp. 365–87.

Whyte, J. and Lobo, S. (2010) Coordination and control in project-based work: digital objects and infrastructures for delivery. *Construction Management and Economics*, **28**(6), 557–67.

Winch, G.M. (2002) *Managing Construction Projects: An Information Processing Approach*, Blackwell Science, Oxford.

KJELL TRYGGESTAD
Copenhagen Business School, Denmark
© 2012, Kjell Tryggestad
http://dx.doi.org/10.1080/01446193.2012.667568

Downloaded by [Copenhagen Business School] at 04:26 09 August 2012