Knowledge, Interaction, and Project Work: From Instrumental Rationality to Practical Wisdom

Svetlana Cicmil

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To my parents
Divna Komarčević Jevtić and Dr Dragan Jevtić
who taught me to value knowledge and personal growth
ABSTRACT

This thesis is, broadly, an analytical project, a pragmatically governed interpretation of the experiences that practitioners have with work and life in project-labelled arrangements. It has aspired to generate insights into what goes on in such arrangements in local situations from the practitioner point of view, to examine the conditions under which useful knowledge can be created to support social action in project settings, and to suggest an alternative framework for understanding project working, organising and management to the mainstream perspectives.

The study refocuses attention to some key problems with the extant body of thought and contributes to developing a practical-wisdom centred sociology of project work and project management. It uncovers, and reaches above, instrumental rationality, functionalism, and mostly normative approaches, which reproduce and are reproduced by, a large body of dominant epistemic project management theory and its application in practice. The study does so by emphasising the importance of the concern for praxis in project management knowledge system, education and research, and by including the awareness and considerations of intuition, judgement, and ethical deliberations about the present and the future, as part of managerial competence in the context.

Utilising a combination of practical philosophical considerations, literature review, documentary evidence, and concrete empirical analysis, the thesis has provided:

- An evaluation of the relevance of the value-rational intellectual virtues or practical rationality (Aristotle’s notion of phronesis interpreted by Flyvbjerg, 2001) embracing judgement, intuition, and considerations of value and power in context, for practical action in project environments;
- Guidance in terms of how the intellectual foundations, including the formal body of knowledge of the discipline, can be broadened to include these virtues; and
- Some constructive trajectories for action and change in project management education, practice and research.

The empirical part of the study was designed as a participative cooperative inquiry to generate insights into project related experiences of practitioners on the basis of their accounts, reflections, and thoughts obtained mainly through the method known as active interviewing (Silverman, 2001; Holstein and Gubrium, 1995). The concept of complex responsive processes of relating in organisations (Stacey, 1996, 2001, 2003) was used as an appropriate practical interpretative framework. Insights from the analysis and interpretation of the empirical material draw attention to those aspects of the organisational arrangements labelled ‘project’ which are excluded from the mainstream project management concerns. These are related to participation
and reflexivity in thinking about own complex processes of relating with others in project-
labelled situations; the quality of conversational life, sensitivity to themes that form and are 
simultaneously being formed by power relating, and the importance of anxiety and how it is 
lived with in project environments; coping with unpredictability and paradox of outcomes of 
individual and group complex conversational relating over time; and ethical and moral concerns 
about actions both, intuitive and logical, taken while ‘thinking on one’s feet’ and simultaneously 
‘knowing’ and ‘not knowing’, ‘being’ and ‘not being’ in control of the project.

The propositions from this research are integrated with the Dreyfus (1986) model of human 
learning (in Flyvbjerg, 2001), Stacey’s (2001, 2003) responsive-processes-based approach to 
organisational analysis and management competence, and Introna’s (1997) work on developing 
a concept of ‘involved-in-the-world’ manager. The outcomes of the study position within the 
lower stages of the Dreyfus model of human learning and competence the structured linear-
rational decision making model of the universal project life cycle which promotes clarity of 
goals, justification of plans, design of the work structure for the project, implementation and 
control of plans and intentions, management of changes, uncertainties and risks. In conclusion, 
reflexive holistic understanding and evaluation of the specific project-labelled arrangement 
where considerations of the present and deliberations about the future are key for creating future 
possibilities of ‘going on’ together in accomplishing what is required for human living, are 
identified as central virtues in achieving a virtuoso / expert level in performing social and 
political action in project arrangements.

In relation to project management education and research, the proposition is to refocus 
attention on different ontology of management: joining agency and structure; doing away with 
the Taylorist dualism of thinking/doing, planning/implementation, in project management; 
thinking about projects as being constructed and reproduced in the process of complex 
conversational relating among various organisational members in the medium of symbols which 
form, and are being formed by, existing power relations, and paying attention to their social and 
political characteristics rather than exclusively to representations, models and tools. A 
phronetic-science centred sociology of project emphasises the relevance of value rationality as a 
virtue and expands the scope of project manager’s role, skills, competencies and the nature of 
knowledge towards a balance between instrumental reason necessary to sustain the progress of 
the ‘risk’ society and the considerations of conflict, values and power in project-labelled 
situations, particularly in relation to environmental risks, work, health, security, political 
stability, and possibility for action.
The intellectual and emotional experience that has resulted from my work on this thesis has defined and influenced my life in many important ways. I treasure support, enthusiasm, and encouragement of a number of my colleagues and friends, who, although scattered all over the world, were with me when I needed them most. I thank them all.

I owe a lot to: Dr Damian Hodgson (Manchester School of Management, UMIST) for his invaluable advice on the academic aspects of the thesis, and for his collegiate support and encouragement throughout; to my colleagues at Bristol Business School for their understanding and discretion; to Val and Andrew, Bob, Tauno, Jane, and Beulah for their friendship, confidence, and care at the times of deliberation, uncertainty, and crisis; to my children Nela and Helena, who keep my priorities straight, and my life in perspective, and whose laughter, love, and music made the work on the thesis possible; and to Gordana and Vladimir for helping me retain the spirit and soul of our South-European Slavic roots.
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## Abbreviations and Acronyms

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<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>APM</td>
<td>Association for Project Management (UK)</td>
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<tr>
<td>BOK</td>
<td>Body of Knowledge</td>
</tr>
<tr>
<td>BNRR</td>
<td>Birmingham Northern Relief Project</td>
</tr>
<tr>
<td>BPR</td>
<td>Business process re-engineering</td>
</tr>
<tr>
<td>CRP</td>
<td>complex responsive processes</td>
</tr>
<tr>
<td>CRMP</td>
<td>Centre for Research in Project Management</td>
</tr>
<tr>
<td>DMU</td>
<td>De Montfort University</td>
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<tr>
<td>FT</td>
<td>The Financial Times</td>
</tr>
<tr>
<td>IEB</td>
<td>International editorial board</td>
</tr>
<tr>
<td>IJPM</td>
<td>International Journal of Project Management</td>
</tr>
<tr>
<td>IPMA</td>
<td>International Project Management Association</td>
</tr>
<tr>
<td>IS</td>
<td>Inquiry System (Mitroff and Linstone, 1993 after Churchman, 1971)</td>
</tr>
<tr>
<td>IT</td>
<td>Information technology</td>
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<td>IS</td>
<td>Information systems</td>
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<tr>
<td>MAM</td>
<td>Masters in Management</td>
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<td>MBA</td>
<td>Masters in Business Administration</td>
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<td>MI</td>
<td>Management information</td>
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<tr>
<td>MIS</td>
<td>Management Information System</td>
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<tr>
<td>NHS</td>
<td>National Health Service</td>
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<tr>
<td>OR</td>
<td>operational research</td>
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<tr>
<td>PFI</td>
<td>Private Finance Initiative</td>
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<tr>
<td>PERT</td>
<td>Project Evaluation and Review Technique</td>
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<tr>
<td>PLC</td>
<td>Project Life Cycle</td>
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<tr>
<td>PM</td>
<td>project management</td>
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<td>PMBOK</td>
<td>project management body of knowledge</td>
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<tr>
<td>PMI</td>
<td>Project Management Institute (US)</td>
</tr>
<tr>
<td>PPP</td>
<td>public-private partnership</td>
</tr>
<tr>
<td>PRINCE</td>
<td>PRojects IN a Controlled Environment</td>
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<tr>
<td>TQM</td>
<td>total quality management</td>
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<td>UWE</td>
<td>University of the West of England</td>
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Chapter 1

Introduction

"Project Management has become a scientific field in its own right, a field defined not by its theories or its origins, but by the habit of human beings to label a variety of co-ordinated, time-limited undertakings as 'projects'. The field is obviously held together by certain conceptions on process rationality; differences in outcome and process are disregarded in favor of alleged similarities in the planning and implementing of projects. But is there really a single, consistent, unambiguous empirical phenomenon that can be labelled 'the project'?" (Packendorff, 1995: 324)

The world, in which we live and work, has become a world of projects. At any point in time, and within any time period anywhere across the globe innumerable projects are conceived, or being run, or have been terminated successfully or unsuccessfully, leading to some further change affecting a range of individuals, organisations and societies. This thesis is concerned with the phenomenon of projects in contemporary organisations and society, and is, by default, located within the project management field of study. As noted in the quote above, the definition of this field is increasingly being seen as problematic. The problematic definition of the field itself is not a major concern in this research project but it provides an important context within which the aims of the thesis and the overall research approach has been developed. In the introductory sections of this chapter I will discuss key aspects of that context.

There has always been an interest in the topic of projects and project management and it has been studied for rather long. Despite such wide and continuing general concern, the intellectual foundations of project management as a field of study have been questioned by both the academic (see, for example, Kreiner, 1995; Packendorff, 1995; Hodgson, 2002) and the practitioner community (Laszlo, 1994; Balck, 1994; among others). Some of the critique is related to the shortcomings of the conventional project management body of thought in addressing the variety of activities and arrangements that are characterised as ‘projects’ in contemporary organisational environments other than traditional military, aerospace, and construction. Other authors focus on an increasing rate of projects that are perceived as ‘failing’. In addition, as a result of the proliferation of management ‘fads’ such as project-based working and organising, and by eager responses of organisations to ‘quick fixes’ in the recent years, it is becoming increasingly difficult to say, with confidence, what 'project management' stands for in contemporary management discourse (cf. Bresnen, 2003). This confusion has been recognised,
subtly, even in a prolonged debate among and within communities concerned with the development of a stand-alone, formal project management body of knowledge (PMBOK) involving academia, practitioners / industry, and professional institutions in the UK and internationally (APM, PMI, see Chapter 2). Since the mid-1990s, the debate has been characterised by difficulties in agreeing on what the meaning of the term *project management* now is, how it should be modelled in order to be studied, and whether it is an organisational or individual (the project manager’s) concern. (Walta 1995, Wideman, 1995; Turner, 1999; Turner, 2000b; Morris *et al*, 2000, Themistocleous and Wearne, 2000, among others). Other emerging questions to which answers are yet to be found or agreed upon are: What is the role of project managers? To what extent can they influence the performance and outcome of projects in practice? How should the extant body of thought (management research, literature, and educational programmes) respond to an increasing concern about project failures?

This thesis is, broadly, an analytical project, a pragmatically governed interpretation of the experiences that practitioners have with work and life in the arrangements labelled ‘project’. It aspires to generate insights into what goes on in such arrangements in local situations from the practitioner point of view, to examine the conditions under which useful knowledge can be created to support social action in project settings, and to suggest an alternative framework for understanding experiences that organisational members involved in project working have with accomplishing a sophisticated, co-operative activity ‘required for human living’ (Stacey, 2001) in their local contexts. I will explore the possibility of developing intellectual virtues within the project management knowledge system that are relevant to complexity, intersubjective relational dynamics and power asymmetries surrounding project-labelled arrangements. The reason for implying the notion of *label* in this context is ontologically important and will be made reference to, throughout the thesis. Huczynski and Buchanan (2001) advise that if we are to gain an insight into, and perhaps some control over, our situation in organisations, we need to develop our understanding of how organisations function, and why people within them behave as they do. How do we achieve this understanding in relation to project-based organisational arrangements that are the focus of the thesis? It is useful to first and foremost consider the question: Why do projects matter?, thus opening up the scope for the subsequent justification of the need for, and a purpose of, a study of this kind. A detailed discussion of the aims, objectives, and research approach will follow in Section 1.2.

1.1 Why do projects matter?
It is always tempting, and very common in this field, to ‘jump straight into defining’ (Stacey, 2000, p.2) what ‘project’ is and what it is not and how it is to be modelled and managed (see for example Meredith and Mantel 2003, among a number of other seminal texts in the field). The
Chapter 1 Introduction

Purpose of this section is to show potential problems with such haste, which, as experiences with similar issues in subject areas such as strategy and organisational change suggest (Stacey, 2000, Buchanan and Badham, 1999, Egan, 1995), often results in the obscuring of what lies behind the definitions and prescriptions. My intention is to create an opportunity to stand back, problematise that what seems known and accepted, and ask some fundamental questions:

- Is there a universally true explanation of what projects are and how projects evolve?
- What is the meaning behind the vocabulary in use, the terms such as 'project', 'project management', and 'project success'? 
- How do organisations and individuals create knowledge about these phenomena and how useful and communicable this knowledge is in practice?

Since project management emerged as a social practice in the post-World War 2 development of technology and infrastructure, it has been subject to various streams of praise and criticism. Yet, project management and projects are accepted as natural, self-evident, and indispensable. Problematising the conventional concept is a starting point for developing a different fundamental understanding of the function of projects in organisations. I will endeavour to show that projects, in the ways they are studied and talked about, have a significant effect on the nature of project management body of knowledge and prescriptions related to managerial skills and competencies, offered to practitioners in the mainstream literature.

Projecticised society

The proliferation of 'project management' as an organisational innovation (e.g. Winch, 1996) outside of its traditional heartlands in construction and engineering, is a recent but significant social phenomenon. The contemporary surge in interest in 'project management' is typically explained by reference to the increasing recognition of 'the Project' as a versatile, flexible and predictable form of work organisation. Its image as a universal solution to organisational problems is heavily built on the availability of specific techniques developed for planning, monitoring, and control, tried and tested in the operations of traditionally project oriented industries such as defence, aerospace and construction (see, for example, Young 1998, Frame 1999, Maylor 2001). Projects and project teams have emerged in the practitioners and academic discourses as unique economic and social processes on which the emerging 'knowledge economy' heavily relies. They are promoted as universally applicable templates of integrating, by design, diverse functions of an organization that enable concentration of flexible, autonomous, and knowledgeable individuals in temporary project teams, for focused accomplishment of goals efficiently, timely, and effectively, for customer satisfaction and company benefits.
The created myth about projects and project management continues to expand as knowledge intensive firms increasingly based on project models are hailed as the organisation of the future (Weick, 1995, Frame 1999). Thus Frame, for example, claims confidently that the underlying reason for the projects becoming the central focus of management activity in many organisations can be stated 'in a single word: competition'. (1999: 4, italics original). The literature of the nineties and in the recent years has been drawing attention to the centrality of project based organizing and project working in the processes of information sharing and knowledge management in organizations (Wiig, 1997; Davenport and Prusak, 1998; Hansen et al, 1999; Silver, 2000). The received wisdom of this kind has resulted in a widespread adoption of 'Project' in contemporary organizations as the unit of their operations. Not only are projects considered suitable ways to control endeavours in a turbulent environment, but are regarded as an appropriate way to stimulate a learning environment and enhance creativity. Despite an inherent contradiction that these two arguments for project basing seem to contain, they still appear to be viable in co-existence.

In certain scholarly circles the increasing influence of 'project basing' has been referred to as the projectification of society (Midler, 1995; Lundin and Soderholm, 1998; Sydow and Staber, 2002). In essence, it is understood to be a consequence of the growing colonisation of all quarters of life by project-related principles, rules, techniques, and procedures, aspiring to form a new 'iron cage' of project rationality (Hodgson and Cicmil, 2003). As more and more organisational members are consequently being redefined as project workers and project managers across industrial sectors, both scholarly and practitioner communities are experiencing the implications that this shift has on employees and organisations (Packendorff, 1995; Hodgson, 2002). The emerging concerns are related to the impact on identity, reshaped intersubjective interaction, and increased control over the individual through ideological mechanisms of efficiency and performativity. These mechanisms are actualised in a number of 'project related' contemporary tendencies including the use of information technology (IT) in business process restructuring, the promotion of self-managing teams, the ideology of 'knowledge society' and 'knowledge worker', and the emergence of project-based organisation. The resulting drive towards professionalisation of the project management discipline has been accompanied by the struggle and the tensions involved in conceptualising, promoting and agreeing on the universally acceptable document which should outline the formal body of project management knowledge.
Concurrently, mainstream research into projects and project management continues to rely heavily on the prescriptive and the instrumental, where the function of project management is taken to be the accomplishment of some finite piece of work in a specified period of time, within a certain budget, and to agreed specification. But, it is apparent that accepting and applying such orthodoxy does not eliminate project failures nor does it guarantee project success. A growing body of literature, as well as a growing body of empirical evidence and voices of practitioners, significantly support the view that the very reason for using projects and project management as organisational innovation or organisational change methodology is in the heart of risks of project failures. (Clarke, 1999, Maylor, 2001) These concerns will be discussed in more detail below and in Chapter 2, as central to the aims and approach taken in the thesis.

Project performance and project management knowledge – A dichotomy
The concern about a set of ideas that has evolved into the received wisdom, later in this work termed as orchestrated belief system, about management of projects since the World War II, forms the background of the research. Although the project management body of thought has been substantially modified over the last decade, the core ideas continue to shape academic enquiry and practitioners' discourses about projects and project management. The question is: What advancements in that knowledge have been made over the years, and what is their relationship with experiences in practice?

The intellectual activity in developing the field until 1960s was based almost exclusively on scientific techniques and operational research (OR). During the 1960s and 1970s, the predominantly technicist approach was criticised and the theoretical foundations of the field expanded (Packendorff, 1995; Winch, 1996) to encompass traces of organisational research and theories mostly concerned with project organisation structures (matrix), project leadership, the role of human resource management in facilitating project work and advice on project team building (detailed discussion in Chapter 2). In the 1980s and 1990s there was a revival of the OR based project management research driven by the developments of computer based technology, which resulted in the creation and promotion of sophisticated expert systems for project planning, control and risk analysis, and increased use of terminology such as project information systems, project communication networks etc. This was mainly due to the awakening of public sector clients, including government agencies, in their search for robust management models and procedures to minimise disasters of budget and time overruns and questionable quality associated with the project work and outcomes delivered by contractors. A variety of project control methodologies (for example the PRINCE family) and risk
management schemes have been developed against such a background. Despite the increased sophistication of these models for project planning and monitoring, researchers found that only the most basic ones are actually used by practitioners and that they are not always used as intended (Packendorff, 1995).

Project management and project based organising have been researched with a high level of scientific enthusiasm against the background of instrumental rationality in decision making and control. Simultaneously, the rate of reported project failures has been increasing. In the closing decade of the 20\textsuperscript{th} century, project management was challenged more seriously than in any previous period. A glance at the content of recent public reports and those recorded in previous studies (e.g. Morris and Hugh, 1987; Standish Group 1995; Winch, 1996; Ewusi-Mensah and Przasnyski, 1997, Williams 1999, Atkinson 1999) provides an insight into frequent cost overruns, delays, and under-performance in terms of quality and user satisfaction, which seem to have become a rule and reality of contemporary projects. Contemporary studies of project performance continue to indicate the disparity between the maturing body of project management know-how and the effectiveness of its application, as an increasing visibility is being given to the claims about project and project management failures, and about dissatisfaction with project performance and outcomes by affected stakeholders.

Publicly available statistics and reports about the performance and outcomes of contemporary projects provide an important source of insights about the phenomenon of interest (detailed discussion in Chapter 2). They reveal a multiplicity of positions and levels of intervention that surround these projects and affect evaluation of their progress and outcome, as well as the impact that a variety of project forms and many different types of project deliverables have on society. A paradox can be noted in relation to qualifying projects as success or failure over time. Fincham (2002) observed that 'the gloss of success is often critical for projects that may involve large expenditures and much uncertainty' (Fincham, 2002, p.1), with expectations to justify huge risky investments. On the other hand, technology has to 'work' and, according to Fincham 'there is no more dramatic sign of failure than ... the project that does not deliver, or is delayed.' (ibid) Equally important and interesting is the dynamics at the micro-level of these projects – the behaviour and ‘expertise’ of groups and individuals involved in the planning for, and doing, the work that should deliver the expected project outcome. Thomsett’s (1980, p.5) comment illustrates this level of concern:

Ours is a world of paradoxes. For the past five years, our research team has spent nearly one thousand hours with hundreds of computer people and users in attempting to resolve one of the most frustrating and fundamental paradoxes: How is it that competent computer professionals working with the most advanced technology continue to develop computer systems that don’t work, exceed cost
estimates, and fall behind schedule? ... The more we have learned about the paradox of project management, the more complex the paradox had appeared to us.

Attempts have been made to explain these failures by claiming the obsolescence of the conventional project management wisdom in comparison with the 'real' nature of projects in contemporary organisations which, according to the proponents of such critique, no longer resemble the traditional project settings in the defence, aerospace, or construction industry where the project management methodology has originated from. (Frame, 1994; Turner, 1995, Clarke 1999; Maylor 2001) Having identified paradoxes with the criteria for evaluating the performance of project management in contemporary organisations, particularly related to IT/IS development and implementation projects, Atkinson (1999) asserts that it has become an impossible, and, most likely, non-adding value endeavour to define project management in terms of the traditional 'iron triangle' principles. These principles emphasise the achievement of time, cost and quality objectives as the major justification of the role of project management. According to Atkinson, the attention should be refocused from these efficiency measurements, which are being questioned as appropriate measures of project success (see also Belassi and Tukel 1996, Chapman, 1998, Baldry, 1998, Maylor, 2001), to the nature of project as a complex organisational arrangement, 'a good management of which is a flexible attribute which could be a strength for achieving project success'. (Atkinson, 1999, p.339).

This section has briefly introduced the theme of paradox associated with the attributions of success / failure to contemporary projects and its significance to scholarly work, knowledge development, and practical action, contributing another aspect to the discussion of why projects matter. I will return to this theme in Chapter 2 in order to review a significant body of literature that has dealt with these issues so far and to show how the approach taken in this thesis compares with, and draws on, the extant theoretical and methodological base.

In the subsequent sections I will discuss in more detail the aim of the thesis, the sociological nature of the proposed inquiry, and the underlying assumptions of the approach taken to ensure that the thesis is both a critical and a constructive study.

1.2 The Agenda: Phronetic social science

This thesis intends to refocus attention to some key problems with the extant body of thought governing project management research and the field as practiced and, as the title suggests, to contribute to developing a practical-wisdom centred sociology of project work and project management. The intellectual concerns related to the interrelationship between theory and practice, and to evaluating the quality of research, have been part of the research process
throughout. In order to acknowledge the complexity of these issues and to avoid getting trapped in unproductive research paradigm wars and discussions, I have adopted, at a general level, Flyvbjerg’s (2001) well argued identification of three intellectual virtues: *episteme, techne, and phronesis*, as my overall epistemological frame of reference. *Episteme* is understood as producing analytical, scientific knowledge, resulting in explanatory and descriptive theories with a predictive capacity. The understanding of *techne* evolves around the application of epistemic theory - theory for practice — producing what is referred to as ‘know-how’ or technical knowledge used in order to plan, design, and exercise the mechanisms of system control. *Phronesis* is understood as capability for situated action in a concrete context based on reasoning beyond both analytical, scientific knowledge and technical knowledge, and ‘involves judgements and decisions made in the manner of a virtuoso social and political actor’. (Flyvbjerg, 2001, p.2, italics added)

The study draws on a combination of practical philosophical considerations and concrete empirical data in order to achieve the following:
- to develop a critique of mainstream prescriptions offered to practitioners about how to manage projects for ‘success’;
- to offer an alternative account of project, project management and project performance to mainstream perspectives, emphasising relational, context-dependent nature of knowledge and skills, and processual properties of knowing and communicating in project-labelled arrangements;
- to explore the implications of the concept of complex responsive processes of relating in organizations for understanding of:
  - what goes on in projects in local situations when people find themselves involved in jointly performing a sophisticated, co-operative activity,
  - what it might mean managing a project from this perspective; and
  - the skills and competencies that enable a *virtuoso* social and political action (Flyvbjerg, 2001) in managing the arrangements labelled projects.

1.2.1 The approach to the research question
According to Bent Flyvbjerg’s (2001) contemporary interpretation of the Aristotelian concept, *phronesis* can be broadly understood as *prudence* or *practical wisdom*. It is this notion of *practical wisdom* and its intellectual roots in value-rationality, that is of interest in this thesis. How might such a research study contribute to, or be important for, organisational members involved in project-labelled arrangements? My argument is that *practical wisdom* is that intellectual activity or virtue by which instrumental rationality is balanced by value-rationality,
and as such is relevant to project management studies because such balancing is crucial to the sustained wellbeing of any society, (Flyvbjerg, 2001, p.4), and by implication our contemporary, ‘projectised’ one. The thesis seeks to uncover and to go above instrumental rationality, functionalism, and mostly normative approaches which reproduce and are reproduced by, a large body of dominant epistemic project management theory and its application in practice. The design and process of this study reflect the concerns with praxis, and seek to broaden project management agenda by including the awareness and considerations of intuition, judgement, and ethical deliberations about the present and the future, in the context.

In his original research, Flyvbjerg (2001) has developed a methodological guidance for phronetic oriented studies of concrete social situations and actions. The knowledge created through such methodological approach urges the consideration and awareness of four value-rational questions that an expert or virtuoso project actor must address: Where are we going with the type of decision making exercised in this context?; Who gains and who loses while going there, and by which mechanisms of power?; Is it desirable?; and What should be done?. These value rational questions focus on, and problematise that what is taken for granted, made obscured, or hindered by the operation of the mainstream thinking in much of the literature, and by knowledge-power relations in specific environments where a project is situated. A phronesis based social inquiry into projects does not lead towards the development of ‘better’ project management theory, but to society’s practical rationality, i.e. to individual and organisational capacity for value-rational deliberation and action, hand-in-hand with the necessary instrumental rationality underpinning the need for control in the ‘risk society’. As phronetic approach, according to Flyvbjerg cited above, involves judgements and decisions made in the manner of a virtuoso social and political actor, the implications for broadening the knowledge system underpinning educational and project management development programmes by including these virtues are significant. In summary, the aim that guided the development of the thesis has been to

- Evaluate the relevance of the value-rational intellectual virtues or practical rationality embracing judgement, intuition, and considerations of value and power in context, for practical action in project environments;
- Provide guidance in terms of how the intellectual foundations, including the formal body of knowledge of the discipline, can be broadened to include these virtues; and
- develop some constructive trajectories for action and change in project management education, practice and research.

In order to present in a clearer manner the outcomes of this research study, I will use in the concluding chapters of the thesis the Dreyfus model of human learning. The following section
explains the model in detail, and illuminates its relevance to the aim and scientific position of this study.

### 1.2.2 Phronetic knowledge and the human learning process—The Dreyfus model

The phenomenology of human learning, as formulated by Hubert and Stuart Dreyfus (1986, 1988), suggests that people pass through five phases or levels in the learning of skills and acquiring competence and virtuosity in performing their tasks. *Skills* are understood to range from the technical to the intellectual, and the five levels are differentiated by their proprietary, recognisable, qualitatively different ways of acting and performing in the process of learning a given skill. They are hierarchically sequenced from the lowest to the highest performing potential as: 1) novice; 2) advanced beginner; 3) competent performer; 4) proficient performer; and 5) expert or virtuoso (the latter is Pierre Bourdieu’s term, inserted by Flyvbjerg). What is of particular interest here is ‘a qualitative jump’ (Flyvbjerg, 2001, p.21) that the Dreyfus model of the learning process, summarised in Table I-1 below, implies as required to achieve the higher, (fourth and fifth) levels of learning and performance – evolving around the development of intellectual virtues over and beyond instrumental rationality.

<table>
<thead>
<tr>
<th>Levels in the learning process</th>
<th>Summary of virtues and skills</th>
</tr>
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<tbody>
<tr>
<td>1) novice;</td>
<td>Acts on the basis of context-independent elements and rules</td>
</tr>
<tr>
<td>2) advanced beginner;</td>
<td>Develops an ability to identify and interpret situational elements on the basis of his/her (limited) experience in addition to context-independent elements and rules</td>
</tr>
<tr>
<td>3) competent performer;</td>
<td>Able to base their action on the involved choice of goals and plans in order to structure, make sense of, and store an overwhelming amount of both context-dependent and context-independent information about the problem, in the following sequence: Elements-rules-goals-plans-decision</td>
</tr>
<tr>
<td>4) proficient performer;</td>
<td>The above process of decision, choice and action is based on the ability to intuitively identify problems, and goals, and to check such intuitive choice of plan by analytical rational evaluation prior to action</td>
</tr>
<tr>
<td>5) expert or virtuoso</td>
<td>Develops the capacity and behaviour for intuitive, holistic, and synchronic understanding of the given situation / problem; true human expertise of a flowing performance, which involves analytical deliberations in terms of values, power, and analytical thinking, but is not hindered by them. Characterised by situational behaviour (but not irrational) without conscious separation of thinking from doing, or decision from action by analytically dividing situations into parts and evaluating by using context-independent rules.</td>
</tr>
</tbody>
</table>
Three qualities of this model are of key relevance for the phronetic social science approach taken in this thesis in developing praxis- or value-rationality-centred sociology of projects. Firstly, the Dreyfus model has critical implications. It uncovers the operation of instrumental rationality by drawing attention to two aspects of it: 1) the way it raises analysis and rationality into the most important mode of operation for human activity and 2) it allows them to dominate our view of human learning, knowledge, and skills. The model is, at the same time, constructive: it does not present a ‘polarised’ solution as either rationality or intuition, but argues for the importance of them both in their proper context. The explicit integration of their properties is suggested in the model through the proposition of the higher levels of learning, to include context, judgement, practice, trial and error, experience, common sense, intuition and bodily sensation. Thirdly, Flyvbjerg asserts that ‘teaching can be directly compared with the model for human learning’ (2001, p.24), because context, experience, and intuition are, as much as rationality and rules, important for educational activity.

The result of a social scientific research guided by phronesis is, therefore, a pragmatically governed interpretation of practitioners experiences with project based work and management. As stated in Section 1.2.1 (p.9), one of my aims has been to explore some constructive trajectories for action and change in project management education and research by integrating the discussed value-rational intellectual virtues. The next section will briefly outline the relevant context.

1.3 The nature of project management knowledge system: Implications for management education

'Regrettably, the pervasiveness of the rational paradigm to the near exclusion of others is a major problem for the vast majority of professional education, and especially in practical fields such as engineering, policy analysis, management, planning, and organisation. All are professions where practical skill occupies central importance but has been threatened by epistemic science and didactics'. (Flyvbjerg, 2001, p.24)

In this section I discuss how the aim and the key themes that this inquiry explores, its research design, philosophical considerations, and methodological approach, are positioned within the context of management education and development. A number of contemporary authors whose work informed my thinking, particularly Easterby-Smith et al (1991), Reed and Anthony (1992), Mitroff and Linstone (1993), Arbnor and Bjerke (1997), Introna (1997), Alvesson and Deetz (2000), Fournier and Grey (2000), Flyvbjerg (2001), and Stacey (2001, 2003), have addressed the concern about the nature and quality of knowledge produced and taught on
management development courses. They have acknowledged that academic business education has become a complex and challenging task. The major concern discussed in their work is related to the continuous reproduction of the 'orchestrated belief system' through management education programmes.

Despite the significant presence of project based working and organising across industrial sectors and the problematic qualifications of projects as success or failure, a number of authors note that the development of project management knowledge remains unstable and fragmented, and as a consequence, the dream of establishing project management as an exemplary field of management science is becoming increasingly remote. Questions have been raised about the underlying belief system which exhibits a strong bias towards functionalist/unitarist tradition, reductionism, operational research, and 'how-to-do' prescriptive forms of intellectual output. (Packendorff, 1995; Frame 1995; Turner, 1995, 1999; Buchanan and Badham, 1999; Meredith and Mantel, 2000). It was mainly in the 1990s that critical analysis of social and political power associated with projects as organisational and social arrangements, and project management as a practice and as a social grouping emerged in an explicit form (Buchanan and Boddy 1992; Buchanan and Badham, 1999; Packendorff, 1995; Kreiner, 1995; Lundin and Midler, 1998; Lundin and Hartman, 2000; Hodgson, 2002, 2004;). Nonetheless, the response to this crisis has so far been a yet-greater emphasis on technicist solutions, quantitative methodologies, positivist methodologies and a stronger reliance on instrumental rationality.

The work of Reed and Anthony (1992) addresses a number of points which will be raised throughout this research project. They pose an important question — How is managerial reflective responsibility to be enhanced by education?

'While the demand for management education is sustained by the belief that improved economic performance requires more of it, ... the evidence of improved competence is not easy to find. But education, even for management, must ultimately be a matter of faith, or belief in values that are fundamental.' (Reed and Anthony, 1992, p.607)

The authors suggest that attention should be focused on encouraging our students and our managers to think through developing, for example, literary criticism, relevant spirit of enquiry, and awareness of differences in power, perspective, and values in contemporary organisations. These are obviously rather unorthodox views in terms of standard contents of management courses, and as such are relevant to the issues this thesis sets out to address.

Arbnor and Bjerke (1997) view knowledge as a fundamental production factor loaded with immense economic, ecological and cultural values. They argue:
Nobody should leave an academic education without knowing what the knowledge that he or she has acquired, including its ultimate presumptions, really is knowledge about. Knowledge and knowledge creation are today the ultimate and most important production factor for business activities. (Arbnor and Bjerke, 1997, p.xxv-xxvi)

Explaining the need for an audit to uphold the quality of business knowledge, the authors suggest that 'not only knowledge (the content), but also the methods of creating knowledge and methods of learning (the form) can become extinct and bankrupt' (Arbnor and Bjerke, 1997, p.486). Arbnor and Bjerke look critically at the management development content and forms as a fundamentally important aspect behind overall development in the knowledge field. They argue that conventional approaches have exposed managers and other employees involved in problem solving and decision making to an overwhelming amount and range of, for example, behavioural techniques (empowerment, teamwork, work-flexibility, multi-tasking, and similar), which in turn can be interpreted as 'covert tools of manipulation and exploitation' (Huczynski and Buchanan, 2001, p. xxi)

As a lecturer and researcher in management at a business school, I am both interested in and concerned about the implications of what is widely accepted as current (professional, official, scientific, and useful) project management body of knowledge, for management education, for individual and organisational learning, and for the development of individual skills and competencies, in contemporary society (see Appendix 1). It is important, as stated by numerous authors addressing the issue of quality, content, and effectiveness of business and management education, to include in this kind of study, serious considerations of the reflexive analysis and discussion of values and interests, which is 'the prerequisite for an enlightened political, economic, and cultural development in any society' (Flyvbjerg, 2001, p.3)

The capacity for such reflective analysis is embedded in the individual actor’s and the organisation’s ability to embrace value-rationality as an intellectual virtue, including the considerations of power and conflict, that are commonly involved in all types of social practice. My overarching proposition is that projects, project based working, organising, and management are contemporary examples of social practice that lend themselves to a critical and constructive social analysis. I argue that it is necessary to investigate the knowledge and skills that project practitioners, including project managers, create and use in their local situations that enable them to cope, manage, make decisions, act, and create the possibilities for future action in relation to the specific project and beyond its constructed boundaries.
From the very outset of this study, the research strategy has encompassed a reflexive consideration of the management education environment. The research methodology reflects this, and the procedures within the research method were planned in such a way that they allowed the exploration and exploitation of such an environment with an overarching intention of listening to (reflective) practitioners and allowing wider participation (discussed in detail in Chapter 4). This has been recognised in the contemporary work as a long-overdue contribution to the extant knowledge system of project management and its intellectual basis, in order to critically and constructively tackle the apparent crisis of the discipline and its universally defined rules and tools. By using the Dreyfus model of human learning and skill development as an influential framework, I attempt to explore the qualitative changes and interventions that could be introduced to address the levels 4 and 5 of skilful performance in project-labelled arrangements, in addition to and above a didactic and normative approaches (levels 1-3) at which most of project management development programmes stop.

1.4 The content and structure of the thesis
In this chapter, I have introduced the general intention of the study, its aims and objectives, and the intellectual background against which the key themes (also indicated in the title of the thesis) and the research process have been developed. I outlined my view on the significance of the phenomenon of ‘project basing’ in contemporary society, and on the perceived crisis of project management, frequently qualified as a ‘confusion’ about where the boundaries of the field have been set, who sets them, and where the point of convergence between project management theory and practice is. This broadly explains the context within which the thesis is located. The thesis unfolds with the assumption that projects do matter in our society, and that available evidence indicates that some, taken for granted, issues in studying and practising project based working, organising and management are problematic.

In Section 1.2, in addition to the aims and objectives, I have also outlined at a very general level, the intellectual framework that has guided this research – a phronesis based qualitative inquiry into knowledge and skills of practitioners that enable an expert or virtuoso social and political action in complex, dynamic and often paradoxical settings labelled ‘project’ in which they find themselves participating as managers, researchers, or team-workers. I have briefly outlined the virtues that such skills and knowledge should encompass and how it compares and relates to conventional, mainstream project management approaches and prescriptions, emphasising the potential contributions that this kind of research can make to the body of thought, educational content, and praxis.
Chapter 1 Introduction

In Section 1.3, I discussed how the aim and the key themes that this inquiry explores, its research design, philosophical considerations, and methodological approach, are positioned within the context of management education and development.

Following this introductory chapter, the thesis unfolds in the remaining six chapters as follows:

Chapter 2 - This study takes as its point of departure the need to re-examine the manner in which the issues of project success and failure, and knowledge and skills required for successful project management, have been addressed by the extant body of project management thought, and the pattern of prescriptions aimed at practitioners (project managers, team leaders, and other organisational members) emerging from these various analyses. The intention is to uncover some of the key assumptions that the mainstream wisdom makes about the nature of projects, the character of project work and intellectual virtues on which knowledge and action are based. I expand on the points outlined in Chapter 1, and explore the crisis of project management both as an academic subject and the practising discipline (Section 2.1). In relation to the aim of the thesis (formulated in Chapter 1 and summarised in Section 1.2.1) and through a combination of traditional literature review and a critical theoretical discussion of the intellectual system governing project management research and the field as practiced, the following relevant aspects are addressed:

- insights into problematic performance of contemporary projects as expounded in various reports in the public domain;
- mainstream theoretical and methodological positions from which success and failure of projects and project management have been studied;
- the nature of extant project management knowledge and practical recommendations created from these position, including the developments of formal PMBOK; and
- the experiences with the application of project based working, organising and management as a 'universal solution' to contemporary organisational and managerial problems with effectiveness and efficiency.

Chapter 3- Having made a case for a critical examination of the extant knowledge system of project management and project working through the review of relevant literature in Chapter 2, I attempt in this chapter to uncover the operation of the orchestrated belief system and 'scienticism' and their implications for studying project performance and for developing prescriptions of 'good practice' aimed at practitioners. This includes the implications of the continual construction and reproduction of 'projects' as natural objects through the imposition of certain imperatives, ruling illusions, and ideologies. On the basis of the literature review and
documentary analysis (seminal texts and the PMI version of the PMBOK document), I discuss the roots, reasons, and consequences of such reifications for project practitioners’ learning and skill development. I review the literature that proposes alternative approaches to qualifying project performance as success / failure and advising on effective competencies and knowledge. The chapter contains theoretical and philosophical considerations leading towards the practical interpretative framework to be used in analysing concrete empirical data in order to address the aims of the thesis. The propositions related to the conceptual frame of reference draw on the discussion in Chapter 1 and Chapter 2. On the basis of the overarching phronetic approach to the inquiry and its aims, and the major themes to be explored, including knowledge, interaction, and value-rationality, the concept known as ‘complex responsive processes of relating in organisations’ (Stacey, 1996, 2000, 2001, 2003) is introduced and discussed in terms of potential implications for studying and creating practical knowledge about organisational arrangements labelled ‘project’ from this perspective. Habermas’s theory of knowledge constitutive interest will be referenced to provide further justification of the chosen methodological route. The perspective of complex responsive processes builds on three theoretical traditions: Maed’s (1934) relational psychology, Giddens’s (1984, 1993) sociological method of ‘structuration’, and the experiences with applications of chaos and complex systems theory to studying organisations (Stacey, 1996, 2000). The way of looking at organisational arrangements, suggested by this concept, is useful and relevant to this type of social scientific study. It joins agency and structure, takes conversational relating in the medium of symbols as the core organising pattern, recognises both spatial and temporal dimension of organising and self-organising, focuses attention to unpredictability and relational circularity of power in local contexts in the living present. It argues for the methodological approach of emergent enquiry, putting the practitioner/manager/researcher in the position of a participating actor rather than an objective observer standing outside the studied arrangement and intentionally perturbing and directing the system toward the desired outcome.

Chapter 4- This chapter outlines the methodology, methods and design of the research study. Knowledge resulting from phronetic research is based on interpretation. Therefore the procedures ensuring validity are demanding as such knowledge is open for testing in relation to other interpretations and other research. I discuss the choice and implementation of such procedures in this study, and reflect on validity claims making reference to the literature relevant to a qualitative social research project of this kind. As the title of the thesis suggests, it is the notion of practical wisdom and its intellectual roots in value-rationality, that is of interest in this thesis. Building on the review of literature, and the analysis of documents and secondary data (Chapters 2 and 3), the empirical part of the study generates insights into the experiences
practitioners have with work and life in project based arrangements. The objective of analysing their accounts, obtained in the participative inquiry and mainly through an active interviewing process, has been to gain insights into: 1) how organisational members understand or think about ‘projects’ and ‘project management’; 2) how projects and project management become enacted (objectively existing) in local contexts; 3) how different organisational members experience the implications of being part of or affiliated with a project, over time and space, including the qualifications and attributions of success / failure; and 4) what these various actors see as most critical to know, be aware of, or understand in order to cope with and act (get the job done) within such arrangements. The research design is outlined and explained, and research method (active interviewing) discussed in detail. The issues of credibility, reliability, generalisability, validity and bias in a research process, have been addressed and reflected upon in the context of this research study, taking into account its specific qualitative stance. The process of data collection and interpretation are outlined in as much detail as possible, which is complemented by an extensive set of examples and transparency of analysis, presented in Chapter 5 and relevant appendices.

Chapter 5 - This chapter contains the analysis of the empirical material including the explanation of the process of interpretation and interpretative themes around which the analysis unfolds. The central concern in the analysis and interpretation of the empirical material has been to understand how participants (project actors / workers / managers) experience, and make sense of the situations labelled 'project' in their local environments, how they create knowledge about projects and project management and use it in practice, and on what basis they qualify projects as success or failure. By interpreting the empirical material through the lenses of complex responsive processes of relating, it has been possible to generate a number of alternative insights into what people do when they work in a project setting, how the links are made between managerial action and a project’s performance, and what an individual can do to facilitate knowledge transfer and communication in project arrangements that would make projects more successful. The following have been used as key themes organising practitioners’ experience of participating in a project setting: references to symbols of project rationality (project goals, strategic intentions, projected benefits, project plans; control, failure and structural problems; project management methodology and body of knowledge); reference to unpredictability (paradox of control, interpretations of failure, power relations); reference to joint accomplishment of a sophisticated co-operative human activity (project working and organising as a process of relating in the medium of symbols; being together, getting the job done; communication and polyphony of voices, learning together, knowing, anxiety, trust, relating and power); reference to managerial action (project management skills, knowledge and action as
complex processes of responsive communicative relating; practical wisdom, intuition, concern for the present and deliberation about the future possibilities and implications; social and political actor; holistic understanding in context). Insights from the analysis and interpretation of the empirical material draw attention to those aspects of the organisational arrangements labelled projects which are excluded from the mainstream project management concerns. These are the experiences with project work and management of projects which emphasise participation and reflexivity in thinking about own complex processes of relating with others in project-labelled situations; the quality of conversational life, sensitivity to themes that form and are simultaneously being formed by power relating, and the importance of 'free flowing conversation' for creation of novelty and change; anxiety and how it is lived with; coping with unpredictability and paradox of outcomes of individual and group complex conversational relating; ethical and moral concerns about actions both, intuitive and logical, taken while 'thinking on one's feet' while simultaneously 'knowing' and 'not knowing', 'being' and 'not being' in control of the project.

Chapter 6 - This chapter builds on the analysis presented in Chapter 5 and contains reflections and discussion of the major themes emerging from the empirical analysis. I discuss the process of developing knowledge and skills identified as adequate and desirable for moving beyond the image of project manager as 'implementer' towards 'a virtuoso social and political actor' in project arrangements. In this chapter, the assumptions from the scientific/functional belief system (managers as skilful technicians who face an objective reality, and apply value-neutral knowledge and competence in order to make rational decisions, collect information and implement a finite piece of work in a specified period of time, within a certain budget, and to agreed specification), are contrasted with what practitioners experience in their local situations. The analysis identifies some uncertainties and fundamental contradictions confronted by project practitioners which conventional mainstream project management prescriptions fall short in addressing at a level relevant to praxis. Mainstream research into projects and project management relies heavily on the prescriptive and the instrumental, where the function of project management is taken to be the accomplishment of some finite piece of work in a specified period of time, within a certain budget, and to agreed specification. A phronetic-science centred sociology of project refocuses attention to the relevance of value rationality as a virtue and expands the scope of project manager's role, skills, competencies and the nature of knowledge towards a balance between instrumental reason necessary to sustain the progress of the 'risk' society and the considerations of conflict, values and power in project-labelled situations, particularly in relation to environmental risks, work, health, security, political stability, and possibility for action. Such intellectual virtue is guided by the following value-
rational questions which ensure that the enquiry will adequately deal with issues of power: Where are we going with the kind of decision and action performed within this project setting? Who loses and who gains, by which mechanisms of power?, Is this desirable?, and what should be done?

Finally, more detailed guidelines and recommendations are offered on how such knowledge and skills can be developed if one adopts the perspective of complex responsive processes of relating in organisations. The Dreyfus model of human learning is used to incorporate the outcomes of the study.

Chapter 7 – In this chapter I reflect on the research process, outcomes, and overall contributions of the study presented in this report. It includes a discussion of what has been achieved in terms of the stated aims of the thesis, a reflection on its philosophical and theoretical grounding; concluding commentary of the research design and method, and the limitations and scope for improvement. The result of the research including both practical philosophical considerations and concrete empirical analysis presented in this thesis, is a pragmatically governed interpretation of the experiences that practitioners have with work and life in the arrangements labelled ‘projects’. The aim that has guided the development of the thesis has been to combine both documentary analysis and empirical study of the body of thought governing the project management subject and the filed as practiced, in order to:

- Evaluate the relevance of the value-rational intellectual virtues (practical rationality, and considerations of value and power) for practical action in project environments;
- Provide guidance in terms of how the intellectual foundations, including the formal body of knowledge of the discipline, can be broadened to include these virtues; and
- develop some constructive trajectories for action and change in project management education, practice and research.

The implications of this study for project management research and education in more general terms are discussed, some trajectories for future inquiries laid and other theoretical possibilities are recommended.
Chapter 2

The Project Management Knowledge System: Making a Case for a Critical Examination

"...it can be dangerous for individuals, groups, and societies when their capacity for value-rational deliberations is eroded. Today the erosion of such capacity seems to many to be rapidly taking place and coincides with the growing incursion of a narrow means-rationality into social and political life." (Flyvbjerg, 2001, p.168)

In this chapter, I expand on the points outlined in Chapter 1 to explore the crisis of project management as an academic subject and the practising discipline. In relation to the aim of the thesis (formulated in Chapter 1 and summarised in Section 1.2.1) and through a combination of traditional literature review and a critical theoretical discussion of the intellectual system governing project management research and the field as practiced, the following relevant aspects are addressed:

- Insights into problematic performance of contemporary projects as expounded in various reports in the public domain
- Mainstream theoretical and methodological positions from which success and failure of projects and project management have been studied
- The nature of extant project management knowledge and practical recommendations created from these position, including the developments of formal PMBOK
- The experiences with the application of project based working, organising and management as ‘universal solution’ to contemporary organisational and managerial problems with effectiveness and efficiency

2.1 The crisis of project management

In the introductory chapter I have drawn attention to the paradoxical situation where a progressive development of project management science and its proprietary body of knowledge has been taking place simultaneously with the recognition of a crisis of the discipline in both research and practice. Despite all the practical advice and academic knowledge available, projects still regularly fail in key respects. A deeper insight into the way the problematic issues are identified and presented in public, shows that the intellectual foundations of ‘project management’ as a form of managerial knowledge have been questioned from a variety of angles and agendas, including the mainstream writers. The failure of high-profile projects and the chaos that follows frequently captures the public attention and endures in the memory. Yet, in
organisations, at a micro-level of inquiry, the wider perception of projects, project work and project outcomes also reflect more mundane and institutionalised failings in the management of project activities and expert input. In the view of some authors (for example Williams, 1999; Atkinson, 1999), the emergence and use of structured project management methodologies, such as the PRINCE family and IT based tools, have had frequently adverse results. On the other hand, some perceive project failure as an endemic crisis, rooted in a set of problems that tend to recur again and again.

2.1.1 Problematic performance of contemporary projects

'Most projects fail; it is just a question of how much failure can still be deemed a success'

Cadle and Yeates (2001)

The above quote is taken from an introductory section in one of the popular texts on project management for information systems. I have inserted it here as I believe it articulates the paradox and concerns within the overall body of thought related to projects and project management. Moreover, it reinforces the need for a radical re-examination of the knowledge system governing the field of project management in terms of its relevance to practitioners – to the very project actors experiencing life and work in situations labelled ‘projects’ in contemporary organisations and to those of them charged with the responsibility of making the project a success. I will argue that it also calls for alternative approaches to studying contemporary projects and their performance.

The success/failure debate

Publicly available statistics and reports about the performance and outcomes of contemporary projects provide an important source of insights about the phenomenon of interest. They reveal a multiplicity of concerns and levels of intervention surrounding these projects and affecting evaluation of their progress and outcome. It is not difficult to appreciate how a variety of projects forms and many different types of project deliverables for a range of client industries and end users impact on people’s everyday lives. The boundary between ‘the project’ and ‘the rest of the world’ is blurred as there is no neutral grounds in judging it, in separating society from a failing IT project in a government agency environment, or from a delayed PFI (Private Finance Initiative) based construction project for the NHS (National Health Service). Although reports and statistics cannot provide in-depth insights into the complexity surrounding these projects, it is still useful to consider how the business sections of daily newspapers and magazines describe and define contemporary projects, their performance and management. It
provides a way of generating some insights into the modes in which the 'project' phenomenon is experienced in the contemporary social environments. We note the level of intervention, paradox, complexity, uncertainty and change that is reported in relation to the conceptualisation, unfolding, and outcome of these projects over time.

The estimate for 1995 by the Standish Group was that American companies and government agencies spent $81 billion for cancelled IT projects (Ewusi-Mensah K and Przasnyski Z H, 1997). In addition, the same source reports that, in total, 31% of IS/IT projects were deemed complete failures, 53% were late, over budget and did not meet expectations. The same research suggests that only 9% of IT projects are delivered on time or within budget, and a mere 16% in total were considered successful. The average time overrun has been identified as being 222% of the original estimate. The question often raised in public about this issue is, generally, how the IT/IS project risk (both financial and service risk) is shared and transferred among the public sector and private sector participants. Particularly, who should carry performance risk, in the paradoxical situation where a common assumption is that 'In a complex project, there is always the possibility that delays may occur'? (FT, 04/08/1999, p.4)

In January 2000, The Financial Times (FT, 14/01/2000) reported, for example, on the 'fiascos' of the major government information technology projects in the UK 'stemming from basic project errors' which 'highlighted the need for greater professionalism in project management.... The government's track record in project management has been, to say the least, poor'. Attention is drawn to a lack of specialist PM knowledge among some civil servants and ministers, and to different approval systems, which have, according to some observers, resulted in unrealistic project deadlines. A growing body of evidence shows that similar observations and conclusion have been made in relation to IT/IS in other sectors and types of organisations.

It is not only the performance of IS/IT projects that comes under public scrutiny. For example, Bowen et al (1994) reported that nearly 30% of the product development projects never live up to business objectives. According to Winch (1996), UK government procured construction projects ranging from hospitals to roads, suffer from, on average, 14% cost overrun and 11% time overrun. More recently, the £214m refit project of the Royal Opera House in Covent Garden resulted in a cancelled opening performance, and the remaining shows being run at huge technical risks associated with the operation of newly installed but not properly tested and learned backstage equipment. The report in FT of 24/11/1999 illustrates the situation at the time:

While the opera house [sic] had no shows to put on, everything seemed to go smoothly. Now, faced with rehearsals and performances, and with just six days to
the formal re-opening of the opera house in the presence of the Queen, the cancellation of one of the …showcase productions makes it look as accident prone as ever. … When builders moved into the Royal opera House two-and-a-half years ago, the original plan was to have everything ready three months before the reopening on December 1. … The artists and technicians were allowed into the building only last week. … Backstage they found a building site. Some had to work in hard hats. Others found rehearsals had been cancelled. … For the remaining shows … staff will be under pressure to handle machinery they have had no chance to learn. (FT of 24 / 11/ 1999, p.5)

In the final analysis, the Jubilee line extension project, for example, has been characterised as having been '...a long saga of overshot deadlines and overspent budgets' (Winder, 1999, p.8)

Or, in more elaborate terms:

Strikes, safety scares, sabotage… a station with the wobbles, the wrong type of soil… and this week the news that it's £2.4 billion over budget. What more can go wrong with the Jubilee Line? Well, how about missing its millennium launch? (Beckett, 1999, p.2)

Subsequently, a conclusion is made about the destiny of such projects as a rule inherent in their very nature:

No theatre has opened, ready and on time, with a project of this scale and a programme of such complexity and ambition. …These projects never go according to plan. (FT 24 / 11/ 1999, p.5)

It has been noted that the relationships among project parties are among major concerns related to the issues of sophistication in project risk taking and transfer. It is stated in The Financial Times of 14/01/2000 that 'greater transparency and a more open dialog would build trust' instead of some consultants taking 'advantage of public sector imprecision in commissioning projects'.

'Controversy' in addition to paradox is another notion often associated with projects, project management and assessment of project performance (success/failure). FT reports on the performance of the BNRR (Birmingham Northern Relief Road) project in March 2000 illuminate other characteristics of the project phenomenon in contemporary social and organisational environments.

The controversial project to build a northern relief road for Birmingham has suffered a serious setback after the building contractors pulled out in a row over costs. … [It] has already been delayed three years by environmental protests and a public inquiry, during which time the original 1992 contract ran out. (Jowit, 2000)

At the same time managing director of the consortium-developer is reported to have said:

There have been a lot of changes to the project and the parties involved since 1992. … We are as confident as ever that BNRR will be a great success both commercially and as a vital piece of transport infrastructure. …Construction of BNRR is

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scheduled to begin in late 2000, early 2001, and will be completed in 2004. The objective is to fit the process within that timetable. (Jowit, 2000)

The representative of the lobbying group against the scheme comments:

We believe that this is fundamentally flawed scheme. It fails to resolve traffic problems and it's highly environmentally damaging, but this suggests it's also going to be hard to build and finance the road. (Jowit, 2000)

Paradox and controversy illustrated above through some sketchy fragments from reports, are linked to the multiple, multi-level issues of unpredictability and complex social interaction in project environments, phrased in The Economist's report of 1997 on the Three Gorges project as:

...later this year the Yangzi [sic] river will be blocked by the Three Gorges dam, the world's biggest dam project ever. Is this a triumph or a disaster? (Economist, 02/08/1997, p.47)

Indeed, the evaluation of project success/failure has been identified as immensely controversial issue. To illustrate the point, note that in some publications the Sydney Opera House has been cited as one of the greatest planning and project management disasters ever (according to the time and cost overruns), while simultaneously characterised as a project of enormous artistic, social and scientific value:

The solutions found for the host of problems of construction and equipment of the Sydney Opera House have benefited architects, engineers and technicians all over the world. The Australians are the fortunate owners and beneficiaries of this extraordinary cultural centre. Like all masterpieces, the Opera House will remain a universal source of creative inspiration. (Stallworthy and Kharbanda, 1985, p.179)

The concept of project performance in general and its relationship with 'project management' has been identified as problematic in the mainstream literature (Morris et al, 2000; Atkinson, 1999; Belassi and Tukel, 1996; Williams, 1995; Baker et al, 1983) and, in much of the recent critical work, as paradoxical too. While the issues of ambiguity associated with declaring project's success or failure have tended to be peripheral to the dominant themes of project management, it is possible to identify a number of alternative ways in which they appear within discourses on projects. The point of departure for this study is the need to re-examine the manner in which the issues of project success and failure, and knowledge and skills required for successful project management, have been addressed by the extant body of project management thought, and the pattern of prescriptions aimed at practitioners (project managers, team leaders, and other organisational members) emerging from these various analyses. The intention is to uncover some of the key assumptions that the mainstream wisdom makes about the nature of projects, the character of project work and intellectual virtues on which knowledge and action are based.
Subsequently, upon the analysis of empirical material (reflective practitioners accounts) I will strengthen the case for phronetic-centred sociology of projects (Flyvbjerg, 2001), for studies which would create knowledge through research capable of addressing the paradoxical and complex issues illustrated and remarked upon in this section (Chapters 5, 6 and 7). The notion of complexity and paradox in projects is seen as inseparable from values, judgement, polyphony of voices, and context, and has already been raised in critical and sociological work that will be drawn upon in this thesis (see Chapter 3).

2.1.2 Approaches to project failure — a theoretical and methodological framework

Fincham (2002) argues that project failure can be interpreted in a wide range of ways. One is the failure of a project product to meet its objectives resulting in the features of the deliverable being scaled-down or the project work cancelled due to unsatisfactory performance against the expectations of various parties. The second relates to problems with budget and deadline overruns, where the project product may be a 'technical' success but is deemed a failure because of incurred costs. The third involves the long term benefits and performance of the resulting outcome (system, building, service, new product), that is not equal to the demands placed on them when in use (cf. Atkinson, 1999). Fincham observes a more recent trend in the literature where projects are associated with a more strategic level of decision making and where project failure appears to be 'strategic' rather than linked to technical problems. A growing body of documented cases also show that project failure could be due to political processes of resistance in organisations (Buchanan and Badham, 1999; Buchanan and Boddy, 1992). Notions of dissatisfaction mounting and support draining away (Fincham, 2002) are identifiable, so that social and behavioural factors, not just 'technical' ones, are always implicated in accounts of project failure. (see for example Clarke, 1999; Atkinson, 1999, Belassi and Tukel, 1996.)

Table II-1, adapted from Fincham (2002), summarises different approaches to understanding project failure by distinguishing three perspectives: rationalist, process, and narrative. The first two essentially reflect the idea of Sauer (1999) who differentiates between a factor-based approach and a process approach to project failure - two approaches most frequently featuring in the extant project management body of thought, and briefly illustrated in the paragraph above. The third (narrative — Fincham, 2002) is related to a much less frequent approach to project performance research, but the one that is of significant interest in this thesis.
Table II-1 Perspectives on project success and failure (adapted from Fincham, 2002, p.3)

<table>
<thead>
<tr>
<th>Perspective on project performance</th>
<th>Form of organisational behaviour and action</th>
<th>Methodological focus</th>
<th>Success and failure seen as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational / normative</td>
<td>Organisational goals; managerial and organisational structures surrounding the project</td>
<td>Simple cause and effect</td>
<td>Objective and polarised states; discrete outcomes</td>
</tr>
<tr>
<td>Processual</td>
<td>Organisational and socio-political processes; projects as form of a decision outcome</td>
<td>Socio-technical interaction</td>
<td>Outcomes of organisational processes</td>
</tr>
<tr>
<td>Narrative</td>
<td>Organisational and socio-political processes; symbolic action; themes,</td>
<td>Interpretation and sense-making; rhetoric and persuasion; critical/ hermeneutics</td>
<td>Social constructs; paradigms; complex double-act rather than discrete outcome</td>
</tr>
</tbody>
</table>

The propositions contained in Table II-1 appear as a useful framework to structure a review and critical evaluation of the body of literature and research representing the developments within the intellectual foundations and knowledge system of project management. What is of particular interest for the ultimate aim of the study is an in-depth insight into propositions, prescriptions and advice that are offered to practitioners and organisations in relation to a competent and skilful conduct in project based environments guided by a dominant paradigm about successful project performance.

2.2 Project management mainstream – the universal prescriptions

The body of project management thinking that will be discussed under this heading I have termed mainstream because the views of this kind form the central message of most books on project management that are directed at practitioners, and of a large body of academic literature on the subject. The mainstream assumptions in project management can be summarised and plotted against major criteria distinguishing the functionalist agenda and positivism in management studies from other epistemological positions, as discussed in the work of, for example, Reed (1992), Grint and Willcocks (1995), Alvesson and Willmott (1996), and Johnson and Duberley, (2000). Firstly, positivist epistemology is based on the belief that managers face an objective reality which they can control by applying suitable methods for a rational assessment of the problematic situation in order to come up with the correct solution. This results in a proliferation of methods, tools, analytical techniques, and applied instruments with which management itself becomes identified. Management skills and knowledge are reduced to value-neutral competence, ignoring the political aspect of organisations, and ethical and moral issues, reinforcing the belief that management can be conceptualised in a technical way by
agreeing on terminology and meaning. I have systematised the respective implications of the functionalist approach to project management under the four sub-headings in Table II-2 for the quality and nature of knowledge created from that position.

Table II-2 Project management mainstream – The implications of the functionalist approach

<table>
<thead>
<tr>
<th>Scientific, rationalist assumptions</th>
<th>Implications for project / project management research and body of knowledge</th>
</tr>
</thead>
</table>
| Practitioners face an objective reality | • 'the project' exists out there in a pre-given form readily available to be managed or studied  
|                                      | • The 'Project life cycle' (PLC) model is a universal representation of the true nature of 'projects'  
|                                      | • The model serves as a decision making tool with predictive and explanatory power |
| Instrumental/ rational approach to organisational decision making and management processes | • Linearity of PLC model promotes the attainment of project objectives through the sequential and progressive application of orderly methodology (control / content/ implementation focused)  
|                                      | • Decision/ action, thinking / doing, planning / implementation divide  
|                                      | • Promotes a non-contingent approach to the desired competence profile of project manager, the policy of composing project team, the choice of planning methods and the evaluation criteria |
| Managers are rational technicians | • skilfully use a well defined methodology to navigate through the stages of PLC to accomplish some finite piece of work in a specified time, within a certain budget, and to agreed specification  
|                                      | • responsibility for a competent control of the implementation process; |
| Project management is a value-neutral competence | • specific language and terminology sustain the 'scientific' aura of both project management discipline and project management profession  
|                                      | • project working and project management are universally applicable as a neat and orderly solution to implementing complex organisational initiatives  
|                                      | • Instrumental reason allows only for means-ends relationships and promotes itself as politically neutral. |

Project managers are seen as rational technicians, dealing with technical issues that are resolvable through the application of superior knowledge of the planning and control techniques. For example, Burke (1993) considers project management to be a specialised management technique, to plan and control projects under a strong single point of responsibility. Lock (1994) holds the view that project management has evolved because of the need to plan, co-ordinate and control the complex and diverse activities of modern industrial and commercial projects. This view reflects the evolution of project management with the roots in the innovative management and engineering styles in large-scale military technology developments (mainly in
the USA) after the World War II (see for example Hughes, 1998). Definition that appears on the Association of Project Management (APM) web site (www.apmgroup.co.uk) portrays project management as an all-embracing 'managerial' process:

Project management is the planning, organisation, monitoring and control of all aspects of a project and the motivation of all involved to achieve the project objectives safely and within agreed time, cost and performance criteria.

The assumption is that if a manager complies with the recommended model of behaviour and performs recommended activities, the expected benefits (project objectives) will be delivered. It is important to note that the mainstream definitions of project management never question or problematise the notion of 'project objectives' or 'project goals'. They are assumed as given, rationally arrived at through an informed and professional process of thinking and decision making prior to the formation of project. What is of concern in almost all of these definitions are issues of implementation, control, and motivation of people to understand, clarify and buy-in these stated project objectives / goals / benefits (see also Buchanan and Badham, 1999). In the subsequent sections of this chapter and particularly in Chapter 3, I will discuss in more detail the operation of the mainstream body of project management thinking with the above assumptions, which comes to dominate the prescriptions given to practitioners, to the exclusion of other views and concerns.

2.2.1 Rational / normative perspectives on project success and failure

It is important to note how the conventional mainstream belief system operates in the above definitions of project management through a specific set of assumptions that promote normative functionalist views and sideline others that would include power, unpredictability, and conflict. These mainstream prescriptions for project management reflect mostly the rational / normative view on project success and failure, and to some extent the processual view (Table II-1). The concept of rationality in this context can be defined as the use of scientific reasoning, empiricism and positivism, and the use of decision criteria of evidence, logical argument and reasoning (Huczynski and Buchanan, 2001) in order to discover the range of variables associated with project failures. As a result, numerous lists and tables (Pinto and Slevin 1987a, b; Morris and Hough, 1987) have been provided stating the correlation between project failure and lack of senior management support, vague project goals, lax project management, inappropriate project organisation etc. The normative approach offers a framework in the form of a checklist of required action for those involved in planning and implementation of a project, usually recommended to be accompanied by some kind of project stakeholder analysis. The failings of project management are explained in mainstream research and practice as a consequence of: insufficient training in project management techniques, inappropriate
organisational culture (particular culture not being conducive to project management), employee resistance, or unprofessional implementation (Clarke, 1999; Young, 1998; Pinto, 2000). This wave of critique, research, and propositions for 'improvement' is based on the assumption that a skilful individual (in this case a competent project manager) can overcome the negative effects of power and politics surrounding the decision making process during project initiation, development and execution stages.

Similarly, project success has been related to 'getting it right' along a similar range of dimensions which recommend how individuals should behave in order to achieve a desired outcome. The logic of inquiry into project performance from this perspective is dictated by an emphasis on linking the hardbound phenomena ('factors', Fincham, 2002) causally to a clearly bounded outcome (success or failure). The rational / normative perspective can also be identified in the stream of studies which emphasise the strategic dimension of projects, including managerial planning and objective setting (e.g. Clarke, 1999 among others). The message here is that clear strategic goals, well co-ordinated structures for achieving them, and tight control of the project environment (i.e. 'structural factors', see Currie, 1997) are the prerequisites for successful project implementation and outcomes. A typical conclusion of the mainstream analysis is that there are no clear answers to the repetitive problems with the performance of projects, but that 'success potential' (Cadle and Yeates, 2001) lies in ensuring user involvement, top management support, and a clear statement of requirements.

2.3 Broadening the mainstream agenda: systemic decision making and behaviour of multiparty coalitions

The body of thought in organisational analysis known as the processual / contextual perspective emerged from the studies of organisational change (Huczynski and Buchanan, 2001) as a critical response to the simplified solutions and explanations offered by normative and rational approaches. In the context of project management, the argument is that there are many related factors – individual, group, organisational, social – which influence the progress and outcomes of projects and the nature of associated change. Project is viewed from this perspective as a social arrangement, a system of interaction, conversation, decision making, creativity, evaluation, and politics. Such approaches counterbalance the prejudice that some other disciplines, sciences, engineering and related professional groups, hold with respect to the nature of projects, their performance and management.
2.3.1 Processual perspectives, contingency approaches, and middle-range project management theories

The processual model (Sauer, 1993) of project success / failure (Table II-1) focuses on socio-technical processes and the nature of decision making about projects with a high level of innovation and change. Projects are represented as a socio-technical system (Gareis, 1994; Holt and Rowe, 2000), a form of human and technical interaction - as a complex and contested process of decision making in which corporate systems, user groups and other involved parties interact. Holt and Rowe (2000), for example, conclude that a project’s successful performance is therefore not conceptually limited to the project product, but incorporates relationships between suppliers and clients within the project supply network, during and after the completion of a project (see also Atkinson, 1999).

The proponents of the processual perspective argue that the attractiveness of the traditional project management as an ideal organisational solution to modern challenges needs to be balanced by an awareness of some of the limitations of its application. For example, Briner and Hastings (1994) note that different kinds of strategic problems require different project approaches and the lack of awareness of these differences has been a factor in poor performance of strategy task forces. Recently, a new stream of research has introduced a kind of ‘contingency approach’ to project planning and management – claiming that planning process, and for that matter, the conventional project management methodology, cannot be seen as universal, and that project planning and control approaches, procedures, and techniques depend on the type of project at hand, the implementation environment, and the stage in project life. (Turner and Cochrane, 1993, Turner, 1995; Maylor, 1999, Young, 1998, Frame, 1994, 1995) This has resulted in the development of ‘middle range theories’ (the term coined by Pinder and Moore, 1979, in Packendorff, 1995) contingent upon different types of projects where project management processes correspond to the level of uncertainty of project objectives and project work methods and organisation. The practical recommendations contained in these typologies mostly refer to the need for modifications and variations in the choice of project planning and control procedures and tools.

Despite the attempts to move away from the conventional project management wisdom, these recommendations and created knowledge remain largely prescriptive, stressing planning and objective setting, and narrowly correlating success with management control and failure with lack of control. Contingency approaches frequently produce rather non-theoretical classifications of projects - idealised typologies not fully empirically supported - along the dimensions such as: the level of clarity of project goals, the environment of application, the technical content, or strategic intent behind the initiation. The approach is criticised as being...
weak in providing a scope for theoretical understanding of intrinsic complexity of organisational processes associated with projects and of 'how these processes may themselves be changing' (Huczynski and Buchanan, 2001).

2.4 Discovering the 'true' nature of projects
One of the key assumptions within project management mainstream is the notion that project managers 'face objective reality' (Section 2.2 and Table II-1). It is no surprise that a significant amount of research and scholarly activity has been directed towards discovering the 'true' nature of projects and a best corresponding management methodology.

Maylor (1999) has proposed an 'activity view' of projects where a project is seen as a transformation / conversion process with 'non-repetitiveness' being its fundamental trait, followed by a set of characteristics that differentiate it from other types of organisational undertakings: specific end goals, time, cost and quality constraints, measurable output and 'something has been changed through the project being carried out'. (Maylor, 1999, p.5) A conversion process schemata is given in Figure 2.1

![Figure 2.1 The project as a conversion process, Source: Maylor, 1999, p.14](image-url)
Turner and Cochrane (1993), have stated the following all-embracing definition:

"[A project is]...an endeavour in which human, material and financial resources are organised in a novel way, to undertake a unique scope of work of given specification, within constraints of cost and time, so as to achieve unitary, beneficial change, through the delivery of quantitative and qualitative objectives." (Turner\(^1\) in Turner and Cochrane, 1993, p.95)

Young's commentary amplifies the 'uniqueness' associated with projects: 'The project is therefore something special by its nature' (Young, 1998, p.16), and is defined as

'...a collection of linked activities, carried out in an organised manner with a clearly defined start and finish point, to achieve some specific results that satisfy the needs of an organisation as derived from the current business plans.'

Similarly, 'A temporary endeavour undertaken to create a unique product or service' is the definition of a project adopted by the PMI (Project Management Institute Standards Committee, 1996, p.167). I will discuss in the subsequent analysis the implications of the notion of 'temporary' and 'unique' for the ways in which the mode and process of managing a project are conceptualised and promoted in the mainstream literature.

*Formulating an appropriate management methodology*

On the basis of the agreed characteristics of projects in the above definitions, majority of leading texts tend to promote an understanding of 'Project' and Project Management as firmly evolving around the construct known as Project Life Cycle (PLC), where project performance and project work are defined as a sequence of delineated stages (typically 4-5), bounded with a specified beginning and end, constrained by limited resources, and driven by the attainment of the agreed project goal. The linear model of PLC is proposed as a decision making tool and as an explanatory concept for project success. The PLC stages are assumed to happen sequentially and progressively, where each unfolds on the basis of the completed preceding stage (see Figure 2.2)

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Project management methodology

Step 1: Strategic need identification, Evaluation of potential benefits
Step 2: Agreement and approval of project goals and objectives / specification
Step 3: Planning the project work on the basis of Step 2
Step 4: Selection of project team, communication & negotiation of project's goals and objectives, control of project work being performed against the planned (in Step 3)
Step 5: Project termination; evaluation of performance against the agreed specification and expected benefits

Stages of project life cycle

Concept and feasibility → Initiation and development → Execution / implementation → Completion / hand-over

Figure 2.2 A representation of a generic project management methodology corresponding to the stages of the universal project life cycle model

Implications for project management knowledge, skills, and competencies

Most of the improvement recommendations that the normative and processual approaches offer to practitioners mainly turn into efforts of redrawing the traditional linear project life cycle model into a less-linear, iterative, non-sequential or cyclical representations of PLC, promoting less structured project management process, but still concrete enough to provide the illusion of security and control.

In Appendix 2 (Figure A2.1) I have included one of those more dramatic representations of PLC suggested by Young (1998) which attempt to capture an 'improved' understanding of complexity and dynamics of projects, and to signpost towards more appropriate project management methodology. Project management now includes the inevitable revisions of the original project definition, replanning part of the work, revising the project schedule, solving problems related to uncertainty, motivation, individual and team behaviour and the like (Young, 1998; Turner and Cochrane, 1993; Frame 1995).

The skills needed are primarily those of team-building, negotiation, communication and political skills (Meredith and Mantel 2000, Pinto, 2000, Kerzner 1995, Turner 1995). The assumption is that even if the goals get distorted, it is still possible to achieve the agreement through the participative process of communication and negotiation. The issue of politics and
power are therefore only implicitly addressed as an inevitable consequence of the 'unique nature' of project - the phenomenon existing objectively in the world of organisations: carried out beyond normal operations, with the 'temporary' management role directly associated with the life of the project, thus challenging traditional lines of authority with perceived threats to the status quo; the work involves multi-functional, multi-disciplinary or multi-organisational input. These explain the conflict over priorities, objectives and resources between a project and the rest of the organisation.

Frame's view is representative of these approaches:

> 'In the management arena, the concept of messiness is nothing new to those who practice project management. Whereas traditional management focuses on things like chains of command and tying authority to responsibility, project management has centred its attention on getting the job done in an environment where authority is lacking, goals are subject to multiple interpretations, and rules of behaviour are ill defined.' (Frame, 1994, p.23)

Project managers are assumed to be neutral in their decisions towards making the right, rational, business-oriented choices consistent with the environment and objectives of the project or organisation under investigation. This reinforces the belief that Project Management itself can be scientific - a value-free activity, where project management skills and knowledge are reduced to value neutral competence, ignoring the political aspect of organisations. Instrumental reason allows only for means-ends relationships and promotes itself as politically neutral. An illustrative example of the simplistic, linear 'how to do project management' rhetoric, assumptions, and 'persuasions', which imply but do not attempt to theoretically elaborate the issue of organisational power and politics thus raising an ethical issue within such inquiry system, is taken from Young (1998, p.19):

> [as the project manager] ...You have an interest in success and a key element of success is the project team, i.e. the people doing the work. It is not enough to just hand out the work you decide is necessary for the project. The people in the team must participate in all aspects of the work from the start-up and definition to completion. You can get the team motivated, enthusiastic about the work and focused on the objectives if you can explain the context of the project in the organisation's strategy. Then everyone understands why the project exists, its importance and relative priority compared with other work.

It is assumed that the goals / objectives (of the project) can be 'defined, clarified, communicated and well understood' and that it is just the question of 'skilful' trying, while

> ...It is essential that projects are not initiated as a management whim at any level but are only allowed when it is demonstrated they make a clear contribution to corporate strategy. This can only be achieved if senior management is involved in the project process and has responsibilities which are clearly defined for the sponsorship of all project activity. The sponsors come from this senior management group where authority should be clearly defined. (Young,1998, p.22)
The ‘best practice’ recommendation and advice in the mainstream project management literature instructs project managers that their implied duty is to navigate the implementation: establish negotiated contracts with clients and all other interested parties, to explicate and operationalise the goals of the endeavour, to define and analyse the scope of work required (WBS), to schedule the required activities into the agreed time-scale with the respect of the budget and available expertise, to co-ordinate implementation by comprehensive planning, to supervise the work processes towards task accomplishments, and the like (see the conventional model of PLC). This is linked to the explanation of how the project process has become rationalised to a degree that the project can be presented and promoted as the appropriate and most effective organizational form of the current epoch and a project management as a new form of general management. (cf Cleland 1995)

For Meredith and Mantel (2003, p.10), ‘project management is no place for the timid’, which is seen in the context of ‘conflict’ being a major characteristic of project based organising. For Frame, project complexity can be best handled in most cases by mastery resulting form experience and education. Applied to the people operating, managing and making decisions in project environments, Frame’s comments on such mastery illuminates the requirements of knowledge and skills:

For the people who are new to a project, grasping its totality may seem impossible. Consider what they must know: the Project Management Institute’s Project Management Body of Knowledge stipulates that the competent project manager should have some degree of mastery over time management, cost management, scope management, human resource management, risk management, quality management, contract management, and communication management. Beyond this, project workers are expected to have the technical competence to understand the specific content of their projects. There is much to master even on relatively simple projects. (Frame, 1994, p.27)

Meredith and Mantel (1995. p.662) claimed: ‘...the conceptually simple issue of maintaining communications between the various parties becomes, in reality, almost impossibly complex’. Although it is a common practice in PM research for these issues to be studied in isolation, Meredith and Mantel’s discussion points out the inherent interconnectedness between, and the implications of, ‘cultural differences among the parties-at-interest’, ‘various aspects of the environment’, ‘multiparty, multicultural communications’, ‘differences in managerial style’ and organisationally induced problems related to the need for a ‘universal information system, conflict resolution in matrix management, and new methods of rewarding excellence’.

The impact of interindustry, interfirn, and intrafirm microcultural diversity on the project manager is significant. Perhaps more than any other type of manager, the project manager is dependent on commitments made by people, both inside and
outside the parent organisation, who owe little allegiance to the project, have little cause for loyalty to the project manager, and over whom the project manager has little or no de jure authority. In light of this uncertainty, the PM must know whose promises can be relied upon and whose cannot. (Meredith and Mantel, 1995 p. 665)

It is interesting to note how the conventional mainstream belief system operates here within a specific set of assumptions about power, communication, persuasion, knowledge, causality, intersubjective relating, and a crucial role of an objective observer, standing outside the system, and designing and specifying how things will unfold in the future, in order for the system to get to the desired state. Unpredictability and possibility of ‘not being in control’ are rarely addressed.

The inevitability of organisational structural problems with projects implied by Meredith and Mantel, Frame, Young, and Maylor among others, appear to be seen as a major obstacle to resolving the crisis of project management and to enabling practitioners to utilise the knowledge base and manage projects successfully. Meredith and Mantel argued in 1995, that the development of the project management subject to a higher level of sophistication is an important scholarly and professional task. They suggest that such a task should be based on a serious consideration of the existence of three pertinent and unsolved issues related to: 1. the ability of project managers to learn from their own experience and experience of others, 2. the need to manage conflict in inherently complex project environments including the problems with matrix structure, and 3. the purpose, ethics and methods of the professionalisation of PM practice. The authors say: ‘... it seems apparent to us that they must be solved if project management is going to develop much beyond its current state’ (Meredith and Mantel, 1995, p.678). Such a statement subtly echoed a degree of desperation and helplessness within the field, implying, at the time, an uncertain future of project management as a subject area and a managerial discipline.

Maylor (2001) has recently argued that projects and project management should be viewed, defined, and studied as core business processes, as an integrated way of organising for successful performance in modern business age. The body of knowledge relevant to the project management discipline should, in Maylor’s view, evolve around this ‘core process’ perspective of projects / project management and should be ‘multidisciplinary’. I will return to the (formal PMBOK and the on-going debate about the content and purpose of it) later in this chapter. In the section immediately below I review a phenomenon of ‘project basing’ as a universal solution to organisational success in contemporary social and economic context (already remarked upon in Chapter 1), as important for this thesis and its aims and outcomes.
2.5 The universal promise of project based organising and management – a ‘control and implementation’ paradigm

This section reviews the background to a widely accepted model of ‘project working, organising and management’ as a universal solution and a big promise for improved performance of contemporary organisations. I will then discuss in more detail the PMBOK itself, a document which attempts to build both standards and infrastructure for the discipline of project management. In the subsequent chapter (Chapter 3) I will argue that this wide acceptance of project based working and project management is a consequence of reification and naturalisation of ‘project’ as an organisational object on which the operation of the orchestrated belief system of project management is based.

Within traditional, hierarchical organisations, projects often function as ‘special situation’ structural devises used where a separate, self-sufficient sub-unit is created to oversee the completion of a specialist activity (developing and integrating a new computer system or package; building an extension to the hospital, starting up a new venture, etc). With the associated notions of ‘one-of-a-kind’, ‘non-repetitive’ task, labelling something a project may be seen as a means of making ‘non-normal’ work more ‘normal’ and understandable by imposing a scientific, rational approach thereby increasing the predictability of the outcomes (Sydow and Staber, 2002, p. 217). The relevant management methodology entails planning work in small measurable tasks and tracking progress against outcomes. It is supported by a knowledge system orchestrating a belief in linear progress, rational planning of ideal social orders, and primacy of technical scientific knowledge (reviewed in the preceding sections of this chapter). As a consequence, project management and projects are today accepted as natural, self-evident and indispensable. The scientific frame of reference has given project based organising and Project Management an image of structured and disciplined approach suitable for complex organisational affairs. (Frame 1994, 1995, Briner and Hastings 1994, Cleland, 1995, Clarke 1999, Young 1998, Meredith and Mantel, 2000). This is illustrated in Figure 2.3 below.

![Figure 2.3 Reshaping fit: the process solution](Adaptation of a model from Egan (1995) p.115)
Egan (1995) suggests that strategic change antecedents are now pretty well explained and understood, but that the theory and practice suffer from the inability to deal effectively with the implementation process. Therefore, aspects related to implementation have increasingly become the focus of research as crucial factors to the overall success of a strategy. Briner and Hastings (1994) asserted that projects, as temporary organisational structures combining thinkers and doers, different structures and different organisational perspectives, offer a way of addressing complex strategic problems that harness the collective brainpower and commitment of the organisation. In this way, both project based organising and project management have been promoted as a universal and politically-neutral toolkit of techniques appropriate for any type of activity in any sector, promising to ensure and deliver a tight control of multi-functional, multi-professional input efficiently, timely, and to specification. As Clarke (1999, p.139; italics added) states: ‘In a world where change is becoming increasingly important, tools such as project management, if used properly, can provide a useful way for organisations to manage that change effectively.’ It is usually based on the introduction of a set of procedures, or on a new model of administration with a strategic aim to enhance competitiveness through a more effective intra-organisational integration and optimal utilisation of scarce resources (Cleland, 1998). The introduction and application of project management or project based organising in this form is often seen as an organisational development initiative, with a subsequent redefinition of what is perceived as ‘project’ in organisational environments. Project based working has been promoted as a universal promise of solutions to pertinent organisational problems such as inflexible organisational structures, inter-functional and inter-disciplinary intolerance, undisciplined technical professionals, and a neglect of ‘the customer’s needs’. (Frame 1994, 1995, 1999, Briner and Hastings 1994, Cleland, 2003, Clarke 1999, Young 1998, Meredith and Mantel, 2003).

The definition below is a typical illustration of the approach promoting projects and project management as an effective organisational change methodology:

…the dynamic process that utilises the resources of the organisation in a controlled and structured manner, to achieve some clearly defined objectives identified as strategic needs. It is always conducted under a defined set of constraints. (Young, 1998, p.21)

Young’s approach is firmly based on the assumption (belief) that the project management process is essentially ‘the control system you use to achieve the right results or outcomes’ (Young, 1998, p.21).
The other potential benefit for which projects are valued is their contribution to fostering organisational learning. Cleland (1998) points out that as project teams evaluate new technologies and resources, they gain insights into the need for making changes. Projects supposedly provide, according to Cleland, a central point where new knowledge, skills and attitudes can be developed.

2.5.1 Project work: paradoxes within the ideal solution
Concurrently, some paradoxical phenomena have been observed by both practitioners and scholars. Despite the promise of an ideal work design articulated in the definition of projects (as a unique temporary unit, multi-functional multidisciplinary teams, customer focus, strategic orientation, disciplined approach to management of time, cost and quality), these very characteristics have become the major sources of problems and failures in project settings (Greiner and Schein, 1981; Packendorff 1995, Kreiner, 1995, Marshall, 2001; Sydow and Staber, 2002). One of the reasons is that the problem with tension between identity and difference, integration and differentiation continues, being displaced from functional to project level. Meyerson et al (1996) portray some of the tensions of such temporary groups. These include a high degree of complexity of project tasks, where the formal structures needed to facilitate co-ordination and control of work are lacking, and high dependence on diverse skills and collective knowledge in the arrangement where individuals have little time to find out who knows precisely what. This tension is seen as inherent and irremovable, as it is 'an always emergent, reversible, and potentially unstable process of negotiation.'(Marshall, 2001) Various reasons have been identified, and modes for rectification proposed to remove the sources of core problems: interdepartmental barriers, lack of communication and tolerance between professions, strategic decision making related to projects, learning from previous experience, and capturing information and knowledge within individual projects that are relevant to other projects and the organization as a whole.

Clarke identifies the following as problematic in the application of Project Management as a change implementation methodology: the rigid 'standardisation' of project management as the mode of change management which often causes cultural clashes; perceived benefit of using project management, or 'managing by projects' or becoming a 'project based' organisation is poor and is often regarded as another control mechanism, a 'corporate reporting' tool; inadequate formal completion of change projects; project overload syndrome; individual resistance to imposed procedures and practice, and lack of confidence and motivation. It becomes obvious that the very principles of the effective, structured project management methodology are simultaneously seen as the major causes of its failure.
2.6 The formal PMBOK – meaning, role, and content

The confusion and crisis within the field, commented on earlier, can be noticed in a prolonged debate on the international scene about the formulation of a stand-alone, formal, professional project management body of knowledge (PMBOK), involving academia, practitioners / industry, and professional institutions in the UK and internationally (APM, PMI). The efforts to ‘professionalise’ project management are founded in serious concerns about the role and responsibilities of project managers in contemporary organisations, the skills they need in order to cope with the requirements for effective management of projects, and the importance and increasing visibility of project forms in businesses. Frame (1999) and Meredith and Mantel (2000), for example, claim that the complexity of the problems faced by the project manager, together with the rapid growth in the number of project-oriented organisations, has contributed to the idea of professionalisation of project management. The creation and development of PMBOK emerged as a concern towards a normative document for certifying competencies and benchmarking best practice and performance. With the inevitable internationalisation of project environments, the need for strengthening the links across the borders between educational institutions, industry, and professional bodies has been embedded in these efforts. Evidently, all major creations of PMBOK so far have been experiencing continuous revisions of the content in order to respond to the critique and concerns from both academia and industry, in meeting often incompatible requirements of their professional purpose and relevance to practice (Curling 1995a, Pharro, 1997, Turner, 1999, Turner, 1996).

The debate surfaces the difficulties among the PMBOK proponents to agree on some fundamental aspects including the boundaries of the project management subject area, its purpose, practical application, and relationship with other aspects of organisational and managerial reality. (Meredith and Mantel, 1995, Frame, 1999, Turner 1999, Morris et al 2000, Wideman 1995, Walta 1995, among others). The major areas of concern and disagreement within the PMBOK debate are:

- What is the phenomenon of interest? - theoretical foundations and the underlying assumptions about projects, project management, and professional management education and training as determinants of the content of the PMBOK;
- description of the purpose of project management, particularly in relation to the criteria for measuring project success, and factors that lead to a successful project performance;
- the purpose of project management particularly in relation to the criteria and factors for judging and achieving success on projects, and definition of ‘good project management practice’.

Appendix 2 contains a selection of material illustrating these points.
A prevailing position within the debate over the nature of the PMBOK (see Morris et al. 2000, Turner, 1999; Morris, 1999; Wideman, 1995) is that the PMBOK should be a standalone concept based on 'objective, publicly-testable knowledge based on facts', although opinions differ about how it is to be achieved. Turner, for example, believes that a strong theoretical basis to the subject should be the central aspect of such knowledge. Turner adds that the required strong theoretical basis should not be developed on '...conjecture and pure empirical evidence, but on certain, sound knowledge ...a series of premises, from which a strong, consistent theory is derived' (Turner, 1999: 330). Turner's proposition (Turner, 1999, p330) of such premises is:

- The purpose of project management
- The criteria and factors for judging and achieving success on projects
- And hence what constitutes good project management practice.

This implies the underlying assumptions of the instrumental rational approaches to project management driven by positivism and scientism and resulting in prescriptions directed at practitioners that resonate with the normative perspective of project performance (success/failure) and an 'implementation' focused role of project managers.

Walta (1995) sees the idea of knowledge circulation within the project management profession as central to the policy of creating a universal PMBOK (see Appendix 2, Figure A2.2). The primary purpose of organising knowledge in the form of 'professional body of knowledge' is, for Walta, in maintaining 'knowledge unity' to support practice, knowledge transfer, and provide guidance for knowledge development and acquisition. Walta (1995, p.101) states the reasons for such multiple purpose and objectives as:

The professional looks for prescriptions: how to do a certain project task. The trainee looks for how to do it and reasons for doing it. The academic looks for useful research topics.

In addition, Wideman asserts that constructing the 'body of knowledge' of any professional discipline, is a 'scientific' mission the purpose of which should be defined as the first step of the methodological process (see Appendix 2, Table AII-1). He believes that a structured approach to knowledge requirements of a PM professional defined by sound, clear and accepted criteria should lead ‘... to a model of the PMBOK which enables the contained knowledge to be organised so that it can be examined systematically and its scope can be evaluated.’ (Wideman, 1995, p.72) The purpose of constructing PMBOK should encompass, as claimed by Wideman, strong educational and practical aspect:

It should help institutions of learning to structure programs for training practitioners, and facilitate further research and development. On the other hand,
Chapter 2 The Project Management Knowledge System: Making a Case for a Critical Examination

it should also be directly helpful to those individuals and organisations who are involved in project work. Therefore, the PMBOK should encompass only those elements which have become accepted as contributing to successful project management, or have had sufficient exposure to establish their potential value and usefulness. (Wideman, 1995, p.72)

A concern common to other attempts of constructing PMBOK, such as the recent research for the revision of the APM PMBOK (Morris et al, 2000, Morris, 1999), is the need to define and generally agree on basic project-management terminology ‘in order to establish a common understanding and facilitate effective communication and learning.’ (Wideman, 1995, p.74)

As it becomes clear from this discussion, the issue of language, terminology, and agreement on their meaning within the community of academics and practitioners engaged in the field of management of projects, is still a concern (see Chapters 4, 5 and 6). For example, Morris et al, (2000, p.155) propose that the PMBOK ‘should reflect the purpose of project management’ and subsequently add

It describes the levers that any professional could, or should, employ in order to fulfil this purpose. The Body of Knowledge thus reflects the ontology of the profession: the set of words, relationships and meanings that describe the philosophy of project management. (Morris et al, 2000, p.156)

The authors of the report conclude: ‘In the end, however, most people working in the subject do believe that there is a generic discipline that is core to the practice of project management across a very wide range of industries and applications, and that as a result it is worth trying to define what this core is.’ (Morris et al, 2000, p.156) The major driving force behind such endeavour is the practitioners demand: ‘performance ought to be improved’ (p.156). (see Appendix 2, Figure A2.4)

Appendix 2 contains other suggestions related to making PMBOK more theoretically serious and strong to justify it as a basis for professional education, and qualification and to establish project management as a worthwhile field of scientific study. I will make reference to these various models and scientific approaches again while developing a critical deconstruction of some of the mainstream thinking, in Chapter 3.

2.7 Are we facing a dead-end in the intellectual development of the field?
It seems that some seminal mainstream writers see the way out of the crisis of project management in achieving the state of ‘maturity’ of the discipline. The belief is that maturity relies on a well defined body of knowledge. For example, in the epilogue of the previous edition of their seminal text on project management, Meredith and Mantel (2000) raise a number of concerns about the future of the field, concluding:
"The field of project management, however, is not yet a mature body of knowledge. While certainly not in its infancy, it is just as certainly not beyond adolescence" (Meredith and Mantel, 2000, p.571)

It is significant to note that in the latest (5th 2003) edition of this text, the authors offer a more enthusiastic and confident account of the project management discipline, largely justified by reference to the developments of the official Guide to PMBoK® by PMI (Project Management Institute), the USA based professional body.

Other writers (Belout, 1998; Turner, 1999; Maylor 2001, among others) believe that more and better project manager theory is the key to improving the image of the field as a scholarly subject and as a recognised mature practical discipline. In Chapter 3 I will review and critically analyse (deconstruct) some of the efforts to make the field theoretically more mature and stronger as a professional discipline, and uncover the operation of the mainstream belief system behind such efforts and its implication for individual project workers / managers, as well as for organisations and society.

It is useful to draw a parallel with a similar observations that Introna (1997) made about the 'maturity' of the body of knowledge related to management information systems (MIS) and management information (MI) as a 'phenomenon in-the-world' (p.150) Introna argues that it is important to understand what such 'maturity' claim implies. In the case of MIS and MI, if it implies that the current framework for understanding the phenomenon has been exhausted and is producing new ideas, then the claim 'has much merit' (1997, p.150). If it implies that the concepts and principles within the current orthodoxy governing the field have 'come of age' (ibid.) and have proved themselves true and useful, then such a claim is open to challenge. This is a key, relevant conclusion from the preceding stage of the investigation conducted as part of the thesis.

2.7.1 Is there a way out of the crisis?
Despite the emerging work that challenges the dominant doctrines in response to the failure of technical project management to deliver expected project results, the tendency is to treat the basic framework of project management as compelling. Apart from adding certain 'improvements' to the traditional models and skills, little radical examination of the intellectual foundation of project management has been done within this stream of research. Most of the effort is directed towards searching for another model which better represents the 'true' nature of projects, and for an ideal form of project management, with the assumption that such an ideal model objectively exists in the world of practice. These propositions include the need to redefine 'project' from 'one-off activity' to 'core business process', and the need for
'multidisciplinary' approach to the studies of project management (Maylor, 2001). Other authors argue for the need to study 'complexity' of projects as a major determinant of the project management process and the associated issue of project 'success' (Williams, 1999, Turner 1999), to bringing in the issues of 'culture change' into project management studies where project management should be seen as part of both individual and organisational development and learning (Frame, 1999), and something useful for everyone involved rather than perceived as a burden (Clarke, 1999).

Packendorff comes to a conclusion that the current developments and propositions for improvements of the project management knowledge systems and its application in practice are inapt. He identifies three major deficiencies which are ingrained, maintained and reproduced across the research field through certain ontological, epistemological and methodological assumptions: 1. the assumed universality of project management theory, 2. the lack of empirical studies of projects, and 3. the lack of alternative representations of 'projects'. (summarised in Table II-3)

Table II-3 Common and alternative assumptions on project management (adapted from Packendorff, 1995, p.326)

<table>
<thead>
<tr>
<th>Common assumptions</th>
<th>Alternative assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management theory</td>
<td>General theory for all kinds of projects, generic concept collecting different theories applicable to projects under one umbrella</td>
</tr>
<tr>
<td>Aim of research on projects</td>
<td>Prescriptive, normative theory, grounded in ideal models of project planning and control, Research undertaken as survey studies of large samples of projects</td>
</tr>
<tr>
<td>Research metaphor for the project</td>
<td>A tool, a means for achieving higher-level ends</td>
</tr>
</tbody>
</table>

The suggested avenues for research of projects by Packendorff (1995) include:
- the ways projects are institutionalised as organisational arrangement in different environments and their influence on the supposedly goal-rational behaviour of project participants;
- action in projects to be studied in the context of expectations that form the action base and of the learning that occurs as a result of the action;
- project leadership as relation-oriented not only task-oriented; beyond superficial theories of project leadership but to understand the concept of collective action in projects;
- conceptions of time and budget constraints; these can be enacted in various ways by the individual project members (realistic, non-realistic); time limits can also be described as social constructions.

Packendorff concluded at the time that his propositions were in need of empirical investigation. Subsequent development of project management knowledge in popular literature appears to have been unstable and fragmented. As the dream of establishing project management as an exemplary field of management science became increasingly distant, the resulting internal crisis of project management and its intellectual basis has become more of a concern for academics than for practitioners.

In this thesis, as outlined in Chapter 1, the aim is to listen to the voices from practice and, through a combination of practical philosophical considerations and concrete empirical analysis, to explore the ways in which the project management knowledge base can be broadened to incorporate concerns of organisational members—project actors—and their experiences with project success and failures in their local situations in the living present.

Two issues require particular attention and explanation. Firstly, it is the problem with the label, that is the ontological representation of 'project' in the studies concerned with project management. Secondly, it is the problem with conceptualising the nature of managerial knowledge and competence and, by implication, management education in the field. I see it as important to recognise that a certain belief system underpinning the definition and reification of 'project', project organizing and project work in contemporary organizations is reproduced and sustained in most of the mainstream literature through a set of assumptions which emphasise certain problems and voices, and silence others. Managerialisation is an ontological issue (Fournier and Grey, 2000) — propositions to 'project manage' a particular business affair, strategic problem, political issues or change initiatives implies invoking a 'technical' solution through expert management. Project managers are perceived as having a privileged knowledge of the real world. The managerial status is legitimised on such ontological and epistemological
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Grounds. Consequently, the normative/rational prescriptions offered to practitioners about managing projects, and creating managerial knowledge tend to dominate organizational discourses. A critical investigation into the operation of the dominant belief system is the topic of Chapter 3.

The concern is about overemphasising the representation of projects through models and definitions and of their properties as a structural template. I have taken this concern as a point of departure for the empirical study and for the subsequent discussion. This study has intended to refocus attention to some key problems with the extant body of thought governing project management research and the field as practiced and, as the title suggests, to contribute to developing a practical-wisdom centred sociology of project work and project management.

Chapter summary

A substantial literature exists on projects, project organisations and project management. As mentioned earlier, (see Packendorff, 1995) projects are mainly theorised in terms of control or in terms of organisational structure, mainly focusing on management aspects of projects from a situational contingency perspective (Sydow and Staber, 2002). As discussed in the preceding sections, more recent approaches have attempted to broaden the theoretical basis of the field by emphasising systems character, strategic significance, and the relational and behavioural aspects of projects.

This study takes as its point of departure the need to re-examine the manner in which the issues of project success and failure, and knowledge and skills required for successful project management, have been addressed by the extant body of project management thought, and the pattern of prescriptions aimed at practitioners (project managers, team leaders, and other organisational members) emerging from these various analyses. The intention is to uncover some of the key assumptions that the mainstream wisdom makes about the nature of projects, the character of project work and intellectual virtues on which knowledge and action are based.

I expand on the points outlined in Chapter 1 and explore the crisis of project management both as an academic subject and the practising discipline (Section 2.1). In relation to the aim of the thesis (formulated in Chapter 1 and summarised in Section 1.2.1) and through a combination of traditional literature review and a critical theoretical discussion of the intellectual system governing project management research and the field as practiced, the following relevant aspects are addressed:

- Insights into problematic performance of contemporary projects as expounded in various reports in the public domain – the success/failure debate (literature review and secondary sources of data)
- Theoretical and methodological framework encompassing a range of approaches to project failure in research literature (Fincham, 2002) – to organise and structure the subsequent literature review and discussion
- Mainstream theoretical and methodological positions from which success and failure of projects and project management have been studied; this includes project management mainstream approaches such as rational normative, systemic, processual and behavioural
• the nature of practical recommendations created from these positions, including the developments of formal PMBOK
• the experiences with the application of project based working, organising, and management as 'universal solution' to contemporary organisational and managerial problems with effectiveness and efficiency; implications for individual knowledge and competencies; problematic process of 'projectification of society'
• a review of influential voices for change and improvements in project management theory and research to overcome the crisis

Scientism and scientific trends in social inquiry into projects, project success / failure, and project management have the tendency to believe that science holds a reliable method of reaching the truth about the nature of things. The positivist / functionalist tradition follows the ideal of natural sciences originating from Socrates and Plato – the belief in universal rationality, that is in the possibility to 'establish entire system of theoretically objective principles which like mathematical laws could be defined with rational argument and used to explain nature and human actions.' (Flyvbjerg, 2001, p. 70) This is how the prescriptions discussed briefly in Chapter 2 come to dominate the overall knowledge system in project management. We need to show that they are not value-neutral and that the operation of such a knowledge system has important political, individual, and power dimension.
Chapter 3

The Operation of the Project Management Mainstream

"We are able to achieve goals through project organization that could be achieved only with greatest of difficulty if organized in traditional ways. ... Businesses regularly use project management to accomplish unique outcomes with limited resources under critical time constraints. ... Indeed, there is a rapid increase in the number of firms that use projects as the preferred way of accomplishing almost everything they undertake. Not even the most optimistic prognosticators foresaw the explosive growth that has occurred in the field."

(Meredith and Mantel, 2003, p.iii)

Having made a case in Chapter 2 for a critical examination of the extant knowledge system about project management and project working through the review of literature addressing project based organising, project management and project performance, in this chapter I attempt to do two things. Firstly, I articulate the critical theoretical debate surrounding the field and discuss some alternative possibilities in conceptualising and studying project working, organising and management (Section 3.1). These are the views that correlate with the third conceptual approach to project failure /success identified as ‘narrative’ by Fincham (2002) (see Table II-1, Chapter 2) and illuminate the nature of project management created from that perspective. Following from there, I proceed with uncovering the operation of the orchestrated belief system and ‘scienticism’ and their implications for creating project management knowledge and for developing prescriptions of ‘good practice’ aimed at practitioners (Sections 3.2; 3.3; and 3.4). This includes the implications of the reification and construction of ‘projects’ as natural objects for both practice and knowledge creation. Finally, the chapter sets the scene for the empirical part of the study (Section 3.5). It suggests an alternative account of projects, project performance and project management to the mainstream perspectives, and proposes an interpretative framework - the concept of complex responsive processes of relating in organisations - for the subsequent analysis of the empirical material which resonates with the intellectual aspirations of a practical-wisdom-centred inquiry.

3.1 Alternative perspectives – critical, narrative, and political frame of reference

Several authors have articulated the need to do away with the conventional approaches to management, and to explore theoretical and methodological possibilities other then those based on strategic choice theory and instrumental rational reasoning. For example, paraphrasing Heidegger’s ideas, Introna argues that in organisational management research we need a shift
from epistemology to ontology, a turn which would involve ‘thinking’ about the phenomenon of interest without first making models and constructing theories, and then imposing our constrictions on the world: ‘We need to stop doing Science and return to the most fundamental question of all - “the Being of being”, the real of the real, the is of is-ness’ (Introna, 1997, p.12). We should encourage an inquiry about how the situations labelled ‘projects’ and their success or failure are being experienced ‘in their average everydayness’ (Heidegger’s phrase cited in Introna, 1997, p.13); and how an alternative vocabulary to the concept of ‘thinking, purposive, and rational’ can help understand the ways in which involved actors cope with their local project-labelled situations.

Kreiner is among those critical writers who argue that; “(Projects) do not exist ready-made for us to scrutinise and classify. They are of course enacted, and thus ‘constituted by the actions of interdependent actors” (Weick, 1969: 27)” (Kreiner, 1995: 344). The vital implication of this insight relates to the power effects of this reification. Bowker and Star (1999) cite the work of Bloor, Douglas and Latour as contributing to our understanding of how such reification and objectification have material and political consequences upon the world as experienced. Latour sums up the recursive effect of this reification process; “if (such objects) are out there in the world then they must be real and so we must model our society accordingly” (Latour, 1993, quoted in Bowker and Star, 1999: 60).

According to Weick, ‘most collectivities and most objects on which collectivities work can be made sensible in a wide variety of ways’ (1979, p.23). Therefore it is possible to hypothesise that situations carved up and labelled as ‘projects’ have a decidedly arbitrary quality, due to continuous process of sense-making in organisations in order to ‘manage some equivocalities, ignore others, and create still others’ (ibid). This is the issue of the rules of boundary definition and of inclusion / exclusion of actors in / from the collectivity. The same applies to frequently used term – the environment. A project’s environment should not be treated as existing independently of the project – it is created by the very process of project based organising (setting the boundary) and by the actors involved in such a collectivity. Stacey’s criticism of systems thinking and boundary drawing addresses a similar issue and proposes the advantages of the ‘process view’ of organisations as continuous reproduction of patterned responsive processes of relating in conversations in the medium of symbols, where power relating is an intrinsic aspect of that process. The relevance of this perspective will be discussed at length in Section 3.5.3 of this chapter.
Other authors suggest the need for a wider picture of what goes on in social construction of projects and project management by focusing on who is included in and who is excluded from the decision making process, analysing what determines the position, agendas and power of different participants with respect to issues (about project success or failure), and how these different agendas are combined and resolved in the process by which the decisions are arrived at. Taggert and Silbey (1986) cynically propose a political development cycle of projects: wild enthusiasm, disillusionment, total confusion, search for the guilty, punishment of the innocent, and promotion of non-participants, in contrast to the conventional rational PLC (project life cycle model) which neatly unfolds as a succession of stages: conception and feasibility study, requirement analysis and specification, design and development, implementation / execution, and project termination. Projects are seen as a complex mixture of decision processes, competing individual perceptions and interests, visionary leadership, and attempts to secure support and build coalitions behind particular ideas using power plays. The management of project and the change associated with its initiation and outcomes is equated with the 'management of meaning' (Huczynski and Buchanan, 2001), or with symbolic attempts to legitimise project proposals, and particular definitions of problems and solutions in the face of competing ideas. The emphasis here is on organisational process and the interest groups involved in development and implementation of a project, which borders and even overlaps with some of the assumptions made within the processual approaches discussed earlier in Chapter 2, Section 2.3.1.

Arguing that all projects exhibit, to a smaller or larger extent, a dimension of organisational innovation and change, Fincham (2002) proposes that the attributions of 'success' and 'failure' can also be explored as associated narratives that are involved in many forms of change and innovation in organisations. 'Through a kind of social labelling events are formulated into evolving 'stories' that evoke either status or stigma and play powerful role in ordering behaviour' (Fincham, 2002, p.1) This means for Fincham that narratives of success and failure are 'reflexive mechanisms', 'narratives of meaning and action', that can shape technical change by influencing courses of action to be either accepted or rejected through a type of social labelling. These narrative mechanisms are designed to influence actors into a particular course of action, either adopting or rejecting particular choices, often rhetoric or management ideas as forms of persuasion. The implications for project team members, managers, sponsor or board can be seen as an opportunity that this approach creates to minimise negative public perceptions about high rate of project failures (see discussion in Chapter 2), and decrease the amount of daunting reports in the press. For the project manager, though, the difficulty is in developing a completely different type of skills and knowledge which draw attention to how the themes of
success within narratives are born from social labelling, political manoeuvring and conflict (even if creative conflict) between groups.

3.1.1 Implications for project management knowledge, skills and competencies

Holt and Rowe's (2000) research suggests the notion of 'critical project leadership' which corresponds to a wider perception of project success as proposed by Hood (1991, in Holt and Rowe, 2000, p.548):

1) a concern for economy and frugality pursued by a stringent matching of resource and task;
2) a commitment to honesty, fairness and openness; and
3) the aspiration to transform public systems into 'learning organisations' so as to better meet the unexpected.

Critical project leadership is seen here as the ability to balance the use of explicit direction (technical devices such as systems application or teams) with the encouragement of innovation and communication (rhetorical devices such as focus on the customer), or the capacity to envisage how effective activity is governed by both technical challenges (the provision of expert advice, knowledge and systems), and the more nebulous, but equally crucial, value perspectives, in order that the client's voice be heard throughout the product process [sic]. (Holt and Rowe, 2000, p.549)

The relationships between suppliers and clients within the project supply network, according to Holt and Rowe (2000), include effective training, communication, and team building, but within a complex and often informal framework of behaviour promoting performance enhancing possibilities and participation rather than 'explicit rules governing practices' (p.543). Holt and Rowe endorse the view of several other authors, that these relations in project environments are, by nature, grounded in the critical investigation of future-oriented options for improvement, and as such cannot be engineered through exact process modelling.

Laszlo (1994) similarly acknowledges the need to understand complexity and uncertainty surrounding contemporary projects, and to reflect such conditions in the project management knowledge system. He concludes:

Good managers know that it is in their interest to sustain the broader system in the framework of which they operate. To evolve the system that sustains one's own project, even if it also sustains the projects of one's competitors, makes excellent sense. In a time of system transformation, altruism is pragmatic. Either the broader socio-economic and corporate system survives, or everyone in the given industry sector risks becoming extinct. (Laszlo, 1994, p.3-5)
Political behaviour and the drifting environment – major concerns in practice

Pinto (2000) claims that project management is particularly prone to political processes: the status of project manager in many organisations is not rooted in a stable base of power which would ensure necessary control over required resources; it is not part of the traditional management structure; and does not give them a firm base of hierarchical power. This phenomenon is known as ‘responsibility without authority’. It places project managers in the position of having to influence subordinate behaviour into engaging in appropriate behaviour:

In my research and consulting experience, most companies spend thousands of hours to plan and implement a multimillion or even multibillion dollar investment, developing intricate plans and schedules, forming a cohesive team, and maintaining realistic specification and time targets, all to have the project derailed by political processes. This is a pity, particularly in that the end result is often foreseeable early in the development of the project: usually as the result of a project manager’s refusal to acknowledge and cultivate political ties, both internal to the organisation and externally with the clients (Pinto, 2000, p86)

The drifting environment of a project

Basically, the notion of ‘drifting environment’ is used to describe the experiences with original / initial goals of the project and intended outcomes becoming eroded and irrelevant in the course of the project implementation. Kreiner (1995) states that his fundamental starting point is the assumption that projects are designed to produce relevant outcomes. Kreiner claims that the instability of project goals over time presents a major challenge to the mainstream project management. In most discussions about the formal PMBOK, ‘relevance issues’ (Kreiner 1995) feature only as an initial concern on the part of the client or other interested parties, while project managers are seen as rational, professional implementers, where changing ‘goal-posts’ are outside their realm. As empirical evidence indicates, practitioners do show concern about these issues. In the literature, on the other hand, these concerns are mostly referred to as problems with ‘management of changes to the original plan / contract’ and with ‘clients changing their requirements’. The associated managerial responses, termed as ‘re-planning’ and ‘project risk assessment and management’, have been introduced in the PLC models (Young, 1998; Maylor, 2001; as reviewed in Chapter 2). The academic community engaged with the project management subject has not offered any significant explanation of why these changes happen, or in Kreiner’s terms: why the project’s environment tends to drift. In conclusion, relevance over time is seen in mainstream PM as ‘externality’ or ‘risk’ while ‘best practice project management’ advice maintains local / internal rationality by proposing a universal project management methodology.
In some mainstream project management literature, organisational politics is argued as an immediate context of many projects. It is often exemplified in the correlation between the top management commitment and project success. Kreiner states (1995, p. 341):

While human inconsistency may explain the waning of commitment over time, it may turn out to be completely rational for top management to divide their attention and commitment in accordance with the changes in their contexts and change in the ongoing ventures. To the project manager, it may seem incomprehensible that the initial support at the project launch changes into top management subsequently almost ignoring the project. Monitoring drifting environments means monitoring a bewildering complexity of relationships not necessarily centred around the project itself.

Drifting project environments are a consequence of complex reality which does not lend itself to objective or lasting interpretations. Kreiner’s proposition is to refocus the research into project performance from the normative project management methodology which assumes unitarist frame of reference and positivist epistemology, to the issues of tacitness of knowledge, experiential equivocality and systemic complexity. It is the kind of thinking and experiences outlined in Section 3.1 that is of interest to the thesis and the phronetic, value-rationality centred sociology of projects that it attempts to develop. It is also within this stream of thought that we find the literature, research and voices from the world of practice which echo the contemporary crisis of project management as a study area and a practising discipline, and articulates dissatisfaction with the technocratic and instrumental nature of conventional project management knowledge system.

3.2 Unravelling the orchestrated belief system
The study draws on a combination of practical philosophical considerations and concrete empirical data in order to achieve the following:

- to develop a critique of mainstream prescriptions offered to practitioners about how to manage projects for ‘success’;
- to offer an alternative account of project, project management and project performance to mainstream perspectives, emphasising relational, context-dependent nature of knowledge and skills, and processual properties of knowing and communicating in project-labelled arrangements;
- to explore the implications of the concept of complex responsive processes of relating in organizations for understanding of:
  - what goes on in projects in local situations when people find themselves involved in jointly performing a sophisticated, co-operative activity,
  - what it might mean managing a project from this perspective; and
the skills and competencies that enable a *virtuoso* social and political action (Flyvbjerg, 2001) in managing the arrangements labelled projects.

In order to uncover the assumptions behind the mainstream belief system, and reconstruct the intellectual foundations of project management which would include value rationality together and beyond instrumental rationality, it is important to understand how the conventional wisdom operates in project management research and in the field as practiced and what the context of social and political action is. Resonating the methodological guidelines for a phronetic scientific inquiry, it is important to include identification and examination of the discursive practices of project management through a review of the project management ‘truths’ as detailed in the seminal project management texts, repeated by practising project managers, and expounded in mainstream project management training, including the PMBOK. An important task has been to critically examine the ongoing reification of ‘the Project’ as a pervasive organisational object which constitutes both the focus and the *raison d'être* of an increasingly influential sub-discipline of management theory, the field of project management.

My intention in this chapter is to build on the preceding discussion (Chapter 2 and Section 3.1 above) and continue to ‘unravel’ the project, delineated and constituted as an object through generative documents such as seminal text-books and the Project Management Body of Knowledge. As I see the question of *praxis* as important as documentary reality, this chapter is a step in a broader critical analysis of the range of technologies, techniques, formulae, rules, IT applications, etc. embodied in the PMBOK and intimately linked to the project as a taken-for-granted entity in everyday organisational life. I focus as far as possible on the object which legitimises and gives the field its coherence, the project itself, and its construction and reification as a ‘documentary reality’ (Silverman, 1997) which subsequently reinforces certain knowledge system to be reproduced in training courses and academic education (see discussion about PMBOK in Chapter 2).

*The 'projectification' of society – A Problematic Process?*

The contemporary surge in interest in Project Management, outside of its traditional heartlands in construction and engineering, is typically explained by reference to the increasing recognition of ‘the Project’ as a versatile, flexible and predictable form of work organisation. According to Meredith and Mantel (2003), there are three *forces*: 1) the exponential expansion of human knowledge; 2) the growing demand for a broad range of complex, sophisticated, customised goods and services; and 3) the evolution of world-wide competitive markets for the production
and consumption of goods and services; that are paramount to the wide-spread acceptance of projects and project management in ‘our contemporary society [which demands] the development of new methods of management’ (ibid. p.1) reflecting ‘the need for more sophisticated systems to control both outcomes and processes’ (ibid.p.2). All three forces above, according to the authors, ‘combine to mandate the use of teams’ to deal with problems that ‘used to be solvable by individuals’. In addition, they claim that ‘accomplishing organizational change is a natural application’ (ibid.p.2) of project management. Consequently, many firms have ‘set up projects to implement their goals for strategic and tactical change’ (ibid.p.iii)

Having assumed that the arguments above are convincing enough for organisations, organisational members — as well as scholars - to take up ‘learning project management’ seriously, Meredith and Mantel (2003, p.39) introduce the notion of ‘project management maturity’ as a ‘natural’ urge for the development of project and multi-project management expertise. This can be interpreted as an ideological imperative with the message that if the above urge does not come naturally to managers, it means they are not seriously concerned with the success and competitiveness of their organisation! Similarly, Frame (1999) attempts to justify the importance of the PMBOK competence standards to both practitioners and scholars, ‘who plan to work in knowledge-based organizations during the next few decades’ by asserting that it is ‘obvious that organizing knowledge work along project lines has become the central way of doing business everywhere,’ (p.xii) in today's ‘brutally competitive world’ (ibid. p.xiv)

3.3 The Project - Reification and naturalisation
For most Project Management writers, ‘the Project’ is a universal and transhistorical phenomenon – from the construction of the pyramids at Giza to the Allied landings in Normandy in 1945, ‘projects’ have always existed; so for instance, prominent authors argue: -

‘Although some may argue that the construction of the Tower of Babel or the Egyptian pyramids were some of the first “projects”, it is probable that the caveman formed a project to gather a raw material for mammoth stew. It is certainly true that the construction of Boulder Dam and Edison’s invention of the light bulb were projects by any sensible definition’. (Meredith and Mantel, 2003: 8)

‘Of course there is nothing new about undertaking projects in organisations. Anyone who doubts this need merely visit Machu Picchu in the Andes or the Hangzhou canal in China or the Coliseum in Rome.’ (Frame, 1999: 3)

“Whenever and wherever civilizations took root, there were projects to manage: buildings to erect, roads to pave, laws to write. Without the advanced tools, techniques and methodologies we have today, people created project timelines, located materials and resources and weighed the risks involved.” (PMI, 2001: 9)
In an offhand manner, typical of introductory paragraphs of textbooks, such statements emphasise what is taken for granted by the authors: that projects have always been with us, that the human race has only achieved all that it has achieved through ‘projects’, even that The Project is a universal feature of human existence (see the quote at the start of the chapter). From this perspective, the only difference now is that we are now in a position to study projects systematically and scientifically so as to develop a cogent and reliable ‘Body of Knowledge’ regarding the real nature of projects.

This comforting vision of Project Management as another scientific quest of discovery can be seriously undermined by a range of developments in the philosophy of knowledge and social studies of science and technology. Since The Archaeology of Knowledge (Foucault, 1972), it has become increasingly difficult to disregard the constitution of objects of knowledge by and through the creation of a body of knowledge. Foucault argues in this and subsequent works that objects of knowledge do not consist of a “silent, self-enclosed truth”; rather, that an object of knowledge is constituted “by all that was said in all the statements that named it, divided it up, described it, explained it, traced its developments, indicated its various correlations, judged it”. (Foucault, 1972: 35). This reverses the taken-for-granted order of events; rather than a discourse emerging because of the existence of an object of interest, it is argued instead that the discourse brings the object into existence (Hodgson and Cicmil, 2003). In this light, the study of projects and of their management is not therefore a question of discovery, it is one of invention. Rather than a self-evident ‘project’ to be explored, we instead have an ongoing discursive construction of what is to be understood as ‘the Project’; rather than asking “What is a project?”, a better question might therefore be “What do we do when we call something ‘a project’?”.

Kreiner underlines the importance of this distinction; “(Projects) do not exist ready-made for us to scrutinise and classify. They are of course enacted, and thus ‘constituted by the actions of interdependent actors” (Weick, 1969: 27)” (Kreiner, 1995: 344). See also Table II-3, Chapter 2 where Packendorff (1995) suggests that projects should be researched as an aggregate of individuals enacting common cause. It is important therefore that the notions of ‘common cause’, collective structure, and enactment and the implications of power which is present in any interaction are understood. This ontological issue has been of interest in this thesis and part of the empirical analysis.

The consequences of throwaway statements regarding the existence of pyramids as evidence of the universal importance of projects are therefore serious, as they invoke an ahistorical mishmash of pre-historical work organisation, Adam Smith’s division of labour, Taylorism,
Cold War project methodologies and the contemporary techniques and technologies associated with the discipline of project management. In doing so, this perspective serves as an informal legitimisation of contemporary formulations of the discipline of project management as somehow universal and timeless.

3.3.1 Refocusing attention on the label 'project'
Several authors (Hodgson 2002, Hodgson and Cicmil 2003, Linehan and Kavanagh 2003) have addressed the need for introducing alternative theoretical approaches to studying projects and for identifying the implications that they may have for how we talk about and conceptualise our understanding of knowledge creation about projects, as well as what it means participating and managing in a project-labelled arrangements. Drawing on Chia's (1995) work, Linehan and Kavanagh (2003) make a useful distinction between two ontologies of projects — ontology of being and ontology of becoming. The former underpins most of the mainstream approaches to project working (as a 'template' of effective organizing and creativity), commented upon in Chapter 2. The latter emphasises the role of language, conversational relating, intersubjective understanding and interpretation as key to making sense of arrangements labelled projects in contemporary society. The argument is that it is equally useful to understand what is going on when people label something a project and what it might mean performing, in a virtuoso manner, political and social action from that perspective.

From the normative rational perspective, managers face an objective reality of projects as already there with their structures (which can take one of several suitable forms), multi-professional input, and designed system of collaboration, information and knowledge exchange and learning. These plannable elements of the arrangement labelled ‘project’ (project based organisation, project working, etc) are seen as beyond or separate from the actual activities of the project members – a separation of agency and structure. The representations of projects via entities such as functions, parts, structure, and relationships internally and in the wider environment, although useful, cannot capture the dynamics of inter-relating that goes on in the project that creates action and outcomes.

In contrast, an alternative approach, a becoming ontology, emphasises process, verbs, activity, and the construction of entities. Instead of thinking about project as temporary endeavour undertaken to create a unique product or service, where the existence of project is recognised in ‘the spoors of managerial technologies’ (Linehan and Kavanagh, 2003, p.7) such as budgets, organisation charts, Gantt Charts, and similar, an alternative position is to consider a project as an emergent outcome of disparate, ambiguous, political practices.
Similarly to Fournier and Grey (2000) who claim that managerialisation is an ontological issue (remarked upon in Chapter 2), Introna has noted that any chosen form of representation of ‘reality’ is a political artefact as it is always already serving someone’s interest and creates powerful opportunity to structure regimes of truth in the organisation. The users select from the model representing an aspect of reality (in this case the document officially defining what project and project management *are*) that which supports their validity claims.

### 3.3.2 Making ‘the Project’ a Reality

For many writers on projects and project management, a fundamental step in the creation of project management as a discipline and profession is the ‘naturalisation’ of the project as a universal and pervasive organisational object. Many texts and documents in the field, from textbooks and manuals to academic articles, are implicated in this naturalisation, engaging both explicitly and implicitly in the *reification* of the project. Reification is succinctly defined by Berger and Luckmann as “the apprehension of the products of human activity as if they were something other than human products” (1966: 106). The debate within project management thus exhibits the trait termed by Robert Chia as the phenomenon of ‘false concreteness’. It is, according to Chia, a heritage of positivist claim of privileged knowledge, which;

> “Often begins with the production of documents speculating on notions about ... the existence of a particular object which then forms the legitimate focus of investigation. At this stage a speculated object begins to take on a life of its own (reification) and is increasingly perceived as being separate and independent of our apprehension of it. Next...the impression is given that it is in fact the existence of the object which first stimulated our attention towards it. Finally researchers become so accustomed to talking in these inverted terms that the initial stages of conceiving, reifying and inverting of the observer/observed relationship are forgotten or strongly denied.”

(Chia, 1995, in Johnson and Duberley, 2000: 99)

The immediate consequence of an epistemological position which insists upon the reality of its focus is the systematic preclusion of alternative representations/classifications of the phenomena of interest. This position reflects an enduring theme of management theory; the belief that its study is analogous to natural science, i.e. discovering universal laws and fundamental properties of objects which (pre)exist ‘out there’, in the ‘real world’. From this naïve realist perspective, many writers on project management feel able to present their field as gradually converging on a generic model of the project management process, complete with common ontology and a standardised terminology globally recognised by professional project managers.
"The general assumption underlying the PMBoK and subsequent ambitions to create a project management profession, is that project management knowledge is applicable to all sorts of projects in all sorts of industries and environments" (Packendorff, 1995: 324)

This quest for a ‘universal’ model of project management is reflected in the increasing focus on a quantitative analysis developing ‘cross-industry’ comparisons. Morris, for instance, depicts the field closing in on this goal, claiming that;

"it was only in the mid-to-late 1980s that sufficient inter-industry exchange of project management expertise and practice had occurred for a multi-industry, universal model of best project management practice to emerge in any kind of robust form" (1997: 307).

It is noted in much of the emergent critical literature that such ‘best project management practices’ contained and promoted by the PMBoK tend to reflect principles of job fragmentation, intensive surveillance and enhanced accountability, based upon interlocking systems of ideational, system and structural control (Metcalfe, 1997). I will return to the techniques and technologies of project management in my discussion below; for the moment it is enough to highlight that the legitimisation of these techniques relies upon reification, locating ‘the project’ and ‘project management’ as ‘things/objects’ existing ‘out there’ in reality. In this sense, ‘the project’ may be seen to be akin to the ‘epistemic object’ of Knorr-Cetina (1997), acting as a generator of new conceptions and new solutions. So, for instance, Meredith and Mantel assert that it is possible to investigate and agree on the nature of the projects for which project managers are responsible, and therefore on ‘the skills that must be used to manage projects, and the means by which the manager can bring the project to a successful conclusion in terms of the three primary criteria: performance, time, and cost.’ (Meredith and Mantel, 2003: 8).

The necessary first step in the establishment of disciplinary boundaries is thus the definition of what the project really is; “This all is possible if we succeed in clarifying the nature of a project and determining how it differs from the other activities that are conducted in organisations” (Meredith and Mantel, 2003: 8, emphasis added). Meredith and Mantel believe that what is important and most relevant is to understand and ‘see’ the project as a unit that has its purpose (delivery of a set of desired end results): 'A temporary endeavor undertaken to create a unique product or service' (Project Management Institute, 2001, p.167). The nature of the unit is such that it can be divided into subtasks that must be accomplished in order to achieve the desired goals. In addition, these subtasks require complex and careful co-ordination and control in terms of timing, precedence, cost, and performance. The Project Life Cycle model is referred to as ‘a comfortable framework for the reader’ (p.v) to explain major events and issues that usually occur in the life of a project.
3.4 Instrumental rationality and standardised knowledge – The phenomenon of PMBoK

Introna has noted that any chosen form of representation of ‘reality’ is a political artefact as it is always already serving someone’s interest and creates powerful opportunity to structure regimes of truth in the organisation. The users select from the model representing an aspect of reality (in this case the document officially defining what project and project management are) that which supports their validity claims. Moreover, it is important to recognise that for this reification to be effective, it requires institutional support (Douglas, 1986); an infrastructure of relationships with the historical development of tools, routines of work practice, organisational arrangements and technology which forms a ‘negotiated order’ (Bowker and Star, 1999) across diverse communities of interested parties. In particular, this is attempted (and occasionally achieved) through concerted efforts to institutionalise standards which define and stabilise what a project ‘is’, and in particular through the creation of the Project Management Body of Knowledge (PMBoK) of the Project Management Institute.

3.4.1 The PMBoK and the Naturalisation of the Project

While there exist numerous documents, texts, guides, etc in the field of Project Management which attempt to define and classify projects, my focus in this section will be The Guide to the Project Management Body of Knowledge (PMI, 1996; 2000) The PMBoK forms the cornerstone of the largest professional association in the field of Project Management, the US-based Project Management Institute (PMI). The increasing influence of PMI is partly indicated by the increase in PMI membership in recent years, from 8,817 in 1992 to over 100,000 by 2003. The PMBoK was first developed and published in 1987, and has since been revised and republished twice since, in 1996 and 2000.

For the 1996 version, the title changes from The Project Management Body of Knowledge to The Guide to the Project Management Body of Knowledge, to reflect the acceptance that while the knowledge contained may be objective and based on facts, one document cannot contain “all those topics, subject areas, and intellectual processes which are involved in the application of sound management principles to … projects“ (PMI, 1996: vii). Instead, the PMBoK from 1996 onwards claims to “identify and describe that subset of the PMBoK that is generally accepted”, that is, knowledge and practices “applicable to most projects most of the time (with) widespread consensus as to their value and usefulness” (PMI, 1996: 3; italics added). 
Table III-1: PMI PMBoK process-based knowledge areas (PMI, 2000)

<table>
<thead>
<tr>
<th>Knowledge Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project Integration Management</td>
<td>Coordination of the various elements of a project, including coordination of all changes</td>
</tr>
<tr>
<td>2. Project Scope Management</td>
<td>Understanding of project life cycle, construction of WBS, change control;</td>
</tr>
<tr>
<td>3. Project Time Management</td>
<td>Scheduling with Gantt charts, milestone charts, PERT/CPM networks, tracking schedule variances;</td>
</tr>
<tr>
<td>4. Project Cost Management</td>
<td>Employment of cost estimating methodologies, budgeting process, tracking cost variance;</td>
</tr>
<tr>
<td>5. Project Procurement Management</td>
<td>Understanding contract and procurement processes, resolving disputes;</td>
</tr>
<tr>
<td>6. Project Quality Management</td>
<td>Identifying internal and external customer-supplier chains, doing things right first time, monitoring quality;</td>
</tr>
<tr>
<td>7. Project Risk Management</td>
<td>Identifying and modelling risk, planning for risk;</td>
</tr>
<tr>
<td>8. Project Human Resources Management</td>
<td>Managing conflict, motivating matrix resources, team building, appraisal, and</td>
</tr>
<tr>
<td>9. Project Communication Management</td>
<td>Understanding different forms of PMIS, maintaining formal and informal communication channels</td>
</tr>
</tbody>
</table>

While the various revisions entail slightly different contents, sections and emphases, the fundamental structure of the PMBoK remains the same, establishing standard concepts and practices grouped in 9 knowledge areas (see Table III-1 above, and Appendix 2, Figure A2.3). The goals also remain broadly the same; to provide a common lexicon, to put in place a structure for professional development programmes, to provide a framework for the refereeing and selection process for the Project Management Journal, and to facilitate knowledge transfer and management technology transfer across industries and national borders, with the overarching mission of promoting the professionalisation of Project Management. However, the PMI’s definition of the PMBoK is not merely a definition, description and model of ‘the project’. In defining ‘the project’ it incorporates knowledge of related techniques (such as Activity Duration Estimating, Qualitative and Quantitative Risk Analysis, etc.) deemed necessary for the manipulation of the project.

It is no surprise to see that the PMBoK is officially authored by a collective entity known as the PMI Standards Committee; as Silverman indicates, “anonymity is part of the official production
of documentary reality” (1997: 58). In common with most official documents and guides, it is delivered in an impersonal passive tone which both effaces the author and thereby guarantees the objectivity of the knowledge contained therein. This rhetorical device is necessary (but of course not sufficient) to establish that the contents accurately reflect “a reality that exists independently of any individual observer, interpreter or writer” (Silverman, 1997: 59). In doing so, it can be seen as attempting to rise above the petty interpersonal differences which exist between writers and provide an authoritative definition of the disciplinary area. That said, the PMBoK is not however an entirely anonymised document; although the authorship is credited to a committee, there is some recognition that PMBoK exists as a collective effort. For the sake of transparency and in recognition of their efforts, the membership of the Standards Committee is also listed in an appendix to the 1996 edition, as well as a full list of 96 reviewers and their institutions, which is dominated by names of corporations such as AT&T. In a similar way to academic referencing, this appendix can be seen to be invoking a network of allies (Latour, 1987) to strengthen the truth claims of the document itself. This can be seen as the co-production of the authority and the object; through their involvement in the composition of the document, the reputation of academics and organisations is built at the same time as the contents are legitimised as the verdict of ‘the great and the good’, the expert authorities in this field.

It is my contention that the PMBoK as described above, in collaboration with a range of ancillary documents and the wider efforts of a network of agencies, is a key element in the naturalisation of ‘the project’ as a taken-for-granted object through the institutionalisation of standards, and serves as a key step in the establishment of an invisible infrastructure built upon and around a specific notion of ‘the project’. The naturalisation of categories or objects is a process of “stripping away the contingencies of an object’s creation and its situated nature. A naturalized object has lost its anthropological strangeness” (Bowker and Star, 1999: 299). As a consequence of this naturalisation, it often requires intensive work to recapture and re-establish the strangeness and contingency of such objects.

Through authoritative statements which define the ‘project’, certain assumptions about project management become legitimised, clearly expounding the notion of technical / normative knowledge supporting the ‘control’ driven interest in deciding about what counts as ‘proper project management knowledge’. This also implies the approach which acknowledges decision/action and thinking/doing divide:

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1 The 9 areas in PMBoK (2000) include one addition to the 8 areas in PMBoK (1996); ‘Project Integration’.

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For many organisations, *projects are means* to respond to those requests that cannot be addressed within the organisation’s normal operational limits. ... Projects are critical to the realisation of the performing organisation’s business strategy because *projects are means* by which strategy is implemented. (The *PMBOK® Guide* — 2000 Edition, p.4; emphasis added)

We can identify here the relevance of Habermas’s theory of knowledge constitutive interests and the problematic assumption of the project management mainstream about value-neutral, scientific knowledge and competence of project practitioners. It is also apparent that power relations are always involved in establishing ‘knowledge systems’ of (management) disciplines, as argued by Flyvbjerg and Foucault, too. The efforts and rationale behind ‘professionalisation’ of the project management discipline are largely reliant on the establishment of its proprietary body of knowledge. Such proposition, in turn, assumes a unique theoretical platform within the discipline, and an identifiable set of competencies, which define the boundary of project management as a profession.

Wideman asserts that constructing the ‘body of knowledge’ of any professional discipline, is a ‘scientific’ mission the purpose of which should be defined as the first step of the methodological process. He believes that a structured approach to knowledge requirements of a project management professional defined by sound, clear and accepted criteria should lead ‘... to a model of the PMBOK which enables the contained knowledge to be organised so that it can be examined systematically and its scope can be evaluated.’ (Wideman, 1995, p.72) Chapter 2 and Appendix 2 provide the context of the PMBOK ‘scientific debate’ (Wideman, 1995, Walta, 1995)

The dominance of the scientific frame of reference has resulted in the belief that project management can be conceptualised in a technical way creating an illusion of neutrality by agreeing on terminology and meaning. The debate around the concept of professional PMBOK is based on such assumptions. Morris et al (2000) and Wideman (1995), for example, stipulate the need to define and generally agree on basic project-management terminology ‘in order to establish a common understanding and facilitate effective communication and learning.’ (Wideman, 1995, p.74)

*Concluding remarks on the preceding sections*

In the preceding sections, I have discussed in more detail the operation of the mainstream body of project management thinking, and how the above comes to dominate the prescriptions given to practitioners, to the exclusion of other aspects. I perceive three specific dangers implicit in
the reification of the project and the naturalisation of the related infrastructure. In the first instance, the “blackboxing” of knowledge in this area, as definitions, techniques and procedures become set in stone, is an effective way of removing the ethical and political questions from the agenda. A cursory reading of the main journals and proceedings from major conferences in this area provides a striking example of the consequences when everyday categories become “seamlessly interwoven with formal, technical categories and specifications... The moral questions arise when the categories of the powerful become the taken for granted” (Bowker and Star, 1999: 319-20). In particular, the disciplinary effects of project management as a field become yet more difficult to challenge and overturn. Secondly, I would argue that the establishment of universal knowledge of this kind implies a loss of a reflexive and embodied rationality (cf. Flyvbjerg’s (2001) value-rationality or practical rationality) in favour of abstract principles and blind faith in universal techniques (Townley, 2002). Finally, the way PMBOK ‘reifies’ the project into an commonsensical, everyday, routine organisational object represents the way that classifications and standards link the individual with larger processes and structures. Bowker and Star explore and discuss how these links generate both enabling-constraining patterns over a set of systems and developmental patterns for an individual operating within a given set.

On the other hand, I would also emphasise that “any given classification provides surfaces of resistance (where the real resists its definition), blocks against certain agendas, and smooth roads for others.” (Bowker and Star, 1999: 324). To build on this position and encourage more critical perspectives to be developed by those implicated in projects, it is important to maintain ‘open spaces’ where alternative or locally situated knowledge can be created. While this is clearly a difficult challenge, given the tendency of infrastructures to become embedded and to disappear from sight, one possible way out is through denaturalisation, by making clear the contingency and political nature of all categorisations, and the constructed nature of all objects:

“a key for the future is to produce flexible classifications whose users are aware of their political and organizational dimensions and which explicitly retain traces of their construction.” (Bowker and Star, 1999: 326).

Functional means-rationality, defined by the ruling relations of power as the aspect taken to be challenged within the aim of this thesis (Chapter 1). A number of authors have written about the need to do away with the conventional approaches to project management, and to explore theoretical and methodological possibilities other than those based on strategic choice theory and instrumental rational reasoning. This proposition resonates the position of Aristotle, which Flyvbjerg (2001) develops into the concept of phronetic social action, taken as the overall frame
Chapter 3 The Operation of the Project Management Mainstream

of reference in this thesis, and discussed in detail in Chapter 1. The requirement of any study of human activity is that one practice *phronesis*, that is acknowledging the importance of the ordinary and particular as important for praxis. This includes the concern about values and power, related to practitioners’ conduct in the particular local situation, in the living present. (Stacey, 2003)

3.5 Theoretical and methodological options - Towards phronetic science of projects

Many social thinkers now believe that alternatives to instrumental rationalism are needed. Nowadays, according to Flyvbjerg (2001), question of balancing instrumental rationality with value-rationality (as defined by Weber, Foucault, and Habermas) is becoming pertinent again. The question is: in order to overcome deficiencies of positivist, instrumental approaches to studying organisations and organising (including project based work), what are our options as researchers in relation to our practical work? What are ‘intellectual virtues’ related to theory, methodology and practical skills, that we should strive towards in pursuing our social inquiry?

3.5.1 Theory of knowledge constitutive interests

Habermas’s (1972), theory of knowledge constitutive interests is explored here as a useful framework to reinforce and complement the aspects of praxis taken as an overarching intention in this thesis, which includes the debate about project success/failure and appropriate management skills and behaviour. It is seen as particularly helpful in enabling the comparison of knowledge driven by the ‘technical’ interest for control, performativity, and prediction with that driven by the ‘practical’ interest embedded in the human need to communicate with others and develop intersubjective understanding in the context in which they are, or they find themselves to be together. The idea behind the ‘discourse ethics’ and consensus approach to power of Habermas is central to his theory of communicative action, where inter-subjectivism is proposed as an antithesis to the tradition of subject-centred rationality. It is not the intention of this chapter nor of the thesis, to offer any in-depth analysis or critique of Habermas’s work, including his political thesis of ‘communicative action’ and its lack of attention to critical relations of power. Other sources provide a good discussion of these issues. What is of interest here is a background to approaching the question of context and power in creating and legitimating knowledge, and the ‘ethicality’ of resulting recommendations offered to practitioners in their daily coping with life and work in organisations.

According to Habermas, any type of scientific social inquiry involves the consideration of the question: whose interest is being served? For Habermas and contemporary followers of this idea in the areas of systems thinking and operational research (Oliga, 1996; Mingers, 1992) this issue
is not unproblematic. Human interests are seen as being at the heart of science, influencing the way people think, guiding the structures of work and authority, and conditioning the way people enquire into, and create knowledge of, the world. Habermas's early work identified a threefold separation of social sciences, corresponding to three types of ‘cognitive interests’ that human beings hold in their relation to the social and the natural worlds. For Habermas, none of the types of knowledge is ever neutral, but reflects this tendency or interest.

Habermas has argued that different kinds of human interest (the technical, the practical, and the emancipatory) motivate different kinds of inquiry and, consequently, constitute different forms of knowledge (Table III-2). The different forms of knowledge imply different methodological approaches, namely – empirical, hermeneutics, and critique respectively. In his study of critical systems methodologies Oliga (1996) explains that Habermas’s categorisation of constitutive interests arises from two fundamental, universal and invariant forms of human activity – labour (work) and communicative interaction (language), and comments:

The “technical interest” is constitutive of empirical-analytic knowledge aimed at the prediction and control of “things, events and conditions which are, in principle, capable of being manipulated” (Habermas, 1974, p.8). The “practical interest” constitutes the historical-hermeneutic knowledge aimed at achieving intersubjective communicative (symbolic) understanding. The “emancipatory interest” constitutes self-reflective knowledge aimed at the realisation of autonomy from defective actions and utterances arising from social relations of power, domination, and alienation. (Oliga, 1996, p.152)

Table III-2 An interpretation of the theory of knowledge constitutive interests

<table>
<thead>
<tr>
<th>Knowledge Constitutive Interest</th>
<th>Basis of Human Interest /Social Domain</th>
<th>Type of Interaction</th>
<th>Underlying Paradigm</th>
<th>Type of Science/knowledge</th>
<th>Methodological Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical (control)</td>
<td>Work (instrumental control)</td>
<td>Man – nature</td>
<td>Functionalist / positivist</td>
<td>Natural science / nomological</td>
<td>Empiricism</td>
</tr>
<tr>
<td>Practical (understanding)</td>
<td>Communication (interaction)</td>
<td>Man – man</td>
<td>Interpretative</td>
<td>Cultural science /hermeneutic</td>
<td>Hermeneutics</td>
</tr>
<tr>
<td>Emancipatory (freedom)</td>
<td>Authority (power)</td>
<td>Man – self</td>
<td>Radical / critical</td>
<td>Critical science / critical theory</td>
<td>Critique</td>
</tr>
</tbody>
</table>

Nomological knowledge is governed by the interest in technical control, technical mastery of a set of causal relations. As this type of knowledge is claimed by traditional scientists as a prototype of all knowledge, it has resulted in the creation of legitimisation of structures of domination. The argument developed by Mingers (1992) about the historical and future
directions in operational research (OR) is relevant to the examination of the legacy of scientific solutions to messy problems in project planning and control. Mingers explains how control of the physical world as the dominant knowledge constitutive interest in the OR discipline and the strive for optimality as its scientific ideal, have given OR’s solutions their legitimacy, while ‘messy and complex problems were reduced to that which the techniques could handle, and people were just another component of the system, like machines and money’ (Mingers, 1992, p.93). In this light, the prescriptions of the mainstream systemic project management theory will be also examined. Forester’s argument that any ordinary work in professional-bureaucratic setting is always rich with ‘political struggles concerning power and authority, cultural negotiations over identities, and social constructions of the ‘problems’ at hand’ (Forester, 1992, p.47) is relevant to the aims of this research. Project working and project management should be approached and studied as being much more than ‘instrumental action’ but include communicative and emancipatory interest of the actor engaged in it.

Habermas argues that humans have an interest in communication and social interaction (‘man to man’, see Table III-2) based on the necessity to make sense of what others mean in order to create the basis for agreement and consensus in practice. This implies a need for moving away from a mechanistic view of the world towards a complex and contingent world of human interrelating, talk, action, power and ambiguity in project arrangements where the need for ‘understanding’ and hermeneutics can make sense. According to some writers, communicative understanding, or practical knowledge constitutive interest, in the project management body of thought can be contemplated only if we abandon the concept of project as a ‘tool’ serving the purpose of accomplishing an end result. In that case, what is to be studied is the very ‘organising process’ (Packendorff, 1995) as ‘a social interaction occurring between people working together to accomplish a certain, inter-subjectively determined task’. (ibid, p.328) I will subsequently argue that the concept of complex responsive processes of relating in organisations (Stacey, 1996, 2000, 2001, 2003), which centres around intersubjective conversational relating as a prevailing human interest, provides a framework for a deeper understanding of how people create knowledge about, and cope with, life and work in the arrangements labelled ‘project organisation’, compared with ‘control’ driven nature of ‘technical’ knowledge. And subsequently, what it might mean being a virtuoso social and political actor, from this perspective.
3.5.2 Towards phronetic science of projects

In the context of a similar investigation of the confusion within the intellectual system governing contemporary studies of management information systems, Introna (1997) reiterates Heidegger’s claim that it is time to return to ‘the things themselves’ (p. 176) where our thinking originated from. In the context of the project management subject, it would mean returning to ‘the real world of the daily coping and doing in-the-world’ (Introna, 1997, p.179), and taking up the work that broadens the frontiers of understanding the world of practice, such as Stacey (2000), Mitroff and Linstone (1993), Alvesson and Deetz (2000) and others cited in this thesis, with attention. More of the same data, based on functionalist / instrumental paradigm, will just add to the confusion:

‘Returning our understanding to the world ‘as it is’ does not, as functionalism would hold, require ever more empirical work. Since more empirical work will only lead to:
more observer descriptions,
more objects (data models, decisions, problem-solving, controlling) as described by subjects (managers, analysts, information systems academics)
more models in a discourse already saturated with models;
more abstractions, lifeless and devoid of context;
more representations of representations of representations ...;

... We do not need more data; we need a more primordial understanding, more thinking. ... We need to go beyond our models and abstractions, to return to the real-ness of the real or the Being of being, as Heidegger calls it’ (Introna, 1997, p.179)

One way of resolving the confusion and tension between research and practical knowledge, pointed out by both Flyvbjerg and Introna above, is to consider Aristotle’s notion of phronesis which is understood as ethical practical wisdom, summarised by Flyvbjerg as ‘the relationship you have to society when you act ‘ (2001, p.55) This includes deliberation about values with reference to praxis; knowledge of how to behave pragmatically, in each particular circumstance that can never be captured or reduced to knowledge of general truths; orientation towards action based on practical value-rationality. As indicated in Chapter 1 (Section 1.2.1), Flyvbjerg revives Aristotle’s notion of phronesis by developing it into a social science methodology which recognises the issues of context, judgement, and power. The work of Foucault, Giddens, Habermas, and Buordieu, has been incorporated in his guidelines to a phronetic approach to learning, professional conduct, teaching, research and knowledge creation about society, organisations and individuals.

Phronesis as a research approach is seen as most relevant to praxis because it:

- focuses on what is variable, on that which cannot be encapsulated by universal rules, on specific cases (exactly opposite to the mission of PMBoK);
- it is a sense of the ethically practical rather than a kind of science
- promotes practical wisdom, which is knowledge of how to behave, on the basis of judgement and experience, in each particular circumstance that can never be equated with or reduced to knowledge of general truths;
- is concerned with conduct in local situations in the living present
- operates via a practical rationality where the argument is that ‘...the possession of the single virtue of prudence [phronesis] will carry with it the possession of them all’ (Aristotle’s citation in Flyvbjerg 2001, p.60)

The methodology for achieving the highest level of learning of skills for practical social action in the Dreyfus model, to be guided by the four value-rational questions (Chapter 1, Section 1.2.1) consists, according to Flyvbjerg, of interpretation and analyses of the situation, based on:
- getting closer to reality (paying attention to the particular, in the local situation, in the living present)
- emphasising little things
- looking at practice before discourse, as, according to Foucault, any ‘body of knowledge’ is the product of power relations in operation in the form of ‘body of (dominant) discourse’; (particularly relevant to examining various forms of ‘body of knowledge’ in project management)
- studying cases and contexts
- Asking ‘how?’ – doing narrative
- Joining agency and structure
- Dialoguing with a polyphony of voices

The empirical analysis within this study draws on these guidelines. The subsequent sections explain in more detail the practical interpretative framework that has been used in generating insights from the participating practitioners’ accounts.

3.5.3 Complex responsive processes of relating in organisations – An alternative way of thinking about projects

Complex responsive processes of relating is a theoretical concept introduced and argued for by Stacey (1996, 2000, 2001, 2003) on the basis of the problematic capacity of other theoretical approaches to address complexity and paradox in contemporary organisations. It suggests a particular way of speaking about complexity of organisations, organising, managing and knowing. It emphasises self-referential, reflexive nature of humans, the essentially responsive
and participative nature of human processes of relating, and the radical unpredictability of their

evolution.

This concept puts emphasis on the conversational life in organisations and is concerned with the
question of how the patterned themes of conversations in local situations constitute and are
simultaneously constituted by power relations in organisations and how the potential
transformation of these conversational patterns can induce change, trigger learning and create
new knowledge. The concept recognises the need to acknowledge anxiety that people
experience in these processes of communicative interaction by which existing power relations
and knowledge are being sustained or new forms constructed, and how that anxiety is lived with
when the outcomes are not predictable and complexity is unavoidable. It draws attention to self-
organising capacity of the processes of communicative relating in the medium of sophisticated
tools, technologies, and artefacts, and the way people make sense of their 'being together'
through self reflection on conflict, power and the ordinary. This, imminently, implies an
alternative view on management of organisational arrangements, the methodology of inquiry,
the possibility of control, and the role of the individual and the group in these processes. The
way in which organising, management, strategic change and complexity are approached from
this perspective resonates with the theoretical traditions of Maed's (1934) relational psychology,
Giddens's (1984, 1993) sociological method of 'structuration', and the experiences with
applications of chaos and complex systems theory to studying organisations, including bounded
instability, self-organising properties of complex systems, and non-linear behaviour over time
(Stacey, 1996, 2000). It goes a step further by acknowledging the advantages of a 'process'
thinking over a 'systemic' perspective in understanding complex and chaotic patterns of relating
among individuals and groups, over time, which simultaneously constitute and are constituted
by a wider organisational system.

In order to outline the basis on which this theory differs from other approaches, Table III-3
summarises the assumptions that the perspective of complex responsive processes of relating
holds in creating knowledge about organisational phenomena, using the four key aspects that
provide relevant comparisons of different theories² (Stacey, 2000):

² Appendix 3, contains a table (Table AIII.1-T1) with a detailed comparison of a number of theories of
organising that could be used to study projects: strategic choice, learning organisations, systems theories,
knowledge management and communities of practice, chaos and complexity sciences, and complex
responsive processes of relating perspective.
Chapter 3 The Operation of the Project Management Mainstream

- How the theory in question understands the nature of interaction and the process of relating between people;
- What views the theory takes on human nature: human psychology, the meaning of tacit knowledge and unconscious processes, and the nature of memory;
- The methodological position and the level of inquiry that the theory adopts; and
- The manner in which it deals with paradox between control and unpredictability

Table III-3 provides a reference base for the subsequent discussion of the central assumptions underpinning the perspective of complex responsive processes of relating, and its implications to the study reported in this thesis. In phronetic social sciences, theory is not seen as episteme—a sum of universal rules and descriptions about (the behaviour of) a phenomenon under study, which is applied in practice to predict and control that phenomenon by providing practitioners with the prescriptions and adequate know-how. The use of theory itself in non-mainstream management research rests on a specific requirement—theory is not created and used to guide the explanation of a phenomenon, but is evaluated according to the extent to which it makes us think differently, question our assumptions, and help us understand our experience with the phenomenon of interest. (Alvesson and Deetz, 2000; Johnson and Duberley, 2000)

Appendix 3 contains a review of other theories—strategic choice theory, learning organisation, open systems theory, knowledge management, chaos and complexity theory—against the above four key aspects, and their comparison with the theory of complex responsive processes of relating in organisations (Table AIII-1).

The concept of complex responsive processes of relating in organisations has been used as a practical interpretative framework in the analysis of the empirical evidence. In the sections below, I will review and discuss the assumptions about human action, organizing, radical unpredictability, and relevant managerial competencies as being of key relevance to the aims and scope of this research and as implied by four value rational questions of phronetic science. Subsequently the thesis concludes with a discussion of the implications for practitioners if project organising and management are studied from the perspective of complex responsive processes.
### Table III-3 The concept of complex responsive processes of relating in organisations: Key underlying assumptions (Stacey, 2001 and 2003)

<table>
<thead>
<tr>
<th>Assumptions about:</th>
<th>Assumptions</th>
</tr>
</thead>
</table>
| **The nature of human interaction:** Environment, internal mechanisms of change, time dimension, prediction, level of analysis, diversity | - communicative interaction: a process of communication and power relating  
- the interaction does not result in a whole / a system, but in further patterns of interaction (creating conditions of radical unpredictability)  
- spatial metaphor of inside / outside is replaced by a temporal metaphor of continual reproduction and potential transformation  
- organisations and managerial action are fundamentally conversational in nature, forming and being formed by power relations  
- unpredictability is central to this theory  
- the level of analysis is micro-level, focused on bounded instability in which through self organisation emergent novel forms of relating and conversation can be produced (that are new meaning and new knowledge)  
- Micro-diversity and creativity recognised as essential for internal capacity to change spontaneously |
| **The views on human nature / psychology** | - Makes a radical shift from the cognitivist view and humanistic psychology: individuals and groups form and are formed by each other simultaneously.  
- The fundamental motivator of human behaviour is the urge to relate  
- There can be no human individual outside of relationship: the individual is decentred, yet not lost sight of.  
- Silent, private conversation (mind) is structured by and always resonating and changing with, public conversations in groups – the social and the individual are viewed at the same ontological level  
- Power relations, ideologies, fantasies, and emotions are central; theory of interaction and theory of human nature are the same  
- Intention is not an attribute of an individual, but emerges in conversational relationship, and is articulated by an individual.  
- While in theories where the individual is primary, there is a tendency to equate agents with individual human beings and retain the orthodox notions of empowerment and delegation through the notion of self-organisation, in CRP the analogue of agents is themes that organise experience. Self-organisation of these themes retains emergent unpredictability; causal dualism of systems thinking is replaced by paradoxical transformative causality of CRP  
- Leadership is no longer an individual competence but a form of relationship |
| **Methodological position** | - CRP advocates the methodological position in which people are both participants and observers at the same time. A manager cannot stand outside organisational processes that are the organisation and control them, direct them or perturb them in an intentional direction. Such intentions are only gestures made to others and what happens unfolds from ongoing responses – **methodology of emergent inquiry** (Stacey, 2003, p.413).  
- critical systems perspectives and some KM and communities of practice approaches also adopt reflexive and participative methodologies: argue for co-constructed nature of knowledge and multiple perspectives on any situation. Still the human interaction is understood as producing a system where there is a strict delineation and dualism of position in and outside the system.  
- The notion of the ‘edge of the chaos’ from this perspective is not the one of others where managers nudges/pushes the system into instability and crisis, and puts people under more stress until they are motivated to change and unleash the power of self-organisation which removes stress. Here ‘edge of the chaos’ is free-flowing conversation, where the pattern of people’s interaction provides good enough holding of anxiety in facing unknown. Stress and crisis cannot contain anxiety, rather they increase it. Exciting patterns of relationship in free-flowing conversations are safe enough not terrifyingly stressful. |
| Dealing with paradox | - The individual and the group are paradoxically formed by and are forming each other simultaneously. Paradox of predictability and unpredictability important.  
- Paradox cannot be resolved or harmonised, only endlessly rearranged. |

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Why this may be of interest and relevance to the community of scholars and practitioners engaged in the studies of projects, their performance and management? In the preceding sections we looked at how mainstream prescription create a certain orchestrated belief system aimed at practitioners advising them on best practice in coping with complexity of arrangements labelled as 'project' in contemporary organisations. A more focussed look at these prescriptions illuminates that they are largely based on the skill of a manager to design and predetermine the system of behaviour, expectations, symbols and themes which would ensure the achievement of business objectives (compare with Table II-1 and Table II-2, Chapter 2). What these prescriptions do not address are the issues of judgement, context, power relating and interest involved in any human interaction, and how these are sustained or reproduced over time. They are also founded in the assumption that structure and individual agents are two different ontological levels.

**Human action, radical unpredictability, anxiety, and thinking / doing divide**

According to Stacey (2001, 2003), organizations exist in order to enable people to accomplish the joint action required for human living. The joint action has its spatial and temporal dimension – it is located in a specific context and is oriented toward an unknown future – the future which is seen from this perspective as being under perpetual construction by the movement of human action itself. Human action is defined as the process of perpetual reproduction of identity (individual and collective at the same time) with the potential for transformation. It is accomplished with the use of tools, artefacts, technologies, designed systems, and other symbols where identities form and are simultaneously being formed by narrative and propositional themes. Transformation and novelty are possible because of the intrinsic diversity of the people interacting, which makes reproduction (memory) of past habitual interaction imperfect and peoples choice of responses spontaneous to some extent. This draws attention to the issue of radical unpredictability and the future as being perpetually constructed in the process of human interaction, as the known-unknown, and implies what Stacey calls a ‘fundamentally paradoxical theory of causality’ (2003, p.390).

This is important to explore in the context of projects, which are conventionally seen in systemic terms, where there is a dual relationship between, on the one hand, formative unfolding of the envisaged design towards some pre-given motivation such as a project goal, and on the other hand, rationalist individual choice of action. If organisations are continually iterated, self organising processes of relating and if strategic direction and future goals are continually emerging, reflecting evolving collective and individual identities, the question
becomes what happens to project control and what the role of project manager/leaders is. This is also relevant to the discussion of the approaches to project failure / success in the earlier sections of this chapter.

Stacey suggests that if one adopts the perspective of complex responsive processes of relating, then organisational arrangements can be seen as patterns of interaction between people. Two qualities of such interaction are emphasised: 1) interaction is always communication and communication always takes place in the medium of symbols, where symbols, including vocal symbols of language, are tools created, reproduced, and transformed in that interaction; and 2) interaction between human bodies is always power relating because in relating to each other people are always simultaneously constraining and enabling each other's actions. Therefore, structures and institutions, including any kind of design tools and plans for organising, form and are simultaneously being formed in the process of interaction between people, through a thematic patterning of conversational themes. 'Social structures, organisational cultures, institutions and societies, therefore are not things but perpetually reproduced thematic patterns of relating between people taking habitual forms' (Stacey, 2003, p.390)

...and it is in such responsive processes of relating that human beings accomplish joint action of any kind. The key feature of all human groups, organisations, institutions and societies is this joint action. Joint action is only possible because complex responsive processes of relating are patterned in coherent, that is, meaningful, ways. (Stacey, 2003, p.389)

*The view on organising, power, identity, and structure / agency relationship*

Organizations of any kind are seen from this perspective as processes of continuous reproduction and transformation in the ongoing communicative interaction between people in the living present, both their formal members and people in other organizations. People interact in the medium of symbols which can take 3 forms: proto-symbols (body rhythms experienced as feeling states), significant symbols (organised as narrative themes), and reified symbols and artefacts, (organised as propositional themes). Themes and conversational patterns of relating form, and are simultaneously being formed by, power relations. Power is therefore located in the processes of conversation which are the processes of relating, rather than in one individual who somehow manipulates or dominates others. As a consequence of differentiating between those who are 'in' from those who are 'out' a certain frameworks of talking are often legitimised and are to prevail.
Chapter 3 The Operation of the Project Management Mainstream

According to Stacey:

This theory differs from social constructionism in that it does not accord either temporal priority or primacy to the social. It differs from the psychoanalytic and critical realist perspective in that it does not ultimately accord primacy to the individual. And it differs from institutionalism in that it does not explain transformation in terms of chance variation.’ (Stacey, 2001, p.61 italics added)

Project working then can be viewed as an evolving pattern of individual and collective identities emerging in the ordinary, everyday local interaction and conversations between people. In comparison with more mainstream approaches to projects and project based organizing (discussed earlier), attention here is refocused on the importance of local communicative interaction in the living present, ‘particularly its thematic patterning, its gesture-response structure and its reflection in ideologies and power relations.’ (p.404) This will be explored in the subsequent chapters of the thesis in relation to its objectives. For this study, which aim to explore the phronetic approach to projects, project management and project working, an appropriate consideration in linking macro-level factors (structure) and actors’ choices in a specific social and political phenomenon marked as ‘project’, would be to seek out information for answering questions about what structural factors influence individual actions, how these actions are constructed, and their structural consequences, while recognising two important things – context and power relations.

From the perspective of complex responsive processes of relating, social structures and individual personalities emerge without overall intention of an agent in the interaction through symbols and gestures. The argument is that individual and social are emerging at the same time (Stacey, 2003, p. 319). Structuration theory which the concept of complex responsive processes of relating in organisations and Flyvbjerg’s (2001) phronetic research build on, focus on both the actor level and the structural level, as well as the relation between the two. This is done in an attempt to transcend the dualism of actor/structure, hermeneutics/structuralism, and voluntarism/determinism, so that agency is found as part of structures and structures as part of agency. These perspectives ‘deliberately seek out information for answering questions about what structural factors influence individual actions, how those actions are constructed, and their structural consequences’ (Flyvbjerg, 2001, p.138). Duality of structure is presented in the argument that ‘social structure is both constituted by human agency and yet is at the same time the very medium of this constitution’ (Giddens, 1993, p.128). This constitution is based on interaction which involves attempted communication, the operation of power through use of language, and moral relations. Modalities by which these are ‘brought off’ are also means by which structures are reconstituted.

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In the subsequent chapter (Chapter 4) I explain the research design and method used for generating the empirical material and analysing it. The discussion builds on the philosophical and scientific justification of the overall methodology and paradigm taken in this thesis, which has been made transparent and discussed throughout this report, including the preceding chapters. Subsequently, Chapter 5 is devoted to the analysis of the empirical data — the accounts from the participants in this research. It will show, in as much detail as possible, the process of analysis — interpretation, insights and identification of key themes relevant to the aims of the study.

Chapter summary

Having made a case for a critical examination of the extant knowledge system of project management and project working through the review of relevant literature in Chapter 2, I attempt in this chapter to uncover the operation of the orchestrated belief system and 'scienticism' and their implications for studying project performance and for developing prescriptions of 'good practice' aimed at practitioners. This material presents the initial creative input resulting from this research, and building on the literature review and some documentary evidence. It includes the implications of the continual construction and reproduction of 'projects' as natural objects through the imposition of certain imperatives, ruling illusions and ideologies. On the basis of literature review and documentary analysis (seminal texts and the PMI version of the PMBOK document), I discuss the roots, reasons, and consequences of such reifications for project practitioners' learning and skill development. I review the literature that proposes alternative approaches to qualifying project performance as success / failure and advising on effective competencies and knowledge. The chapter contains theoretical and philosophical considerations leading towards the practical interpretative framework to be used in analysing concrete empirical data in order to address the aims of the thesis. The propositions related to the conceptual frame of reference draw on the discussion in Chapter 1 and Chapter 2. On the basis of the overarching phronetic approach to the inquiry and its aims, and the major themes to be explored, including knowledge, interaction, and value-rationality, the concept known as 'complex responsive processes of relating in organisations' (Stacey, 2001, 2003) is introduced and discussed in terms of potential implications for studying and creating practical knowledge about organisational arrangements labelled 'project' from this perspective. Habermas's theory of knowledge constitutive interest will be referenced to provide further justification of the chosen methodological route. The perspective of complex responsive processes builds on three theoretical traditions: Maed’s (1934) relational psychology, Giddens’s (1984, 1993) sociological method of 'structuration', and the experiences with applications of chaos and complex systems theory to studying organisations (Stacey, 1996, 2000). The way of looking at organisational arrangements, suggested by this concept, is useful and relevant to this type of social scientific study as it joints agency and structure, takes conversational relating in the medium of symbols as the core organising pattern, recognises both spatial and temporal dimension of organising and self-organising, focuses attention to unpredictability and relational circularity of power in local contexts in the living present, argues for the methodological approach of emergent enquiry, putting the practitioner/manager/researcher in the position of a participating actor rather than and an objective observer standing outside the studied arrangement.
Chapter 4

The Methodological Positioning of the Study

"...no humans, no interpretations;... no interpretations, no risks; no risks, no knowledge. In short, knowledge is inherently a very tricky, risky business. Remove all risks and one not only removes all knowledge but its very possibility. Knowledge is not for the weak willed or faint hearted - safety and knowledge are actually enemies"

Robert Bly (cited in Mitroff and Linstone1993, p.65)

This chapter outlines the methodology, method, and design of the research study drawing on the content of the preceding three chapters where the philosophical and theoretical positioning of the thesis is discussed. Guided by the aim and the key ideas behind the inquiry, the study evolves around a pragmatically governed interpretation of the experiences that practitioners have with being part of, and managing, social organisational arrangements labelled ‘project’ in their local environments. The procedures ensuring validity of this type of research are demanding, as knowledge based on interpretation is open for testing in relation to other interpretations and other research (Flyvbjerg, 2001). In the subsequent sections I will discuss the choice and implementation of such procedures in this study and support my validity claims by the literature relevant to a qualitative social research project of this kind. The following literature, in particular, has informed my understanding of the methodological issues relevant to this research: Easterby-Smith, Thorpe and Law (1991) Management Research – An Introduction; Arnbor and Bjerke (1997) Methodology for Creating Business Knowledge; Buchanan and Huczynski (1997, 2001) Organisational Behaviour – An Introductory Text; Seale (1999) The Quality of Qualitative Research, Johnson and Duberley (2000) Understanding Management Research - An Introduction to Epistemology, Alvesson and Deetz (2000) Doing Critical Management Research, Flyvbjerg (2001) Making Social Science Matter, Holstein and Gubrium (1995) The Active Interview, and Silverman (2001) Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction.

4.1 Research approach and method

The review of literature and the analysis of documents and secondary data (Chapters 2 and 3) evolved into:

- making a case for, and developing, a critique of mainstream project management body of thought and of prescriptions offered to practitioners about how to manage projects for ‘success’;
suggesting an alternative account of project, project management and project performance to mainstream perspectives, emphasising processual properties of knowing and communicating in project-labelled arrangements.

I have also exposed a lack of any serious theoretical and methodological debate within the mainstream research and literature in the field. A group of critical writers on the subject of project work and project management have raised the concern about how the relevant knowledge has been created in the subject of project management, and of the role and use of empirical evidence in that process (cf. Fincham, 2002; Packendorff, 1995; Kreiner, 1995). The conventional use of large-scale questionnaires/surveys in project management research has only reinforced a certain theoretical and methodological paradigm (rational / positivist perspective) (cf Belout, 1998; Introna, 1997) failing to create a scope for alternative interpretations and theoretical positions in studying projects, project management, and project success and failure. Continuing to neglect this important connection may lead the intellectual base of the project management subject to an even deeper crisis. This particularly relates to the label, truth claims, and naturalisation (the phenomenon of ‘false concreteness’, Chia, 1995) of project in contemporary theorising in the field, and the implications for project management practice and its knowledge system. (Chapter 3)

The objective of the empirical analysis has been:
- to explore the implications of the concept of complex responsive processes of relating in organizations for understanding of:
  - what goes on in projects in local situations when people find themselves involved in jointly performing a sophisticated, co-operative activity,
  - what it might mean managing a project from this perspective; and
  - the skills and competencies that enable a virtuoso social and political action in managing the arrangements labelled projects.

The empirical part of the study was designed as a participative cooperative inquiry to generate insights into project related experiences of practitioners on the basis of their accounts, reflections, and thoughts obtained mainly through the method known as active interviewing (Silverman, 2001; Holstein and Gubrium, 1995). My intention has been to capture the continual construction of, and experiences with, projects and project management in contemporary organisational practice in order to develop a case for a practical-wisdom centred sociology of projects, project working, and management. Easterby-Smith et al (1991) made an important assertion that the decision to study a management related topic in a particular way involves some kind of philosophical choice by the researcher about what is important. This conscious
engagement with a certain set of assumptions, based on the premise that 'what one decides to study, has methodological consequences' (Holstein and Gubrium, 1995, p.73), characterises 'actors of knowledge' (term coined by Arbnor and Bjerke), and differentiates theirs from unconscious research and naïve investigative and consultative activities. The following was of interest in the inquiry (see also Table IV-3, p.89): 1) how organisational members understand or think about 'projects' and 'project management'; 2) how projects and project management become enacted (objectively existing) in local contexts; 3) how different organisational members experience the implications of being part of, or affiliated with, a project over time, including the qualifications and attributions of success / failure; and 4) what these various actors see as most critical to know, be aware of, or understand in order to cope with and act (get the job done) within such arrangements. In the subsequent sections of this study, I will outline and explain the design of the research, and discuss in detail the key method of primary data collection - active interviewing within a participative interpretative inquiry (Sections 4.1.1 and 4.2). This will also include the design of the stages preceding the primary empirical phase of the research, the discussion of the time scales and the profile of participating practitioners / interviewees. I will explain the process of interviewing in terms of procedures related to how the questions were asked, responses recorded, and interpreted both during the actual active interviewing and later, in my analysis. The process of data collection and interpretation are outlined in this chapter in as much detail as possible, which is complemented by an appropriate set of examples and transparency of analysis, presented in Chapter 5 and Appendix 5. In Section 4.3 and Section 4.4, I discuss the issues of openness, credibility, generalisability and inevitable trade-offs in this type of qualitative study. Section 4.5 addresses the challenges and ethical considerations associated with the project. The concluding chapter of the thesis (Chapter 7, Section 7.2) contains a further discussion of the limitations of, alternatives to, and possible future developments of the methodology and methods used in this research and related to the field of projects and project management.

4.1.1 Active interviewing in a participative inquiry
Participative inquiry is addressed in literature under several different labels, including action research, cooperative inquiry, and participative action research (see for example Easterby-Smith et al 1991, Johnson and Duberley, 2000). The origins and principles of the approach are attributed to Reason (1988) and are rooted in the intention to research human action more at an individual level, rather than as part of an organisational system. Participative inquiry, generally, departs from a positivist principle of 'objectivity' and focuses on the experiences and explanations of the individuals concerned, allowing them to participate in deciding what questions and issues are worth researching in the first place (Easterby-Smith et al, 1991). The
subjects / respondents become participants (the researcher’s partners) in the process of the inquiry. They become fully engaged with their reflections and experiences and frequently see them in a new way. (Johnson and Duberley, 2000)

The data collection process or, in this case more appropriately, the process of generating empirical material (Alvesson and Deez, 2000), was based on principles of ‘active interviewing’, explained in more detail in other sections of this chapter. The ‘standard interview’ method is, according to Holstein and Gubrium, appropriate for ‘generating straightforward behavioural and demographic information’ (1995, p.73). What differentiates ‘standard interview’ from ‘active interviewing’ is that the latter brings meaning and its construction into the focus of research. It is appropriate where the researcher is interested in subjective interpretation and constructed nature of knowledge, which is the case of this thesis, as explained earlier in this chapter and in other parts of the thesis, in the belief that human experience is organised through communicative interaction by ‘themes, stories and conversations’ (Stacey, 2003, p.339). Construction of meaning within the ‘active interview’ is a dynamic process where the research topic (the area of study) frames the initial questions which elicit and allow for answers related to varied aspects of the topic. The meaning of what emerges is actually constructed within the interview interaction between the interviewer and the respondent. (Holstein and Gubrium, 1995, p.52) In Chapter 3, I introduced and discussed the perspective of complex responsive processes of relating and why it was deemed suitable as a practical interpretative framework in the analysis of the empirical material. The explicit explanation of how the interpretations were made during and upon interviewing is contained in Chapter 5 and Chapter 6.

4.2 The research programme: design, time scale, and participants

Two major aspects of the research process that have underlined this study can be identified as:

1. Conceptualisation and formulation of philosophical considerations in the light of the initial ideas and intentions of the study; reading and reflecting on the relevant literature in social science and organisational studies; critically evaluating mainstream project management body of literature and research; familiarisation with scholarly work on methodology for creating management knowledge; participation in events and meetings which were not prearranged but served as opportunistic sources for gaining insights into subtle, hidden political and scholarly processes that go on within the filed; exchanging ideas with colleagues in the UK and internationally and gaining valuable feedback and reflection.

2. The empirical study – interacting with the practitioners participants in the research using the active interviewing method to gain insights and achieve objectives of the enquiry (as explained at the beginning of Section 4.1)
The two aspects have been intrinsically interconnected, continuously formulating / informing and being formulated / informed by each another. These processes and interrelationships are made transparent throughout the thesis, and reflected on in this and again in Chapter 7 (Section 7.2.1). As the most of this chapter will be devoted to the empirical study, I will firstly, and briefly, outline the major issues within the former aspect of the overall research design and process.

The process of an early conceptualisation of the aim of the thesis and its subsequent refinements (see the point 1 above) have been influenced and informed by:

1) Articles in academic and professional journals related to projects and project management; 2) Communication with experts in the field; 3) Conversations with potential users of the research findings: these included fellow academics as well as non-management professionals involved in project works, members of the UK professional body - the Association for Project Management (APM), project workers and practising project managers; 4) My lived experience with projects, and with project management education, 5) Literature and extant research addressing the crisis of project management and dissatisfaction with its intellectual foundations and usefulness of body of knowledge to the filed as practised (all referenced in relevant chapters); 6) Active participation in the debate between the three communities: academic, practitioners, and professional institution (recorded in the official and unofficial material from these meetings); 7) Reports and the media; 8) Several other research programmes tackling similar topics – in the UK and Scandinavia; and 9) continuing academic debate about the content and purpose of the professional Project Management Body of Knowledge (PMBOK).

4.2.1 Design of the primary research: procedures and participants

The degree of structure in the research process is, according to Easterby-Smith et al (1991), an important consideration in qualitative research using interviews, encompassing the issues of who is interviewed, where, over what period of time, and similar. The subsequent sections will address these issues.

Procedures

I will outline here the procedures of ‘active interviewing’ as recommended by Holstein and Gubrium, and subsequently illustrate how I adhered to them during the primary data collection phase:

- The active interview is principally guided by the interviewer and his or her research agenda (the research agenda outlined in Chapter 1 and expanded on in Chapters 2 and 3);
It is initiated by 'strategically' proposing the interview to the participant and conveying the topic areas to be explored and the positions from which the exploration can be actualised (will be explained in detail in Section 4.2.2 below).

The active interview within a participative cooperative inquiry is a conversation guided by a certain purpose and plan of *activeness* by the participating parties (respondent and interviewer) to 'capitalize on the dynamic interplay between the two to make reveal both the substance and process of meaning-making in relation to research objectives' (Holstein and Gubrium, 1995, p.76). (Sections 4.2.3 and 4.5 below, and Section 5.1 in Chapter 5)

An interview guide above is a 'conversational agenda' with a set of predetermined questions with the aim to initially engage the respondent and 'designate the narrative terrain' (*ibid.* p.76). The character of the conversational agenda is not seen as procedurally directive but advisory, as it changes from being a crux of the interview conversation in some instances, while in others it is virtually abandoned as the respondent and the interviewer participate in creating and developing emerging narrative theory or interpretations. (explained in detail in the subsequent sections and in Chapter 5 with empirical analysis)

Cultivating the respondent's narrative activity is a paramount task. This involves encouraging it and moderating the predetermined interview agenda (questions) according to their relevance to the emerging meaning-making process; it also involves encouraging the respondent to elaborate on certain issues by drawing on mutually familiar events, experiences or topics of common interest ('conversational give-and-take' Holstein and Gubrium, 1995, p.77). This has been facilitated by the educational context within which the empirical study was embedded (Sections 4.3 and 4.5.2 below)

The importance of the interviewer's background knowledge of material, technical, cultural, and interpretative circumstances to which respondent may orient, in order to engage him or her in a meaningful talk about their everyday experiences in their local situations in the living present. This is one of the weaknesses of this research study, discussed in Chapter 7 with recommendations for improvements (Section 7.2).

Encouraging the respondent's multivocality, the shifts to different roles, to address the topic from different points of view in order to explore the various ways in which the respondent attaches meaning to the phenomena under investigation.

Active interview data are records of interpretative practice; they should capture how things are said as well as what was said. (Chapter 5 and Appendices 4 and 5)
the type of study (philosophical approach) and the field of study are intrinsically related to management education,
- my background and lived experience as a university lecturer,
- convenience of ‘sampling’ the research participants from the student cohorts,
- possibility of direct feedback, practical application of research outcomes, and
- temporal and spatial constraints under which the doctoral research study has been conducted.

About participants
Majority of the participants in this research were drawn from the student cohorts of MBA and Masters in Management (MAM) and professional development programmes (Table IV-1) at two different academic institutions, namely the DMU Business School, Leicester (1997: one cohort) and UWE Business School, Bristol (1998-2001: four MBA and two MAM cohorts). As these courses are open to international and UK based participants with diverse professional and organisational / employment backgrounds, the research has been able to draw upon a rich sample of project workers, project management professionals, and senior decision makers. I will discuss in the remaining sections of this chapter the overall implications for the research in relation to this type of respondents ‘sample’, including the associated problems and limitations, and the actions that were put in place to overcome some of them. It is opportune to note here that the overall personal stake in this thesis, the time and other constraints under which I have been working on it including the full-time lecturing commitments, and my belief in the interconnectedness between the nature of knowledge created through management research and the quality of management education, have lead to choosing the population of ‘post-graduate students’ as a basis for the major part of this research. It is important to note that the same interview procedure was followed with the 15 research participants (Table IV-1) who were not on MBA or MAM courses, but to whom the access was negotiated through their colleagues – course participants. These interviews, conversations and reflections took place and were recorded either in their respective working environments or at the University premises. Altogether, 178 individuals were involved in this investigation over its duration (1996-2001), representing 111 different organisations. (Table IV-1) One hundred and six (106) different project situations have been recorded in the participants’ accounts. A breakdown of the projects by type is given in Table IV-2 below.
Chapter 4 The Methodological Positioning of the Study

Table IV-1 An overview of participants in various phases of the research

<table>
<thead>
<tr>
<th>Stage / type of involvement</th>
<th>Number of participants by stage (percentage of total)</th>
<th>Participants by specific backgrounds and project roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preliminary research phase and non-pre-arranged / informal situations throughout the research (1996-2001) – identifying the ‘crisis’ of the project management knowledge system, and of project management as an academic subject and a practising discipline</td>
<td>50 (~25%)</td>
<td>Representatives of national and international professional bodies for project management… 13, Lecturers and tutors in project management in academic institutions internationally… 16, Project management consultants… 7 Practitioners… 14 of whom: • Project managers… 4 • Project team members… 10</td>
</tr>
<tr>
<td>2. The main primary research phase (1997-2001) – primary data collection through qualitative participative inquiry, involving participative interpretation and interactive sense making of emerging conversational themes between the researcher and participating practitioners, in the process of active interviewing</td>
<td>128 (~63%)</td>
<td>Project managers, project team leaders, project team members, senior managers overseeing projects, subcontractors, clients… 128 of whom: • as participants on executive MBA and Masters in management courses… (113) 1997 - MBA (7); 1998 – MBA (8); 1999 - MBA x 2 (16) and MA x 2 (12); 2000 – MBA x 2 (14) and MA x 3 (23); 2001 – MBA x 2 (19) and MA x 3 (14) • access to project practitioners negotiated by means other than participation on academic courses… (15)</td>
</tr>
<tr>
<td>Total number of participants</td>
<td>178</td>
<td></td>
</tr>
<tr>
<td>Total number of organisations represented</td>
<td>111</td>
<td></td>
</tr>
</tbody>
</table>

This study's critical objective is to get beneath accepted notions in mainstream project management discourses and develop other ways of interpreting experiences with work and management of projects. I believe it is important to include the views, thoughts, and concerns of not only project managers but of practitioners with other roles in project settings. (Table IV-1).

In this research projects, the commitment to a wider stakeholder agenda (Huczynski and Buchanan, 2001; Alvesson and Deetz, 2000; Easterby-Smith et al, 1991) has been actualised in the research design (see also Section 4.4.2). In terms of organisational hierarchy and roles, the participants represented not only the population of project managers but also members of project teams, and other managers responsible for making project related decisions and for facilitating project work by releasing resources. In terms of project stakeholders, the
investigation covered clients, contractors, project teams, and end users. The participants were drawn from a range of backgrounds related to project work, and from a variety of organisational settings involved in projects and/or project management. These include industry specific groups such as aerospace, construction, financial and public sector services, local authorities and small businesses. In addition, the views of representatives from professional bodies and fellow academics were generated throughout the inquiry but particularly at its early stages. (Item 1 in Table IV-1)

Table IV-2 An overview of types of projects reflected on in participants’ accounts

<table>
<thead>
<tr>
<th>Project type</th>
<th>Number of projects</th>
<th>Percentage of the total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional engineering and construction</td>
<td>24</td>
<td>23%</td>
</tr>
<tr>
<td>New product development</td>
<td>17</td>
<td>16%</td>
</tr>
<tr>
<td>Systems development</td>
<td>38</td>
<td>36%</td>
</tr>
<tr>
<td>Organisational change (TQM, BPR, IIP initiatives, or similar)</td>
<td>27</td>
<td>25%</td>
</tr>
<tr>
<td>Total number of projects</td>
<td>106</td>
<td>100%</td>
</tr>
<tr>
<td>Total number of participants providing accounts on these projects in the primary research</td>
<td>128</td>
<td>/</td>
</tr>
</tbody>
</table>

Contrary to the standard interview approaches, which ‘target a population in advance, then select individuals who are assumed to be capable of speaking reliably and validly for the population on the basis of their representativeness and informativeness’ (Holstein and Gubrium, 1995, p.74), the main concern of active interviewing is to continuously solicit and analyse representative conversational themes and horizons of meaning. The sampling process, consequently, becomes an ongoing process, where ‘designating a group of respondents is tentative, provisional, and sometimes even spontaneous’ (ibid. p.74). Throughout the research, when new insights or particular themes were revealed in the interviews, related to different experiential, professional, industrial, or cultural locations / projects, I was able to expand the

1 The classification adopted from Turner and Cochrane’s (1993) work on ‘Goals and Methods Matrix’ (as explained in Chapter 4)

2 These percentages are only a rough indication of the distribution of project types across the study, as it is difficult to isolate, for example, a SAP system implementation project as an IT/IS type from it being an organisational change / development type of project at the same time.
sampling frame to capture, solicit and interpret a wider scope of experiences related to situations and topics of interest or interpretative significance.

Another interesting aspect of this ongoing sampling in active interview, also noted and recognised by Holstein and Gubrium as both complicating and opportune, was actualised in my research. Individual participants were capable of creating diverse and varying narrative positioning, communicative contexts, conversational organisation, and multivocality.

Even though the formally designated respondent remains the same, the subject behind the respondent may change virtually from comment to comment. This, of course, has significant implications for just who or what constitutes the sample. (Holstein and Gubrium, 1995, p.74)

For example, a participant who at the time of interviewing was a project manager, was actually capable of articulating accounts, descriptions, and evaluations from more than a single position or perspective, due to their multiple roles as the organisational member and their simultaneous belonging to different groups such as the project client, 'stakeholder', line manager, project worker / professional. Whenever I, as interviewer, sought to clarify such shifts, I was, in effect, actively modifying the sample. On the other hand, whenever the respondent decided to 'switch voices', it articulated at the same time practical and theoretical sampling implications. This has been experienced as both a strength and a complication of active interviewing. The illustrations of this are provided in the chapter with the analysis, interpretation and discussion of empirical material.

4.2.2 Details of the research method design

In designing the research method and preparing for interviews, the following concerns were addressed in accordance with the procedures of the active interviewing method outlined in the preceding section:

- how should participants be made aware of the research process
- how to make sure that it fully and beneficially fitted within the philosophy of the course that the participants were attending and their expectations
- how to ask questions
- how would the answers, comments, drawings and other records (written and verbal) be handled by the researcher, the group, the others...
- how follow-up interviews or contributions were negotiated
- how this all fits / contributes to the achievement of the research aims
- limitations in terms of time, place, availability
Chapter 4 The Methodological Positioning of the Study

The method of generating empirical material (data collection) was carefully designed and built into the course syllabus. Therefore, the first session of each course was dedicated to the consideration of a pro-forma (Form 1 and Form 2 in Appendix 4, discussed below) by all course participants. An introduction to the process of participative inquiry was given verbally and in writing, and it is incorporated in the course description explaining its link with learning outcomes of the programme and with the nature project management knowledge system and education. The participants were, therefore always aware of both the research aspect of the module and the intentions of the lecturer / researcher, but it was always made clear that participative inquiry, reflective practice and action learning and research (promoted by contemporary management education literature, see for example Reed and Anthony 1992, Stacey 2000, 2001, Arbnor and Bjerke, 1997) are intrinsically and ethically interrelated. Such positioning processes are termed by Holstein and Gubrium as ‘conditioning stories’ serving as ‘a signpost to guide active respondents through the open terrain of their experience.’ (1995, p.41), which I considered one of the crucial aspects in accomplishing the aims of the Thesis.

This was done in the introductory session, before the full content, the lecturer’s approach to the subject, and the recommended reading were discussed in-depth with the course participants. This, in an important way, minimised the possibility of preconceptions being created or students engaging in ‘guessing’ what would be ‘appropriate or right’ to say. It was not always the case that all class members filled in the pro-forma or provided further accounts. The numbers given in Table IV-1 are the real figures. The time slots were then arranged for interviews – the process explained below – either within the class time-table or afterwards, with the participants’ consent.

Interview records

Information about the participants including their educational background, project roles and general work experience, in addition to each interview transcript and references to other interview material (drawings and artefacts, where used) have been recorded in a pre-designed format. Appendix 4 contains the form (Form 3) which, at a very general level, captures information necessary for organising, storing, and cross-referencing various items of raw empirical material, other information about the data collection process (timing, place, etc), and records about participants. Form 3 helped organising and storing the following:

- the type of ‘project’ that the account relates to;
- time period / phase of project that the account relates to;
- the organisational / social context of the project under consideration;
- other relevant actors;
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- what it says about the participant’s assumptions about, understanding of, and experience with projects, project performance and project management;
- what is being continuously highlighted in the account? (with my brief comment about theoretical significance where appropriate);
- which otherwise hidden and subtle issues the account reveals?

Each respondent’s account was given an identification code, and each project situation that has been covered in participants' accounts during the primary research phase, was coded to enable cross-referencing with the actual empirical material in the analysis and write-up phases.

How were the questions asked?
Form 1 in Appendix 4 includes a short note about the purpose of the exercise, its formal aims and statement of confidentiality which was given to the participants at the beginning. This was also repeated verbally at the start of each interview session. As explained earlier, this qualitative participative inquiry used ‘active interviewing’ as the method of data collection – therefore the questions given to the participants at the start (Form 2, Appendix 4) had two purposes. One was to help myself as a researcher, to organise my thoughts and ensure consistency between interview materials and the objectives of the empirical study (see Table IV-3 below). The other purpose was to make participants feel at ease, gradually involving them in the participative communicative process of meaning making and negotiation, interpretation, and generation of in-depth insights and narratives. The initial questions served as the base-line intellectual guidelines, which were then enriched by further prompts from myself, the participants’ spontaneous reactions, and the natural enfolding of the active interviewing process (see Chapter 5 and Appendix 5). Each of the questions had its preconceived purpose, but as the methodological literature also implies, in ‘active interviewing’ meaning is generated participatively in an interaction between the researcher and respondent. The participants were encouraged to develop their accounts actively by responding to several ‘prompts’ by the researcher in order to capture and interpret their experiences within a broader theoretical and philosophical framework as discussed in Chapters 1, 2, and 3. Form 2 in Appendix 4 reflects the content of the original document with the questions given to the participants (see Appendix 5 with copies of original material), but here, for the sake of clarity and explanation to the reader of the thesis, it also contains some of the prompts that were used by myself.

The questions, in most general terms, can be said to have been kept open-ended. It was important to understand what the participants in the research really thought and experienced,
and why these experiences differ among individuals, rather than offering an attenuated, predetermined concepts biased by my own perspective or by the conventional research wisdom within the discipline.

Table IV-3 The process of ‘active interviewing’ – the relevance of the baseline questions to the research agenda

<table>
<thead>
<tr>
<th>Questions</th>
<th>Relevance to the inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Use words or images to, as closely as possible, represent your experience and understanding of the situations labelled ‘PROJECT’.</td>
<td>These two interview questions aimed to generate the insights into how organisational members understand or think about project arrangements, in terms of the meaning that they attach to the notion of ‘project’, to the way they are arranged and enacted, and the purpose of their ‘existence’ as a phenomenon in organisations. The intention has been to evaluate the logic of the rational / normative approach to theorising about projects, and to evaluate the potential for moving the research ground towards the application of organisational social theory to project studies. It was of a critical interest to capture the experiences that a variety of individuals have with ‘coping’ in project based organising: professionals endeavouring to contribute to the defined outcome following the schedule, or continuous sense making of plans, requirements, relationships, learning, and future.</td>
</tr>
<tr>
<td>Q2. What are, from your experience, the most challenging issues that organisational members face during their involvement in such situations? Which of those are most difficult to cope with?</td>
<td>Aimed at exploring the experiences of the participants with ‘project management’ in order to understand the process as practiced, and compare it with the conventional wisdom of functionalist approaches.</td>
</tr>
<tr>
<td>Q3. Using words and /or drawings of your own choice, please describe your experiences with PROJECT MANAGEMENT as it is practised in your working environment.</td>
<td>The next question aimed to explore the nature of ‘management’ of projects in terms of the actions of the individual assigned the role of ‘project manager’. It is particularly concerned with the primordial understanding of such role and of perceptions and intentions built into such understanding.</td>
</tr>
<tr>
<td>Q4. What are, in your view, the most critical issues surrounding the role of project managers in your working environment? How does your organisation facilitate this role?</td>
<td>These two questions are focussed on the issues of the nature of knowledge useful for practitioners in order to cope with project work, project based organising, and project management role, seen by, or as experienced by, different organisational members. Also, what these various actors see as most critical to know, be aware of, or understand in order to cope with and act (get the job done) within such arrangements. Some of these issues have become apparent in the answers to Q3</td>
</tr>
<tr>
<td>Q5. In your view, what areas of knowledge, awareness and behaviour are most relevant to the practitioners of involved in project work? Which of those areas require most urgent / fundamental developments?</td>
<td></td>
</tr>
<tr>
<td>Q6. How is relevant project management knowledge created, captured, retained, shared and utilised in your organisation? What is the role of learning from experience?</td>
<td></td>
</tr>
</tbody>
</table>

For example, the prompts used in the active interviewing to broaden the initial questions were founded in the following concerns:
Chapter 4 The Methodological Positioning of the Study

- Asking the participants to talk about their project related jobs, about the aspects they find difficult or rewarding;
- Asking them to represent their images / assumption of the project phenomenon and attributions of success / failure as they experience it.
- Dealing with the differences in the interrelationships between the statements as people may be making different assumptions about what is influencing what and where the root of a problem is;
- Disagreement can also emerge over the importance and rankings of issues.

The initial answers were in most cases subsequently expanded to include more elaborated accounts of an emerging theme, drawings and other visual representations, observations in the organisational context of the respondent where possible, and similar (explained in Chapter 5). During the interviews, empirical material was also captured in the form of drawings, original notes authored by the participants, and ‘mind-maps’. All these were recorded in writing, raw material kept and where necessary, transcribed for clarity. A sample of the original material to support this description of methods and techniques can be found in Appendix 5, which includes the evidence of primary empirical material (data collection, analysis and interpretation) such as original question sheets, records of communicative interaction in interviewing, etc. The emphasis was on giving both the participants and the interviewer an opportunity to present a complex issue under discussion in a graphical form - as they see it.

Duration of all interviews, which were transcribed verbatim, varied between 20min and 1 hour. Detailed ‘process notes’ of interview conversations are taken, capturing both what was said and how things were said, including signs of confusion, contradiction, ambiguity and reluctance, as a significant part of meaning-making process. All manuscripts have been transferred into Microsoft Word files. Other forms used for asking questions were: group discussions and debate, on the basis of the initial pro-forma. Occasionally, diary entries and written reflective project histories (as part of the course work based on reflective practice) have been included into the pool of empirical material. As recommended by Arbnor and Bjerke (1997), this gives an opportunity to participating oractitioners, during a longer period of peace and quiet, to consider questions the researcher wanted to highlight.

The idea behind this procedure is that the researchers — partly through descriptions made in the actors’ own descriptive language and partly through descriptions made within a given frame of reference provided by the researchers themselves — improve their chances for seeing the totalities and parts the same way the actors do. (Arbnor and Bjerke, 1997, p.386)
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4.2.3 Interpretation of the empirical material
In a qualitative study of this type, it is difficult to talk about the analysis and interpretation of data as separate intellectual activities from the data collection / interviewing. The study is iterative in nature rather than hypothesis driven or exploratory with firm objectives to be achieved. Each stage of interpretation produced ideas which informed the subsequent research activity by further developing interpretative and theoretical themes and highlighting patterns in the data. This means that I was aware of the rigour required for active interview data analysis and presentation. The focus of analysis is respondents' talk in its totality. Accounts were not viewed purely as a collection of reality reports delivered by a competent and informed individual, but as sources of conversational themes about reality created in collaboration with the interviewer.

The data / empirical material in the main phase of the research was interpreted against the claims about the crisis of the intellectual basis of project management and its foundations in instrumental rationality, identified in the introductory chapters. In Chapter 3 I discussed the appropriateness and my rationale behind using the concept of complex responsive processes of relating in organisations as a practical interpretative framework in resonance with the philosophical considerations and aims of this thesis. Further explicit discussion and illustration of the interpretation process is contained in Chapter 5 and Chapter 6. An extensive and detailed overview of the outcomes and conclusions is presented in Chapter 7.

4.2.4 Presentation of the outcomes / findings in the report
Holstein and Gubrium assert that 'writing and presenting findings from interview data is itself an analytically active enterprise' (1995, p.80) where the researcher empirically documents the meaning-making process. In the chapters with data interpretation and discussion (Chapter 5 and Chapter 6), I have not only summarised and organised what interview participants have said, but I endeavoured to explicate the complex discursive activities through which conversational themes and their linkages were produced.

This research has evolved over several years, thus the interpretation of the empirical material producing insights into people's experiences with life and work in project environments occurred simultaneously with the definition, development, and redefinition of the substance of this study. The process of my personal learning and improvement related to theoretical and methodological sophistication spans more than five years, and has iteratively informed the findings of this thesis. Consequently, the sequences in which discussion, propositions, and outcomes are presented in this report do not always reflect the exact chronological sequence of
generating the relevant empirical material. Because of the strong reflexive character of the research, the research process and the research method, in my view, cannot be conventionally presented, as they were gradually developed. The reader should therefore be aware that they are shown in this report in a reconstructed form. The appendices contain illustrative records of raw material and interpretative / communicative processes to support the explanation and discussion of the methodics used during the primary research stages. Chapter 7 contains a detailed overview of the research outcomes (particularly Section 7.1).

Following the advice of Seale (1999), a more personal style of writing has been used in this text. The report is written with the attempt not to solely present the knowledge as ready made, but to show the research process through which the knowledge has been created, exposing the reader to all the tension between action and theory/method associated with that process.

4.3 Openness as a feature of an interpretative research method

One of the vital features of this type of method is an open attitude to construction and interpretation of empirical material and extant research texts. This principle is seen as important for the inquiry process contained in this thesis in order to avoid prematurely applying conventional ideas, labels and arbitrary terminology - the trait that characterises the project management discipline and its body of knowledge. It has been noted in some emerging work, mostly by critical management writers (see for example Hodgson 2002, Packendorff 1995, Kreiner 1995), that the conventional interpretative algorithm is rigidly anchored in many project management researchers' presumptions and vocabulary, allowing it to command over the social reality that a researcher will make sense of, without seriously considering other interpretations or theoretical vocabularies of that 'reality'. The open attitude in this research has been maintained in three major ways following the guidance proposed by writers on interpretative research methodologies:

1. not abrasively declaring or fixing the researcher’s identity as a project management researcher but insisting on participative communication: a large part of the primary material was generated in an educational context, where an open, non-conventional approach to the subject of project management, inviting a full involvement from the participants, was seen as a beneficial (although a risky) strategy (see Section 4.2.2 above),

2. without imposing a particular goal of the research - ‘dialog-based’ knowledge creation and evaluation of experiences at multiple levels of the project phenomenon with a full involvement of the participants balanced and a domination of my own goals and preconceptions as a researcher.
3. interpretation of data was not postponed until the 'data was collected': the empirical material has been opened up, through theoretical awareness, to intensive and explicit interpretation during the interviews. (Section 3.5 in Chapter 3; Sections 5.1 in Chapter 5)

4.3.1 Interview bias
As interviewing itself is a conversational situation among individuals, it is difficult to avoid communicative interaction which leads to the involved individuals constructing 'some version of the world' appropriate for the mutual understanding in the given context (Silverman, 2001, p.86). The real concern for Easterby-Smith et al (1991) is the possibility of the interviewers imposing their own reference frame on the interviewees, both when the questions are asked and as the answers are interpreted. As mentioned above, due care was taken not to impose my own research agenda to the detriment of authenticity of the participants' responses. This was done by 1) introducing and conducting the research interviews as early as possible in the course of a specific management educational programme, and 2) without enforcing upon the participants the detailed aims of the study (Section 4.2.2; Form 1 in Appendix 4). Also, the questions asked were open-ended. In order to sharpen up responses, or to focus them towards specific alternatives, I have used explanatory probes (Easterby-Smith et al, 1991) containing questions such as: What did you mean by that?, and mirroring or reflecting (ibid.) which involved expressing in my own words the account of the participant (Appendix 4 – Form 2). This is also explained in Section 4.2.2 on How were the questions asked?

In the context of this type of research design, it is interesting to note the extent to which the views, images and opinions expressed by participating practitioners contradicted the 'reality' in much of the contemporary mainstream project management literature (see Section 5.1 in Chapter 5, and illustrative enclosures of original records, raw empirical material in Appendix 5). Easterby-Smith et al claim that this could possibly be attributed to the created form of social interaction and trust between the researcher and practitioners where the participants did not feel threatened by the researcher's authority or intention, or obliged to give 'correct' answers or to 'show' that they know what projects and project management theory is. The participants in this research seemed to be encouraged by sympathetic views and the promise of a different approach to the subject matter where their needs and views will be incorporated (equal status to the researcher's), and by the absence of 'forcing' their attention to the created 'concepts', techniques and tools that they do not believe in, or which they know do not work in practice. Consequently, no pressing constraints, either in a form of the ultimate goal of the research or typified vocabulary to adhere to, has been imposed on the participating practitioners. It was important to
ensure that they had some control over the process, and to maintain their interest in the creation of new knowledge and in the excitement of discovering conditions of their own knowing.

Even though the interviewee may well express viewpoints that deviate from the textbook view of the management world, the basic framework and the vocabulary used may be strongly affected by this conventional management knowledge. (Alvesson and Deetz, 2000, p.115)

Alvesson and Deetz (2000) and, more specifically, Seymour and Rooke (1995) and Seymour, Crook, and Rooke (1997) in their critique of the culture of construction project management research, note this as an issue in the management research based on the positivist or rationalist tradition.

A tendency to give 'correct' or 'acceptable' responses has been mitigated during this inquiry by not imposing my own frame of reference toward the project management knowledge system, by introducing to the participants (project practitioners) alternative concepts to the dominant belief system, such as reflective practice, unbounded systems thinking, and critical management thinking, and by evaluating the extent to which the existing 'know-how' addresses the challenges of contemporary project environments. Because of the self-reflective nature of this research, participants’ reactions were observed, and the feedback recorded (see Section 6.5).

In the case of project management vocabulary, researchers and practitioners are often caught in language games, where dialog is not always free-flowing but bounded by the use of 'taken for granted' phrases such as: 'matrix' structure; communication channels; top management support; clients expectations; iron triangle; project constraints and trade-offs; project success / failure; planning and control; communication; project objectives; etc:

In the context of being interviewed by a representative of management science, a person producing 'data' to a research project may be inclined to try to adjust their accounts so that they fit into what is assumed to make sense for the management researcher, which may well be the vocabulary and models that the interviewee has learned in business school. (Alvesson and Deetz, 2000, p.115)

Shared knowledge, created in such a conventional way, does facilitate smooth interactions between a management researcher and a practitioner in, for example, research interview situations, but it also effectively obstructs the questioning of the assumed frameworks and vocabularies, preventing new interpretive possibilities or new representations of the phenomenon of interest from emerging. For example, project phenomena conventionally expressed in these terms may, as the knowledge and experience with projects evolve, be now more productively interpreted in other terms (Section 5.1, Chapter 5).
4.4 The issue of research credibility: reliability, validity and generalisability

This is an issue which deserves a particular care in the context of a phenomenological / interpretative approach. Silverman (2001) comments on the ways of evaluating credibility of qualitative research which include reliability, validity and generalisability. In this chapter I have addressed the issue of reliability by showing in detail how the processes of generating and interpreting empirical material were designed and conducted, how the accounts were captured, mediated, and further elaborated on by using ‘explanatory probes’ and ‘mirroring or reflecting’ (Easterby-Smith et al, 1991). I have also provided appendices with examples of the forms for data storage and retrieval (Appendix 4), as well as illustrative examples of original raw material captured during the research (Appendix 5). The Microsoft Word files with transcribed material have also been kept and maintained systematically.

According to Arbnor and Bjerke (1997), the requirement for relevance seems to be more important and appropriate than for validity in a non-positivist research. They propose validity requirements that encompass a range of criteria from the actors’ acceptance of the results and interpretations made, to the ‘credibility’ and ‘sincerity’ of a research report. (Arbnor and Bjerke, 1997, p.234). Validity of this research project has been continuously evaluated through what is known as members’ validation (Silverman, 2001) which included the peer-review process, practitioners’ feedback, and the conceptual argument exposed in the public domain. This incorporates
- feedback to participants and organisations,
- feedback from course participants (recorded and available for review),
- in addition, theoretical and practical developments of the thesis have been exposed to peer review through a series of work-in-progress and conference reports,
- to ensure validity of research, the ‘findings’ were fed back to the participants wherever possible in the form of a discussion paper and lecture material / presentation. In addition work-shops have been offered and run in interested organisations.

In addition, I was aware of the trap known as ‘anecdotalism’ (Silverman, 2001) to which this type of qualitative interviewing is particularly prone. In order to ensure readers' confidence in the knowledge created by this research it was important to show that it is based on a thorough study rather than on a selected number of anecdotal instances. I have tried to demonstrate a comprehensive treatment of the empirical material within theoretical frameworks used to form interpretative themes, as presented in the remainder of the Thesis.
Generalisability of the outcomes of this research has been implicitly and explicitly discussed in this chapter as well as throughout the thesis. The major issue addressed to achieve this criterion is the variety of practitioners' backgrounds, project types, and organisational and industrial settings that the accounts generated in this study refer to. On reflection, the aims and overall intention of this thesis cover issues of praxis and practical wisdom which is of general concern across the community of project workers and other organisational members. The profile of participants and types of projects and social and organisational settings (Table IV-1 and Table IV-2) have a required variety to ensure generalisability of a number of insights generated about project practice, and of contributions to the development of intellectual virtues within the project management body of thought and to improvements in educational activities related to project management. On the other hand, the importance of context and judgement has been emphasised as crucial for development of virtues for political and social action in project environments – the issues which are non-universal and non-generalisable as items within the body of knowledge.

4.4.1 Limitations and trade-offs
As this research has a significant theoretical and philosophical dimension, it is relevant to explore the limitations of the research methodology and overall approach against the postulate of commensurate complexity, introduced by Thorngate and cited in Weick, 1979. This postulate states that in any research concerned with theorising about a social phenomenon, a trade-off between generalisability, accuracy, and simplicity (GAS) of resulting concepts is inevitable. It is the dilemma inherent in any research – one of the virtues has to be sacrificed if the other two are secured. In order to guide the explanation of the trade-offs and increase the awareness of their inevitability, Weick suggest that they be represented on an imaginary clock face. (Figure 4.1)

Figure 4.1 GAS tradeoffs, Source Weick, 1979, p.36
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For the sake of illustration, Weick’s suggestion will be used to explain how this research responds to the postulate of commensurate complexity. It is located in the two o’clock position, as a mixture of the virtues of generality and accuracy which, I hope, have been achieved in the concepts and outcomes emerging from this thesis, despite the degree of complexity in the process. Section 4.5 (p.100) and Chapter 7 (Section 7.2) contain a further detailed discussion of these issues. The qualitative interpretative methodology has its limitations in terms of accuracy, and knowledge created is ‘distilled rather than deduced, and it has a developing character much like interpretations in context.’ (Weick, 1979, p.40). To know what one is doing by employing a certain methodology means to be realistic, rather than arrogant about what can be accomplished at any one time in an inquiry. By reviewing extensively the extant research in the field of project management that falls into other categories of GAS balance, I have made sure that I understand that work and that I maintain some contact with it. Chapter 7, and particularly Section 7.2 contains further discussion of the issues of complexity and challenges in qualitative empirical research, and some suggestions for overcoming this type of limitations in future.

4.4.2 The objectivity problem
The topic of objectivity in interpretative methodologies is extensive and addresses a number of difficult issues in the philosophy of science, ethics, and epistemology. From their review of the objectivity concerns in social research, Arnbor and Bjerke (1997, p. 246-252) identify two separate levels of objectivity: macro, which stands for the value judgements and normative thesis that are part of the scientific discipline as such, and micro level which centres around the individual researcher. On a micro level, the awareness of researchers of their own value judgements is important as it has become increasingly difficult to claim that scientific activities and results are value-free given the political context and the scientific tradition in which these activities take place. ‘Objectivity’ therefore in an interpretative approach can be seen as encompassing honesty, ethics and high moral standards (see discussion in Section 4.5).

I have followed advice put forward by Silverman (2001, p.300-301) to qualitative researchers:
- avoid the assumption that research is only newsworthy if it reveals what is hidden or secret;
- recognise that what is usually of most interest is what is unremarkable to participants,
- avoid ironic comparisons between what people say and what we (think we) know about what they do
- recognise that ‘experience’ is not more or less ‘authentic’ but is narrated in ways that are open to lively investigation

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Chapter 4 The Methodological Positioning of the Study

Participative inquiry and a wider 'stakeholder' agenda

However, as it is the case with all research, the challenge is in moderating and integrating two temptations – being familiar with the phenomenon under study to facilitate understanding of its social reality, and being able not to be caught by this familiarity but create an intellectual distance to see things in novel light and open up new intellectual world. This issue of 'distance' will be further addressed in Section 4.5. The key intention behind the thesis was to say something to actors - managers and other project workers, and all types of project stakeholders – that is of relevance for their project environments and their experience with project situations, but is different from what is legitimate in terms of 'proper project management knowledge' or conventional approach to project studies. In their discussion about the realities of management research conduct, Easterby-Smith, Thorpe and Lowe (1991) have identified factors that may influence the emergence of the research question and the development of the research process. They note:

Taylor’s ‘scientific management’ was very useful for managers, but very unpopular with the workers on whom it was applied. The interest of such people – whom we call stakeholders – are becoming increasingly important when considering both the applications of research as well as its conduct. (Easterby-Smith et al, 1991, p.47)

Knowledge developed through a study of project phenomena reflects not only the concerns of practising project managers, but of many other project workers who endeavour to make sense of, and better understand their experience with, life in project environments. Alvesson and Deetz (2000) argue that managers, naturally, form a group with a legitimate interest in management knowledge, but that

...there are other interests and groups of people which may have an interest in such knowledge. Management and organizational functioning deserve to be studied from a wide range of angles, including those drawing attention to the less rosy aspects of such activities and reporting outcomes of a mixed nature for those directly and indirectly affected. (p.8)

For similar reason, Huczynski and Buchanan (2001) encourage the adoption of “the ‘multiple-stakeholders-broad-agenda’ view of organisational behaviour, developing an eclectic social science perspective and avoiding a managerial stance.” (p.3) The authors argue that such an approach encourages “a critical perspective, on research, theory and applications, rather than simply to accept a managerialist or a social scientific point of view” (p.3)

4.5 Reflections on risks and challenges with this type of research inquiry

The overall work on this thesis and the research programme span the period between 1996-2002. The primary data collection took place between 1997-2001. It has been noted by other
researchers and methodology writers (Seale, 1999, Alvesson and Deetz, 2000, among others) that in this type of study research design and plans are generally not complete until the study is finished. My experience with the thesis is that only when the last task was finished the purpose of the study was completely revealed and the study plan emerged in its totality. Arbnor and Bjerke explain it as follows:

A study composed according to the actors approach is of course not entirely 'unintentional'. It is controlled by what we might call background vision that become more and more concrete (more goal oriented) as the study proceeds. (italics original, Arbnor and Bjerke, 1997, p.307)

All the courses that I was leading and teaching on MBA level and Masters level (MA) delivered at University or on company premises between 1997-2001, were specifically designed and scheduled to incorporate this participative inquiry, including the feedback (Section 4.2.2 and Appendix 4). It was a major ethical and pedagogical task to keep developing the module content on a rolling-wave basis to reflect interim findings and outcomes over this period of time. (see Section 4.5.1 on 'Ethical and aesthetic considerations' below).

The ideal of a participative collaborative inquiry, suggested by Alvesson and Deetz (2000), Johnson and Duberley (2000), Easterby-Smith et al (1991) among others, is in 'transformative redefinition'. This is the stage of such research where the actual practitioners participants in the research continue to reflect on and make use of their own experience and knowledge resulting from the inquiry in their working practice. I can claim that this has been actualised in several cases of dissertation projects done by the interview participants taking forward the issues raised during interviewing in their own research project in their local environment. These were arranged as practitioner led (co-operative) research enquiry. The outcomes of these projects have been reported elsewhere, and due to the word limit and extensive theoretical and methodological expansion, they have been excluded from the scope of this thesis.

The assumption that I have made in this study is that projects in contemporary organisations and the attributions of success or failure to project situations, are not objectively determined and exterior, but they are socially constructed and given meaning by people. Given the underlying aim and objectives of the study presented in this thesis, and the position taken towards the focus of the primary research, these methods (Easterby-Smith et al 1991, Silverman, 2001) have been considered as appropriate not only from the researcher's point of view, but from the participant's too. For example, I believe that the research methods used to generate empirical material in this study have also served as tools to 'help the respondents think about their own worlds and consider, possibly for the first time, the way they construct their reality'. (Easterby-
Smith *et al*, 1991, p.71) The participants’ feedback in most cases justifies this observation (available for viewing on request).

In my view, interpretative qualitative methodology itself can present a researcher with enormous challenge as it involves much more uncertainty and ambiguity than traditional positivist research, and demands a high level of language skills, richness of one's vocabulary, sensitivity to moral and ethical issues, and a wide theoretical repertoire. It also requires an enormous amount of both enthusiasm and personal discipline, and a willingness to take risks that inevitably come with interrelating with people in a research situation which has a participative character. It was my intention in this chapter to reflect on, and draw attention to, some of these issues. Two major aspects of risk and problems that I encountered are related to 1) the field within which this research is conventionally positioned, i.e. Project management with very strong operations management baggage and operational research connotations; and 2) the academic context of management education where a significant part of the primary research took place. Setting up a major research on a longitudinal basis as part of taught courses and management training has its advantages in spontaneity, validity, and relevance, but disadvantages and risks in terms of ensuring motivation, understanding, and willingness of the practitioners to participate. Although I endeavoured to adhere to the procedures and advice given in the texts on qualitative research methodology, and at the same time retain flexibility and open-mindedness necessary for the above reason, there were a number of instances where things did not go smoothly. For example, some practitioners when approached to participate in the research, commented that individual's reflective interpretation of experiences with project situations are unnecessary and unhelpful for people who are 'task oriented, and want to learn how to manage projects'. Also, some senior managers argued that 'it is destructive for project managers to form a multiple perspective or critical view of the project and its wider organisational and social context' and that 'the job of the project manager is to focus on delivering what was told [sic]. He should not waste his time worrying about external factors beyond his control. He has enough to do just delivering what is specified.' These are illustrative examples of responses and attitudes occasionally encountered during this research.

4.5.1 Ethical considerations
The fact that substantial empirical material relates to the participants in educational environments of two business schools, I see it as important to reflect on how the problem of authority in management research has been addressed in this thesis:

- Given its overarching aim, the thesis is ultimately positioned in the context of management education and development. As a management researcher and educator, I see the issues of
knowledge development, research, and education interrelated and inseparable. As explained in Chapter 1 (Section 1.3), these views have been drawn from the work of Easterby-Smith et al (1991), Reed and Anthony (1992), Mitroff and Linstone (1993), Arbnor and Bjerke (1997), Introna (1997), Stacey (2000, 2001, 2003), Fournier and Grey (2000), among many others. The major concern discussed in this body of work is related to the continuous reproduction of the ‘orchestrated belief system’ through management education programmes. Therefore, from the very outset of this doctoral study, the research strategy has encompassed and embodied management education environment. The research methodology reflects this (see the section above and throughout the report) and the procedures within the research method were planned in such a way that they allowed the exploration and exploitation of such an environment with an overarching intention of listening to (reflective) practitioners and allowing wider participation. This has been identified and justified proposed as a needed contribution to the extant knowledge system of project management and its intellectual basis.

- This includes a careful planning of the methods and procedures of data collection, record, storage and analysis over the years (1997-2001) to facilitate this complex qualitative / interpretative research study.

- Similarly, plans for research validation and quality assurance processes and procedures were thought out and put in place at the very early stage of the study (as early as 1996). These were adapted and modified over this long period of study to accommodate changes in my professional engagement, accessibility of participants, developments in the project management body of thought and literature, nationally and internationally, and the like.

Traditionally, the researcher would assume authority that was implicit in the inquiry process based on rigorous methodological rules for providing objective knowledge. The instrumental and functionalist approach to social issues is now seen as problematic. This has been an important concern and related to the positivist approach to management research, which has been identified as fundamental to the extant project management knowledge system. Alvesson and Deetz advise on an alternative understanding of outcomes of an interpretative or critical research process:

Rather than the researcher providing authoritative research results, the entire research approach should be clear about the complex and uncertain nature of the project, how ‘results’ are dependent on the researcher’s more or less conscious preferences and situatedness within a particular political, paradigmatic and linguistic orientation. From this follows a downplaying of researcher authority and the reduction of the asymmetry between the researcher and the reader. (Alvesson and Deetz, 2000, p.135)
The research has become an active part of the teaching activity— which has its awkwardly risky implications for one's career but has also played an important part in nurturing my determination and enthusiasm about this doctoral research at the time of doubt, despair, and deliberation. As someone involved in academic management education, I see my moral task in keeping the virtues of concern for 'truth', reflective understanding, sceptical enquiry 'as ends in themselves which may (or may not) turn out to be useful.' (Reed and Anthony, 1992, p.608) As these authors claim - education, even for management, must ultimately be a matter of faith, or belief in values that are fundamental.

**Bias and power in lecturer-student relationships**

Closely related to the earlier section are the issues of bias and power on the lines of lecturer-student relationships:

- the perceived power of myself as a course lecturer would 'instigate the tendency among students to avoid confrontation' (Castle, 1999). This was countered throughout by an emphasis on the need for critical comments on, and challenge of, the multiple perspective approach to project management courses and various epistemological and methodological implications. Comments captured and recorded within a systematically designed multiple feedback mechanism, have been highly encouraging and favourable.

- Course participants were also allowed to be sceptical towards the mainstream practice of project management as well as towards new approaches, and to question the usefulness of philosophical and critical social dimension in evaluating proposed frameworks. This has produced a variety of opposing views.

Some of the possibilities of bias and power have been thus removed, but some may have remained despite the efforts. It is, in my view, appropriate to say that any such compromise was inevitable in order to achieve the emancipatory and educative ideals of this research, the issues discussed above and in the introductory chapter with reference to the work of Reed and Anthony, 1992; Mitroff and Linstone, 1993, Arbnor and Bjerke, 1997. The aim of the Thesis has been an increased participation through a dialog combining research and education, which resembles the phronetic social inquiry and the intellectual task of 'transformative redefinition' as summarised by Alvesson and Deetz (2000, p.145):

'While many researchers at the end of the twentieth century conceptualize and teach their subjects to be objects— to be known and acted upon— objects can be taught to be subjects who know and act. The point is then not to produce a new theory of domination as knowledge, but to produce ways of seeing and thinking and contexts for action in which groups can express themselves and act.'
4.5.2 Integrating research with education and the role of feedback

Concrete experiences can be achieved via continued proximity to the studied reality and via feedback from those under study. Great distance from the object of study and lack of feedback easily lead to a stultified learning process, which in research can lead to ritual academic blind alleys, where form becomes more important than the content. (Flyvbjerg, 2001, p.72)

This research has not been about producing cumulative and predictive theory, model or scientific tools. It has been about:

- taking up problems that matter to local, national and global environment in which we live and engage in ‘projects’;
- addressing these problems in ways that matter, i.e. engaging with issues other than rationality and science, such as values, judgement, power, sense-making and human interaction in context
- trying to effectively communicate the results of my research to fellow colleagues, practitioners, and students
- designing a research project that resembles an activity that is done in ‘public for the public’ (Flyvbjerg, 2001, p.166). For example, by engaging in this research the participants attending management classes with transparency, feedback, and interaction, rather than doing it in isolation from the society and practitioners whom I attempted to study.

In this research study, rather than taking a position of a universalist representing the collective conscience, or a specialist engaging in ‘... privileging systems of expertise growing out of conceptions of universal or objective truth’ (Alvesson and Deetz, 2000, p.17), I have drawn attention to those experiences of organisational members with project work and project management, the interpretation of which could provide alternative representations of the project related phenomena. The aim has been to create knowledge relevant to project practitioners, which would enable them to sometimes clarify, sometimes intervene, sometimes generate new perspectives, in an ongoing effort at understanding what is going on with their projects, in their local situations, in the living present. This means, contributing to the practical rationality of individuals and organisations and their capacity for action and value-rational deliberation about the future.
Chapter Summary

The methodological approach is one of ‘participative inquiry’ (Arbnor and Bjerke, 1997, Alvesson and Deetz, 2000, Stacey, 2001, 2003) with the data collection method known as ‘active interviewing’ (Holstein and Gubrium, 1995; Silverman, 2001). Over 170 project practitioners participated in the research and commented on over 100 project situations. The study is interpretative / qualitative (Holstein and Gubrium, 1995, Introna, 1997, Wieck, 1995, Seale 1999, Silverman 2001) aiming at discovering in detail the experiences that actors have with projects, project success/failure, and ultimately with project management, and the way they (and researchers) make sense of their own position within these constructs. The empirical material has been analysed using interpretative themes related to the psychology of organising and ‘complex responsive processes’ view of interaction and organising of experience - learning and knowledge creation. I have outlined and explained the design of the research, and discuss in detail the key method of primary data collection - active interviewing within a participative interpretative inquiry. This also includes the design of the stages preceding the primary empirical phase of the research, the discussion of the time scales and the profile of participating practitioners / interviewees. I have explained the process of interviewing in terms of procedures related to how the questions were asked, responses recorded, and interpreted both during the actual active interviewing and later, in my analysis. The process of data collection and interpretation are outlined in this chapter in as much detail as possible, which is complemented by an extensive set of examples and transparency of analysis, presented in Chapter 5 and relevant appendices. As the majority of the participants were students on post-experience project management courses, the sensitivities and limitations related to the educational context, bias, power relations between the interviewer and the interviewee, feedback, confidentiality, and openness are discussed. The issues of credibility, reliability, generalisability, validity and bias in a research process have been addressed and reflected upon in the context of this research study, taking into account its specific qualitative stance. In Chapter 3 I discussed the perspective of complex responsive processes of relating and why it was deemed suitable as a practical interpretative framework in the analysis of the empirical material. The explicit explanation of how the interpretations were made during and upon interviewing is contained in Chapter 5 and Chapter 6. An extensive and detailed overview of the outcomes and conclusions, as well as reflections on the research process and method are presented in Chapter 7.
Chapter 5

Analysis of the Empirical Material: Interpretation and Insights

This chapter contains the analysis of the empirical material including the explanation of the process of interpretation and interpretative themes around which the analysis unfolds. As explained in Chapter 4, active interview has been used as a main method for data collection in this participative inquiry, where meaning creation and initial interpretations of what is being said happens participatively between the researcher and respondent during the interview process, as well as by the researcher him/her self upon the completion of the interviews, in the consolidation and write-up phases. Section 4.1 in Chapter 4 (p. 79) outlines the key issues that were of interest in the empirical study. The reader is reminded that the objective of the empirical analysis in this project (as stated in Chapter 1, section 1.2) has been:

- to explore the implications of the concept of complex responsive processes of relating in organisations (discussed in detail in Chapter 3) for understanding of:
  - what goes on in projects in local situations when people find themselves involved in jointly performing a sophisticated, co-operative activity,
  - what it might mean managing a project from this perspective; and
  - the skills and competencies that enable a *virtuoso* social and political action in managing the arrangements labelled projects.

These objectives are integral to the overall aim of the thesis which has been to combine practical philosophical considerations and empirical analysis in order to 1) Evaluate the relevance of the value-rational intellectual virtues or practical rationality embracing judgement, intuition, and considerations of value and power in context, for practical action in project environments; 2) Provide guidance in terms of how the intellectual foundations, including the formal body of knowledge of the discipline, can be broadened to include these virtues; and 3) Develop some constructive trajectories for action and change in project management education, practice and research.

Section 5.1 of this chapter introduces the reader to the process of interpretation and analysis of the empirical data. It contains examples of the interview material, illustrations of my process of thinking, interpretation and logic behind the use of the interpretative framework, and insights resulting from this process. In Section 5.2, I summarise and further discuss the insights related to knowledge and competences adequate for enabling social and political action under the conditions of relational complexity and unpredictability in project arrangements.
5.1 Interpretation of the interview material — The process and framework

Building on the review of literature, and the analysis of documents and secondary data (Chapters 2 and 3), the central concern in the analysis and interpretation of the empirical material has been to understand how participants experience and make sense of projects in their local environments, how they create relevant knowledge and use it in practice while taking a variety of project related roles, and on what basis they qualify projects as success or failure (see Section 4.1, p.79 and Table IV-3, p.89). There is a substantial advantage in the research method used in this study over the traditional interview based methods, surveys, and case study research in the field of project management, in terms of the richness and quality of insights into praxis that can be generated. For the sake of illuminating the possibilities that active interviewing and participative inquiry offer, I will briefly illustrate some aspects of the process of data gathering and interpretation before I present the findings and outcomes.

Table IV-3 in Chapter 4 outlines the initial questions, which served as the guidelines to start the interviews. Follow-up interview conversations were enriched by further prompts from myself, participants' subsequent more spontaneous responses, and the natural enfolding of the active interviewing / interpretation process. Two forms of representation of the arrangements labelled 'project' and related discourses can be identified in the generated material. One replicates the standard, text-book definition of what 'project' is or should be. This form of representation encompasses the PLC model; the existence of the client and their specific requirements; the artefacts appropriate for a project arrangement (plans, schedules, reports, meetings, information technology); descriptions of structures, control systems and communication that facilitate multi-functional co-operation in producing the specified output; and a focus on defined constraints of time and cost to which the parties have committed in the contract stage (see samples of raw material: R2, R9, R15, in Appendix 5). It was also noticeable, that in their initial responses to Questions 3 and 4 (Table IV-3) some participants had a tendency to explain the deficiencies and failings in project management practice by claiming a lack of knowledge of appropriate planning, control and evaluation techniques (c.f. Packendorff, 1995, Kreiner, 1995). This was often stated as being due to organisational and individual incompetence where the phrases 'poor communication' and 'lack of information' were frequently used by participants to initially qualify all types of issues. Active interviewing as a method of interpretation of meaning and deeper understanding of practices discussed with the participants proved useful in these instances to probe deeply into what actually lies behind these phrases.

For example, some responses would highlight as important the following:
Chapter 5 Analysis of the Empirical Material: Interpretation and Insights

'Understand the goals and then structure an approach to achieve the goals. Pass the information onto workforce'... 'A project to me means to meet a set objective whether a building, system, operation ... or otherwise... by planning the start, middle and end to a given time period, exercising any constraints required or stipulated along the way.' (Participant RSK1:101 structural works manager - in a large construction contracting company; over 20 years of experience with projects in a variety of roles from junior Site Engineer to project manager)

A typical statement portraying project managers as purposeful, professional, and rational whose conduct is based on and aims at information processing and rational decision making:

'Project management is the collation of all information and material that is needed to complete the project.' (RSK3:103)

Similarly,

'Project managers must be allowed to stand back from the day to day activities and deploy the strategy for success. This means having sufficient resources. Initial planning is also critical to the success of the project. It is important to get method statements and the like in place early enough especially on projects where interfaces with the client are extensive. We are currently reviewing the planning of projects.' (Participant RSK6:106 civil engineer / project manager - in a large construction contracting company)

'The most important issue is — understanding reasons for project. Communication, brainstorming, appointment of a leader and measuring performance during and after project can be helpful.' (Participant R29, NI-IS, general manager - scientist, cardiology)

'Plan the project carefully; map out all your thoughts and follow a specified flow; communicate any issues / delays to those people who are affected' (Participant R8: Financial sector - team leader customer services, little involvement in projects)

These accounts, at first sight, come across as a straightforward resounding of the text-book prescriptions and truths, very much context independent. But, further discussion uncovered that the action beyond this rational representation of the project task involves judgement and the need to 'think on one's feet' in exercising any constraints required or stipulated along the way (RSK101); and in coping with associated variability and unpredictability.

The other type of representations of experiences and reflections appears to have diametrically different qualities. These resemble messiness, fuzziness, indecisiveness and radical unpredictability of projects and project working, which question any possibility of project managers being in control of their projects. Many of the accounts fit well with the political project life cycle, suggested by Taggert and Silbey, 1986 (see Chapter 3, p. 50; also 5.1.2 below), where rational decision making about the project and the linear model of PLC is
replaced by complexity of intersubjective relating, micro-dynamics, and asymmetries of power. This type of accounts came out in two ways. They were either formulated as such in the immediate responses to interview questions, or they emerged in the process of participative interpretation of meaning of the initial responses (of the first type above) during the course of prolonged active interviewing. This participative inquiry, based on active interviewing, has enabled me to engage with practitioners in discovering subtle aspects of their experiences with projects and project management. In that process, it was possible to interpret from an alternative theoretical position their accounts and narratives, and to reflect together on the dichotomy that started to emerge between what the received wisdom of project management and projects prescribes ‘should be happening’ and what these organisational members are actually experiencing in their local situations. The questions, around which the interviewing evolved, allowed and encouraged participants to use drawings and figures to freely express themselves, in addition to narrative accounts (see samples in Appendix 5). These drawings and sketches served as emerging empirical material to be jointly interpreted in the interview conversation. Still, reference was continuously being made to plans, goals and other symbols of project rationality, but the indispensable role of judgement, intuition, power, deliberation about the future possibilities for social action in the context came through in the expanded interview accounts. For example, the virtue of value-deliberation in a social context of projects (what Flyvbjerg takes as practical wisdom) is implicit in the following:

‘Project management?... The role of project managers? ... In my view it is the complicated act of being all things for all people. The most difficult part of the job being the need to provide the client with everything they need while also maximising the profit from that client.’ (Participant RSK10:110 quantity surveyor - in a large construction contracting company)

As the title of the thesis suggests, it is the notion of practical wisdom and its intellectual roots in value-rationality, that is of interest in this project. My intention has been to refocus attention on some key problems with the extant body of thought governing project management research and the field as practiced, and to contribute to developing practical wisdom centred sociology of project work and project management. The way of looking at organisational arrangements, suggested by the concept of complex responsive processes of relating, is useful and relevant to this type of social scientific study as it joints agency and structure, takes conversational relating in the medium of symbols as the core organising pattern, recognises both the spatial and the temporal dimension of organising and self-organising, focuses attention on unpredictability and relational circularity of power in local contexts in the living present, argues for the methodological approach of emergent enquiry, putting the practitioner/manager/researcher in the position of a participating actor rather than an objective observer standing outside the
studied arrangement and perturbing or directing it towards the desired outcome. The concept has provided a practical interpretative framework for the analysis of empirical material.

By interpreting this empirical material through the lenses of complex responsive processes of relating, it has been possible to generate a number of alternative insights into what people do when they work in a project setting, how the links are made between managerial action and a project's performance, and what an individual can do to facilitate knowledge transfer and communication in project arrangements that would make projects more successful. The following have been used as key themes organising practitioners' experience of participating in a project setting: references to symbols of project rationality (project goals, strategic intentions, projected benefits, project plans; control, failure and structural problems; project management methodology and body of knowledge); reference to unpredictability (paradox of control, interpretations of failure, power relations); reference to joint accomplishment of a sophisticated cooperative human activity (project working and organising as a process of relating in the medium of symbols; being together, getting the job done; communication and polyphony of voices, learning together, knowing, anxiety, trust, relating and power); and reference to managerial action (project management skills, knowledge and action as complex processes of responsive communicative relating; intuition, concern for the present and deliberation about the future possibilities and implications; social and political actor; holistic understanding in context)

5.1.1 The symbols of project rationality

In Chapter 3, I discussed the operation of received wisdom and project management truths expounded in the seminal literature, promoted in mainstream project management training, and repeated by practising project managers and other organisational members. I argued that it is important to understand different qualities of project management knowledge and thinking created on the basis of different project ontologies. I identified two ontological possibilities: ontology of being — which assumes the existence of project goals, strategic intentions, projected benefits, project plans, inherent structural clashes, risks, procedures, documents, and project management body of knowledge as given and unproblematic, and ontology of becoming — which focuses on understanding the process of social construction and reproduction of communication patterns, artefacts, symbols and power relations that construct and reproduce projects in a given local situation in the living present (Linehan and Kavanah, 2003, Chia, 1995, Stacey, 2001, 2003). The interpretative framework of complex responsive processes of relating in organisations assumes ontology of becoming as relevant to the creation of practical project management knowledge and wisdom and is used to make sense of the interview material.
Reference to project goals, strategic imperatives, and benefits

The conventional form of representation and qualification of ‘project’ used by the participants (the first out of the two discussed at the start of Section 5.1), is rooted in a belief that projects objectively exist, reified as unavoidable, natural, everyday as they are goal-driven, structured in terms of performance criteria and linked to the strategic initiatives as tools for implementation.

A typical example of such qualifications of ‘project’ is:

‘... a discrete organisational task, or discretely designed organisation which is time limited, delivers to SMART targets, and is externally evaluated. In my organisation project are part of organisational strategy which has discrete goals ... projects therefore provide operational and process linkage, and can be independently managed and assessed. (Participant R26, regional change manager, voluntary sector social care; member of senior management team making decisions about projects in the organisation)

‘ project is an idea or issue that needs implementing’. (Participant R37 : NHS, medical scientist; limited project experience and only as project team member)

For example, participants frequently started off their response about their understanding of projects as ‘...having an idea, normally to benefit company’ (R17). In their elaborated accounts they would soon emphasise the complexities of realising that idea, raising the issues addressed earlier. A typical recommendation for management action is

‘Getting everyone involved in the project to see the benefits for themselves; for a project to work, everyone must believe in it' (Participant R17: food industry- a senior manager, overseeing in-house, service development and organisational change projects)

‘...teamwork, no formal hierarchy; knowledge of all staff important as everyone is involved in all projects; everyone is part of each project’ Participant R2, (sales director in a small, conservatory roof fabrication business; project manager of in-house development projects)

The following account provides insights into other problematic issues about the ‘goal-driven’ project activity. It is recorded in the research database as Project Case 37, referring to an implementation of a corporate strategic initiative within a Building society, named as ‘Data quality improvement project’. The account has been generated in the interview with the participant coded as Respondent R44, who was a team member on this project.

‘The project was introduced by top management as an initiative with a high strategic priority...and as such made mandatory...in theory, top management support and commitment was apparent at the start as the project manager was promised the access to resources....Despite this, the project work became chaotic and disorganised, with very little direction of what to do when and by whom. It seemed that the clash in resource demand with some other activities within the company could not be resolved, and unforeseen interdependencies between the
project activities / tasks continued throughout. There was no way to control the project. ... The project team worked well together as far as their input was concerned. But with little direction or baseline plan lots of time was wasted. No risk assessment was done at any stage. A brainstorming session could have helped.'(Case 37, R 44)

It illustrates how the project becomes constructed by interests and agendas of a particular group of organisational members ‘the project was introduced by top management...with a high strategic priority ... and ... made mandatory ... promised ...resources’ but also, how the efforts to detach the reified ‘object’ - the project - from the rest of the organisational landscape frequently lead to its simultaneous dislocation in terms of resources, control, communication and monitoring. During the prolonged active interview process, it became clearer that the project manager did not get the promised adequate resources in terms of numbers and expertise of staff. The project manager was in continuous conflict with functional managers and was unable to engage in the constructive discussion with the organisational members allocated to the project team (and those ‘outside’ the project team) about where they were going with the activity, was it desirable, what could be done to improve the situation. On many occasions, the participant/ respondent said to have noticed significant signs of anxiety, stress and hopelessness among the project team members, including the project manager, about the progress of their joint work, the possibility of the next step, and a decreasing willingness to discuss, converse, or even argue about the ways of ‘getting the job done’. The practitioner felt that the key skill that was lacking was the ability of project manager to engage in communication and conversation in such a way that the anxiety, uncertainty and complexity could be made ‘liveable’ and that some knowledge and understanding could be created about how to go-on together performing the activity that is required. The reflection referring to the project team ‘working well together as far as their input was concerned’ was further actively discussed during the interview with this practitioner to understand what was meant by this statement. It seems that people on the team used conversational themes that reflected ideas and solutions from their professional points of view in terms of how the work should progress, mutual understanding of the company’s culture, previous experiences and internal interpretation of political and power games, and collegiate ties, to continuously interpret the present situation and create some trajectories for the next action.

We consider now an account by a participant who was reflecting on her experience as assigned project manager of an IS /IT implementation project involving the development of a management information system (MIS) within a UK district council:
The organisation has little experience, understanding and knowledge of formal requirements for managing projects. I was assigned the project management responsibility without having any previous project experience myself. The senior management explained the aims and objectives of the initiative to the project team and project manager. We were left to our own devices to plan project activities in detail... with very little guidance. This resulted in a chaotic performance of tasks... and delays. The most damaging to the project was resistance and lack of commitment of other administrative staff not directly assigned to the project team, to providing information necessary for the progress of the project. Project outcomes were achieved regardless these problems through over-commitment and exceptional dedication of the members of the project team.

(Case 39, R46)

Similar to the account by R44 about Case 37 above, the issues of communication, intersubjective relating, the political and motivational implications of the label ‘project’ for feelings of individual and group identity, inclusion, exclusion, accountability, knowledge sharing and power, clearly emerge as important in this case (Case 39).

Reference to structurally induced problems

In a number of accounts such as those quoted above, the initial statements were related to ‘inevitability’ of projects and inevitability of structurally induced problems associated with them — lack of authority, top-management support, motivation, communication, mutual understanding and learning (as expounded by mainstream literature in Young, Maylor, Meredith and Mantel, among others discussed in Chapter 2 and Chapter 3). For example:

'...although structured and planned for in advance, the intended activities always get distorted by unexpected unforeseen problems during the course of project implementation: resistance to change, lack of support, inadequate budget and poorly monitored costs...; (Participant R6: food industry — production manager, experience with capital investment and organisational change projects; see drawing in Appendix)

Problems with ‘reification’ of projects in organisational and social environments frequently articulated in the interview material were interpreted as common concerns about boundary definition, complexity of interaction, and problems with co-ordination and resources. It became apparent that being an ‘add on’ to the normal operation represented a significant way of arguing the complexity of the situation.

'difficult to define, fuzzy around the edges, often in a vacuum, not well resourced, often hard to finish, or to know when you’ve finished. Often ‘add on’ to the organisation’s day to day activity.; (Participant R 4: social service — child protection social worker, senior manager, responsible for managing the development of a number of ‘service-based’ projects) (see the drawing R4)
Reflecting on the nature of these problems we identify the significance of the social context over technical: complexity [see for example see drawing showing people lost in the woods by Participant RSK7:107 senior project engineer - in a large construction contracting company]; multi-party interaction; intersubjective communicative relating; [see enclosed examples in Appendix 5]

"Bringing together of several parties [sic.] or companies to provide a product of the required quality to a predetermined programme. All projects I have worked on are programme driven." [dates / schedule driven] (Participant RSK8:108 senior planning engineer - in a large construction contracting company)

A significant number of participants seemed to believe that desirable skills for successful project management are in persuading people that team-working on project is important and motivating them to work together. This resonates in my view with the prescribed imperatives about project success in the mainstream body of knowledge discussed in Chapter 2 and critiqued in Chapter 3. The accounts can be interpreted to show how ruling illusions and imperatives, as well as other symbols of project rationality, are reproduced by the imposition of normative knowledge and technical constitutive interest of what is locally accepted as legitimate project knowledge in specific organisational or industrial contexts including training programmes. In the sections below I develop further this line of interpretation.

**References to project plans, dates, schedules, milestones**

From the perspective of complex responsive processes of relating, the major obstacle to organisational change and learning is seen in the continual reproduction of patterns of themes, power relations and feelings in which organizational members get trapped. This is often a result of the prescribed language that is used when decisions about a particular project are made. In our example, it is the use of the plan, dates, order changes, milestones, customers’ specification, etc., the language that, according to Stacey (2003, p.185), can create ‘a kind of myopia in which participants no longer “see” other aspects of the wider process of communicative interaction they are participating in’, for example – the real nature and role of project planning in a wider context of performance. The question to ask relates to how the ideologies that create the unconscious ‘naturalness’ of patterns of power relations remain unquestioned and how it could be changed.

It might be useful to refocus attention from the tools which are implied by continuous reference to plans, dates, customer’s specification, project management information systems, or contract,
Chapter 5 Analysis of the Empirical Material: Interpretation and Insights

toward studying them as reified symbols that are used in the process of relating among members of the organisation and the project team and members of other related organisations, for both the constitution and construction of projects as an ontological entity, and for negotiation in conversations that organize their experience of knowing, or understanding of what it means to ‘jointly act’ in accomplishing a task. During the prolonged active interviewing process and collaborative participative interpretation of the accounts, the problematic notion of the related symbols of project rationality – projects implementation according to the plan – was uncovered. The analysis of accounts below takes the issues further. The examples show how reference is being made to the project plan in the context of political games and power asymmetry.

Case 63 refers to an engineering project which was not perceived as being successful. It was an interesting case to illuminate the importance of asking: By whom and with what interests was this task labelled as ‘project’? (ontology of becoming vs ontology of being) Describing the plan for the project the team leader (R83) said

' the plan was put together from an end date which this firm had agreed with (customer) and then they made the plan fit. So consequently it was throwing people at the job, rather than doing things in the right order. That was my feeling, when I took it on, I had no chance of getting it for the dates they were going on [sic.]... And that meant that we weren't allowed to update the plan, to show progress because that showed a slip in the end date. We were using Microsoft Project at the time so each time you updated at the end of a week it slipped a week, because ....of course it will, .... because it shows that you haven't been making the progress, and we went allowed to do that, we had to keep the end date fixed we had to update the planned with progress but keep the end date fixed, it was a farce. The plan was being reviewed once every two weeks by (the customer) and there was no way that the company wanted to see the end dates moving.' (Case WS62, R83)

Almost with no exception, the next set of problematic issues that emerges from further discussions about the paradoxical imperatives related to project goals and plans, includes perceptions of success/failure, multiplicity of voices, agendas, and points of view. For example, through the continuing interviewing process the participant R83 (the team leader) reflected on the project as unsuccessful, and explained;

' the objective was to meet the time scales on the plan, and as soon as I picked up the plan, it was impossible because half the things we had to do weren't on it. My main objective when I took it on was to get the thing finished to the plan. Not to slip the end date'. (case WS62, R83)

A team member (R84) of the same project when interviewed said

'[The Managing Director] had committed to delivering the project, but, you can imagine how it went. [The Managing Director] said to [the customer] we're going to deliver it, [the Technical Director] or whoever puts a plan under his nose
showing how we are going to do it, he says thank you very much, looks very nice and while down below we are never going to meet those plans. What's the criteria for these plans we never had any hope of meeting it. Here's a start date and end date just make it fit. So these things were not being rippled up, everybody was quite happy because they had got what they wanted. No one was prepared to face up to the fact that it wasn't going to happen, whereas I think if it had been a proper equipment order and not just a development ordered in, they would have focused more clearly on it. (WS62, R84)

It is clear that neither the team leader nor team members had any ownership nor faith in the plan agreed with the customer. It appears that rather than assuming that a rational logical methodology of project management, expounded by seminal literature and formal PMBOK can enable an individual actor to cope with the situation and accomplish the project successfully, it is necessary to uncover the operation of power and decision making behind the very idea of instigating the project by creating the symbols and conversational themes appropriate to the label; the client, the dates, the plan, the milestones, the contract, the project team, the deadline, the specification. The value rational questions suggested by Flyvbjerg may be appropriate as an alternative methodology: Where are we going with the kind of intentions and decision making exercised in this context, and with labelling a portion of organisational reality as 'project'? Who gains and who loses while going there and by which mechanism of power? Is it desirable? What could be done?

The following account is interpreted as emphasising the complexity of processes of individual and group relating in the medium of symbols of project rationality rather than making reference to instrumental / normative methods of project management:

'The major project management challenge is in obtaining agreement on realistic achievable objectives in terms of time and cost, to allow all parties to be satisfied with outcome' [K99 – project manager, construction]

5.1.2 Unpredictability and paradox of project control

Here I discuss how references to project failure, paradox of project control and problems in implementation with change and uncertainty have been interpreted as complex processes of power relating in the conditions of radical unpredictability surrounding situations labelled 'project'. Particular attention was paid to the references to thought, talk, and action in the accounts about project unfolding, linking them to unpredictability, non-linearity, complexity in space and time, dynamic relationship between structure and agency, and issues of intersubjective communication.
Uncertainty, time-flux

The accounts considered here provide the insights into actual experiences with 'project unfolding' which seem to be in collision with the conventional linear model of project life cycle and project management, on which the large body of knowledge is based. The experiences are messy, non-linear, dynamic, conversational, on many occasions resembling the political project life cycle — wild enthusiasm, disillusionment, total confusion, search for the guilty, punishment of the innocent, and promotion of non-participants (Taggert and Silbey, 1986).

Reflections on, and interpretations of experiences of a number of practising project managers and other organisational members who participated in this study suggest a completely different picture about the initially assumed and proclaimed 'orderliness' of projects (see the introductory sections to this chapter). Projects seem to be messy, unanalysable, ambiguous, confusing, frequently with no logical beginning and no obvious logic, in a constant state of 'flux', and with fluid goals, objectives and structures. (illustrative empirical material in Appendix 5) The whole issue of planning as social construction emerges as an alternative to the view of planning as being an exercise of a well trained, skilful professional.

'A labyrinth, a maze between the start and the finish' (RSK2:102 quantity surveyor - in a large construction contracting company; similarly Participant R18)

'Projects do not always deliver their original objectives: when funding is requested the project case is always made to justify 'perfect' objectives ... which are subsequently never met (Participant R19 — Mobile communications IS department, IS licensing manager , experience with being both project manager and project team member; Similar to R14)

Closely related to what was discussed earlier as social construction of project goals, deadlines, plans and milestones (as opposed to the mainstream assumption that these are objective, real, existing as a result of logical, rational decision making) are the accounts below (compare with the case WS62 above). They are examples among a number of similar reflections by the participants in this research, which illustrate the uselessness of the conventional project management methodology driven by 'ontology of being' and normative rational evaluation of project success thorough the achievement of 'agreed' objectives of time, cost and quality.

From the outset, it was clear in [contract manager's] rhetoric that completion on time was the driving factor, and cost, while important, was secondary... In reality, completion or 'performance on time' does not truly translate in good 'time performance'. It is rational to have good time performance and be 'late', it depends
This kind of insights were also generated and interpreted from the account by a project team leader (R85) in an engineering project which was qualified as 'mixed rating' by this practitioner. His view on the chaotic unfolding of the projects was focused on changes in the requirements. He is effectively saying that he sees no need for project planning and control because project estimates can never be accurate.

"the premise that you define the requirements up front and run from requirements is fine. The problem is that no-one is clever enough to know what all the requirements are up front. That's the problem. And if any requirements come further down the line of the project, and they had to go in, they are an important part of the project its just that they were not realised ...I have had a number of projects and the original estimates have turned out to be half the actual time, on three separate occasions. So historically I can say to you "give me your best estimate and I will double it" ... because you are doing safety related projects you can never fully develop the estimate". (Case WS64/R85)

From the perspective of complex processes of relating in organisations, these constructions of symbols of project rationality can be interpreted as forming and being formed by power relations and patterned conversational themes that construct reproduce and potentially change or transform these relations. Under such conditions, traditional prescriptive project management methodology is not helpful to the project actor / project manager. Project managers and other project workers face the situation in which they simultaneously know and don’t know, are in control and are not in control of the ‘project’ as a consequence of unpredictable outcomes of complex processes of communicative relating in the medium of symbols that reify the ‘project’. The skills and knowledge required to deal with this kind of issues require the ability to engage in these processes of conversational and power relating, to use an opportunity to introduce the variation in the stuck patterns of conversations that maintain the status quo, and to instigate a change, and create the possibility for action on the basis of what is happening in the living present, rather than on the basis of what has or what might (project plans). A related issue to the symbols of project rationality, is that of attributions of success/failure qualifiers to the project activity.

A typical account encompassing the construction of dates, milestones, plans (the active role of artefacts in project interactions), and the paradox of control and monitoring:

The number of changes experienced during this project resulted in greatly modifying and revising the WBS, the project schedule and the project budget. The usual way of dealing with changes in construction projects is to analyse the effect on schedule, resources and budget and to notify the Client. It is then for the Client to instruct whether the Contractor is to increase resources and accelerate progress
or maintain resource levels and delay the completion of the works depending on his own priorities. Obviously both these courses of action would increase the cost. In Client/Contractor discussions during this project it was often impossible to reach agreement on whether the change in question should have been anticipated by the Contractor and hence allowed for in the project plan or whether it was unforeseeable and hence a matter for the Client to address... Change was not managed well by the [Client] project management. The original project plan was distorted, added to and deleted from to such an extent in the early stages of the project that it soon became unclear as to whether deviation from the plan or identification of varied requirements by some interested party were indeed changes or just an expected development of fine tuning of the project objectives. Changes were not analysed at the time and their effect on budget and schedule were not agreed upon. They were, instead, recorded and left to be addressed at some time in the future... The management of identifying, analysing and notifying the Client of changes within our [the Contractor’s] management systems is sound in practice and has been seen to work well in different circumstances and types of contractual agreement. However, it must be recognised that things have not gone particularly well during this project. (SK14:114, project site engineer)

This corresponds to the theory of complex responsive processes discussed and commented on in Chapter 2:

‘...[organisational members] continually respond to what others are doing and try to persuade others to take the position they want. This conversational activity organises experience.’ (Stacey, 2003, p. 340; pp.327-329)

Polyphony of voices, multiple perspectives, and interests
The accounts below illustrate the interview material which provided insights into further problems with ‘managing projects for success’ where a variety of views and expectations from a project surface and create a situation where a virtuoso social and political action is required. The need is identified for a participative, reflective understanding and consideration of the present as well as deliberations about future actions to create a possibility for a continuing joint action and cooperative accomplishment of what is required for living.

*Although no clear success definition was stated, it was discussed that as long as a positive decision could be made if it was or wasn’t workable, then the project would be worthwhile. However, it could only be successful, if the system works well enough to establish a positive benefit to the company otherwise the project expenditure had been in vain. (SK12:112, site team leader)*

and,

*Success of a project for me means... constructing a product... bridge, road, tunnels... and in such a way that satisfies all those parties that have an interest or*
stake in the outcome. Experience shows that while we understand the respective desires of those parties we are largely ineffective in meeting all of them. We tend to be effective in only certain areas. My belief is that comes about from poor communication and interaction between disciplines in project management of what the varied goals are; also from poor strategy, poor management ability, under-resourcing of project teams. (Participant RSK5:105 quantity surveyor - in a large construction contracting company)

The process of communication, conversation, intersubjective, inter-group negotiation of meaning relevant to the situation is what comes out frequently in the interviews.

'Key issues are always influenced by communication: project finance and presentations of business cases, obtaining buy-in and support from key stakeholders or project sponsor, understanding and managing scope of project to prevent it growing out of control, outlining roles and responsibilities to cope with politics and conflict, exercising influence to manage relationships.' (Participant R28 — Personal financial services, recently appointed as project manager, some experience with project teams)

Even on construction projects:

People issues tend to be the most difficult to resolve... There is a lot of interaction on a construction project. For example: liaison between disciplines such as planning, engineering, surveying..., also learning or getting used to new techniques, coping with legal issues.' (Participant RSK3:103 quantity surveyor - in a large construction contracting company)

Deliberating on action in the conditions of varying values and views is illustrated below:

'From my point of view there is a single biggest issue related to successful management of project and project risk: it is managing the relationships between the various individuals involved in the project. Each element of the project and the process is represented by an individual with differing views, perspectives and goals. Managing and controlling these to achieve the goal is the key' (K93 — senior project manager in construction)

'The key issue is definitely relationships with other members of the team; also understanding or defining goals... for all people, not only for each organisation. Also, managing risks, maintaining the programme (staying on schedule)' (Participant RSK2:102 quantity surveyor - in a large construction contracting company;)

'The most difficult challenges are building a team to work in the same direction to meet the objectives ... understanding other team members needs. Poor or late design with poor buildability, managing change; setting objectives that are unrealistic from the outset; understanding the goals from the outset from the different perspectives of all parties. Also, poor workmanship, inadequate number of quality operatives to complete the work.' (Participant RSK1:101 structural works manager - in a large construction contracting company; over 20 years of experience with projects in a variety of roles from junior Site Engineer to project manager)
5.1.3 Reference to joint accomplishment of a sophisticated cooperative human activity

Furthermore, experiences with project work and project based organising can be interpreted as a process of relating in the medium of symbols which enables the individuals and groups to get the job done as a joint accomplishment of the required sophisticated project activity. There are examples where the narrative of successful accomplishment did not have much to do with a structured project management process and clear goals, either because they did not exist or they were not adhered to. While it is presumed that the structured procedures and disciplined adherence to project management methodology will produce an ordered performance, in reality they are not significant contributors to the outcome. The bonds and mutually supportive relationships that have been built up among small subsets of the project participants appear to be of more importance in holding the project arrangement together. These interpersonal bonds become activated in response to the managerial effort to co-ordinate and control the activity.

"Critical factor for success was, in my view, that we in this organisation are used to projects and project work... The employees chosen to join the project team felt comfortable working within project environment... We were fully aware of the risks associated with this type of projects and we understood requirements for successful management. The Internet environment as such was new to us and the Society was aware that lots of learning will have to take place about what needs to be carried out for an Internet site launch... This meant that we were expecting many changes to the original plans and objectives along the way... for example redrafting the design... Communication of plans and changes across the team and the organisation was critical for the successful achievement of the project objectives. Updated lists of problems were regularly communicated among the members of the project team. We used the 'post-it' method to ensure transparency and communication... The meetings were frequent..." (Case 41 - new product development project to establish an Internet site to support service provision of a financial sector organisation; R48 - project team member)

We also see examples of interaction where conversational activity organizes experience (knowledge) of 'being together' (Stacey, 2003) relevant to a local situation in the living present, by people continually accounting for themselves to each other in accomplishing a sophisticated, cooperative project activity. As Stacey puts it: 'They continually respond to what others are doing and try to persuade others to take the position they want.' (Stacey, 2003, p.340) The continuous subtle presence of feelings of anxiety, and deliberations about trust and power is noted in these and previously discussed accounts (see SK14:114 above). The following is a compilation of narrated accounts about an engineering project (Case WS61) qualified by the two participating practitioners (the project team leader and an engineer project team member) as successful. Asked about what, in his view, contributed to the success of the project, the team leader (R82) said
'Again communication, everybody involved on the project knew what it was they are trying to achieve and everybody had sight of that, if you lost a piece of information it wasn't as critical because people were not setting off in their own direction. We said we are all going over there, we can see that and we know where we are going. If there's something in the way we will try and work around it, it won't be sending us off in some other direction'. (WS61, R82)

Further interview communication highlighted the lack of any formal planning system on this project. This was confirmed by a reply of the team leader: 'planning system?!... we had no planning, no planning what so ever, we had a plan at some point'. However the project team had identified all the deliverables required in a document structure, and tracked progress against the delivery of the project deliverables. The team leader described the planning approach used as

'we knew what we had got done, what we had ticked off. That is where the pin board came from for the [next project]. The project pin board was effectively a deliverables plan. We knew what we had to do. As to who was going to do it, when it was going to be done, how long it was going to take, forecasting completion, we were not doing that.' (WS61, R82)

Commenting about the same project, an engineer project team member (R86) reflected on how he found out what he had to do on the project

'...word of mouth, I was certainly never involved in perusing any plan, I just got on and did it. I just went as fast as I could. I was never out of things to do. There were regular design reviews, and they generally told you what to do next'. (WS61, R86)

The critical issues were summarised by this practitioner as:

'Commitment, motivation and just getting on with it. It was just having the team, people with the necessary skills and clear focused goals, and being motivated to achieving those goals. You've got to have the skills to do the job, you've got to know what the job is, you've got to want to do the job... Everyone knew why they were doing it, everyone was aware how important it was and everybody was competent doing their particular aspects, and there were a lot of people called in for the duration of the project so it did get the attention it deserved'.(WS61, R86)

Participant R14 a Change manager in a large service organisation; experience with a wide range of both in-house and contracted projects, illustrated his experiences with projects and project management using the image of project manager with a lasso trying to keep the project team together.

*Think beyond your segment of the profession or department. Talk to others as much as possible*’ (R15)

Compared with the received wisdom of project actor being a skilful technician, an objective observer navigating the project system in the desired / agreed direction by utilising value-neutral
knowledge and competence, a number of practitioners accounts reflect the importance of personal participation in on-going processes of communicative and power relating that produce or are the project:

Similarly, March and Olsen (1975) view organisations as set of procedures for argumentation and interpretation. Weick (1995) elaborates on this idea, and claims that a large proportion of the organisational environment

'consists of nothing more than talk, symbols, promises, lies, interest, attention, threats, agreements, expectations, memories, rumps, indicators, supporters, detractors, faith, suspicion, trust, appearances, loyalties, and commitments...' (in Weick, 1995, p.41)

**Anxiety, emotions, and trust**

The assumption that the concept of complex responsive processes of relating in organizations holds about organising, joint action, and knowledge, recognises the emotional aspect of the process of complex intersubjective relating. Because the accomplishment of joint action is seen as a continuous process of communicative interaction and power relating, it is both stimulating and anxiety provoking at the same time. The accounts from the project practitioners illustrate the feelings, frustration, emotions, and fears. The insights are provided of the complexity created by reflexive nature of individuals participating in the communicative relating, knowledge sharing and action in the project setting, and the unpredictability of responses that one gets in this perpetual process of communicative interaction. For example:

Emotions, anxiety; stress are clearly expressed in drawings (see for example R4 and R18 in Appendix 5)

*In my experience, each project starts with a lot of energy and focus, tends to gradually lose both over time; my organisation is not a good finisher*”

(Participant R 4: social service – child protection social worker, senior manager, responsible for managing the development of a number of ‘service-based’ projects)

The radical unpredictability of resulting patterns of complex responsive processes of relating, according to Stacey’s work, adds a unique dimension to the processes of organising a sophisticated cooperative action, both managing it and reflecting on it in local situations – the quality of anxiety and how it is lived with when the future is ultimately unpredictable. The paradoxical state of simultaneously knowing and not knowing, being in control and not being in control, in which organizational members and project managers find themselves in project environments, requires an ability to cope with such paradox, and with the feeling of
incompetence and shame that comes with it. That is the satiation which requires an ability to introduce new patterns of conversation and facilitate creation of new knowledge and learning, removing reference to only one kind of symbols (functional boundaries, plans, dates, bids), and introduce other kind of themes that will make the future joint action possible in order to accomplish what is required for living (Stacey, 2003). These are the issues of trust in the conditions of radical unpredictability. The individual and the social are seen at the same ontological level existing together at the same time. The social is the issue of morality, ethics in simultaneously collaborative and competitive relating, and of circularity of power, including negotiation and accountability. An illustrative example:

*Within the team there were times within the project when communications were not working particularly well, that was overcome, at one stage, by daily cross function meetings for an hour or so in the morning. To look out what we are doing today, what problems have you got? Any production problems with test and prototype build. So that overcame some things slipping.* (WS61, R82)

In terms of what was required to manage in such conditions the following are illustrative

> *Political environment... managing confrontations* (Participant R11: Local government – a parks and landscape manager; experience with service related maintenance projects, see the drawing representing ‘project management’)

> *People skills – knowing the limits of the people which [sic.] are under your control. A structure that allows people to be aware of what is expected from them and the areas that have some float and room for innovation.* (Participant RSK10:110 quantity surveyor - in a large construction contracting company)

Ability and courage to cope with paradox and radical unpredictability – simultaneously being and not being in control; knowing and not knowing:

> *Do not be put off by the first hurdle, see it through. Finish the task. Do not be afraid to ask for help. Do not be frightened of failure.* (Participant R27, production director, manufacturing company, experienced as project decision maker at a senior level, functional manager facilitating projects, project team member and end user)

**5.1.4 References to project management, knowledge, skills and competencies**

Managing and organising is seen, from the perspective of complex responsive processes of relating, as a continuous process of patterned conversational relating in the medium of symbols which simultaneously form and are formed by power relations and ideologies in the local situation (context) in the living present. Knowledge and skills, including management competencies are also seen as being performed as part of these conversational processes of
relating. In the interviews, accounts and reflections, the insights were generated that indicate that technical complexity of projects, knowledge creation, sharing and learning can almost always be qualitatively understood as a form of patterned conversational / communicative action and power relations, in the medium of symbols and conversational themes that 'construct', and are 'constructed by', the project. (Table V-1, pp.125-128)

In this section I provide further interpretations of the interview material related to the practitioners' experiences about what it means managing projects and what kind of skills and knowledge they feel they are using in their project practice in their local contexts. This builds on and integrates the insights already discussed in the preceding sections about alternative ways of thinking and talking about projects, symbols of project rationality relationships in project arrangements, role of projects and political and power issues associated with their social construction and reproduction of projects in contemporary environments. The ways in which project complexity is interpreted from the position of complex responsive processes of relating in organisations indicates the need for intuition, judgement, context, and value deliberation in managing projects where the achievement of constructed time, cost and quality constraints is not any longer the only imperative, but an ability to create a possibility for future action to accomplish the required cooperative activity. The interviews provided the following insights into what practitioners consider a good advise for successful management of project:

'keep eye on big picture... steering through conflict of interest...effective communication' (Participant RSK7:107 senior project engineer - in a large construction contracting company)

'management of response to change... also, having flexibility... respecting objectives of others and taking them into account instead of following own agenda.' (Participant RSK8:108 senior planning engineer - in a large construction contracting company)

'Identifying own goal... but the most difficult thing is identifying goals of others and accommodating them; ...communication, giving direction, leadership' (Participant RSK9:109 senior project planner - in a large construction contracting company)

'Must have networking skills in order to understand business plan objectives and to enable partnering with consultants (contractual and as a working framework). (Participant R22, highway engineering, experience as project manager and project team member)
Table V-1 The nature of project management knowledge and competencies identified by practitioners and interpreted from the perspective of complex responsive processes of relating in organisations (Stacey, 2001, 2003)

<table>
<thead>
<tr>
<th>The knowledge areas identified by participants as important</th>
<th>Examples / Quotes from practitioners’ accounts</th>
<th>Interpretation from the perspective of complex responsive processes of relating during interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation</td>
<td>'study regulations and follow requirements set by relevant legislative documents'</td>
<td>Intersubjective communicative understanding in the specific context; conversational relating in the medium of artefacts that form and are being formed by, power relations; interpretation and sense-making; epistemic, professional knowledge;</td>
</tr>
<tr>
<td>Co-ordination</td>
<td>'learn to communicate, communication is important because of the need to continuously “chase” either people or information'</td>
<td>Active, reflective participation in the processes of communicative relating that is 'project' in the local situation in the living present; persuasion; recognising and living with anxiety and radical unpredictability of the outcomes</td>
</tr>
<tr>
<td>Flexibility and coping with uncertainty</td>
<td>'when necessary allow for modification of requirements to meet stakeholders criteria'; nothing similar done before</td>
<td>Radical unpredictability; polyphony of voices; negotiation and joint accomplishment of a sophisticated, cooperative activity required for living</td>
</tr>
<tr>
<td>Endurance</td>
<td>'conduct meetings regularly in order to discuss all process elements, various inputs...'</td>
<td>Anxiety of simultaneously being and not being in control; knowing and not knowing; thinking action as a result of emergent enquiry</td>
</tr>
<tr>
<td>Financial management</td>
<td>'risk management, pre-project evaluation, decision making at the conceptual stage'; understand what budget is available;</td>
<td>Instrumental rationality, logic and purposefulness merged with conversational themes patterned in such a way that enable power relating, ideology and rules to form and to be formed by power relating; including what counts as knowledge and accurate information – all symbolic</td>
</tr>
<tr>
<td>Resource allocation</td>
<td>'avoid project starving; ensure the resources are planned and distributed to projects fairly', manage project resources</td>
<td>Participating reflexively in complex processes of power relating that construct and reproduce themes and symbols that are ‘project’; requires political and social action of value-rational consideration of the present and deliberation about the future;</td>
</tr>
</tbody>
</table>
Table V-1 (cont.) The nature of project management knowledge and competencies identified by practitioners and interpreted from the perspective of complex responsive processes of relating in organisations (Stacey, 2001, 2003)

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<th>Interpretation from the perspective of complex responsive processes of relating during interviews</th>
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</thead>
<tbody>
<tr>
<td>Communication / communication strategies</td>
<td>Between employees / resources; networking skills; at all levels to enable progression of work; identify issues at early stage; encourage open feedback; ‘key issues are always communication related: project finance and presentations of business cases, obtaining buy-in and support from key stakeholders or project sponsor; understanding and managing scope of project to prevent it growing out of control, outlining roles and responsibilities to cope with politics and conflict, exercising influence to manage relationships’, presentation skills, report writing, reporting of risk assessment and management; define the business case and devise a plan. Listening to others in order to understand their views; keep all people involved informed of progress; keep project planning lively; manage project sponsor – client relationship’.</td>
<td>Prudence, practical wisdom, judgement, and considerations of power asymmetry, ideologies, complexity of intersubjective communicative relating; patterns of themes organising experience of being together in a project setting; Refocusing attention to the quality of participation in conversations, anxiety and how it is lived with, trust in the moments of dislocation, accepting the possibility of simultaneously knowing and not knowing, being and not being in control while still being able to deliberate about the future joint action in performing and accomplishing what is required; paradox and radical unpredictability; methodology of emergent enquiry: knowing-acting on the basis of being involved in the process of power and conversational relating, rather than standing outside the system and perturbing and directing it towards the stated goal; facilitating free-flowing conversation</td>
</tr>
<tr>
<td>Understanding overall objectives</td>
<td>‘on time, within budget’</td>
<td>Acknowledging social construction of plans in the process of complex intersubjective relating in the medium of symbols which are at the same time the patterns of power relating in the specific context in the living present; performative stance as well as value-rational deliberation about the future</td>
</tr>
<tr>
<td>Programming of the activities / planning</td>
<td>‘to understand timescales’</td>
<td></td>
</tr>
</tbody>
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Table V-1 (cont.) The nature of project management knowledge and competencies identified by practitioners and interpreted from the perspective of complex responsive processes of relating in organisations (Stacey, 2001, 2003)

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<tbody>
<tr>
<td>Holistic view</td>
<td>To see the bigger picture and where the individuals fit</td>
<td>practical wisdom and logic / rationality balanced; virtuoso political and social actor; 'involved-in-the-world' manager; reflecting synchronically and holistically on the patterns of complex intersubjective relating while still being able to act on the basis of knowledge of the local context, judgement and intuition, and asking: Where are we going with this kind of 'project', Who loses and who gains and by which mechanisms of power; Is it desirable?; What should be done? Leadership and action through participation and emergent enquiry;</td>
</tr>
<tr>
<td>Knowledge of the immediate and wider environment</td>
<td>'performance management and measurement, the organisation’s strategic plan, Government initiatives... (NHS case)'</td>
<td></td>
</tr>
<tr>
<td>Organisational knowledge and skills</td>
<td>Influence project members, ability to see wood for trees by maintaining focus on the project objective; knowing how to set clear objectives, realistic timeframes, and how to optimise project plan reviews; motivation of team members;</td>
<td>Participates in complex responsive processes of relating within and outside of the organisation by bringing in new conversational themes and patterns of relating, or introducing variety and novelty into the existing patterns of relating to create new knowledge and learning</td>
</tr>
<tr>
<td>Networking</td>
<td>Ability to identify useful contacts</td>
<td>Paying attention to anxiety and how it is lived with; trust; radical unpredictability</td>
</tr>
<tr>
<td>Stress management</td>
<td>Being aware and able to cope with own and other people’s stress</td>
<td>Instrumental rationality balanced with value rationality; considerations about the present and deliberation about the future possibilities</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Measure progress and outcomes</td>
<td>Participation in the complex responsive processes of power relating in conversations in the medium of symbols</td>
</tr>
<tr>
<td>Project administration; tendering and contracting procedures and processes</td>
<td>Know the right language and procedures</td>
<td></td>
</tr>
</tbody>
</table>
Table V-1 (cont.) The nature of project management knowledge and competencies identified by practitioners and interpreted from the perspective of complex responsive processes of relating in organisations (Stacey, 2001, 2003)

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</tr>
</thead>
<tbody>
<tr>
<td>Change management</td>
<td>Communicating the change</td>
<td>Coping with radical unpredictability and paradox of control: accomplishing jointly a sophisticated activity under the conditions of bounded instability; non-linearity, complex intersubjective relating; creating possibilities for future action; both performative, instrumental rationality and value rationality / practical wisdom</td>
</tr>
<tr>
<td>Leadership skills</td>
<td>Ability to get the best out of the group; sell the idea about ‘team-working’; knowing how to motivate people</td>
<td>Virtuoso social and political actor (the highest level of competence in the Dreyfus model) – prudence, logic as well as value-rational deliberation in context, in the living present; focusing attention on one’s own participation in the complex processes of power and conversational relating that are project; anxiety and how it is lived with; radical unpredictability and paradox – being able to cope with the feelings of ‘shame and incompetence’ in situations when they simultaneously know and don’t know, are and are not in control</td>
</tr>
<tr>
<td>Professional specific skills; technical knowledge</td>
<td>Understanding the technical aspects/ main subject area of the project scope</td>
<td></td>
</tr>
</tbody>
</table>
What also clearly comes through in the interpretation of the empirical material is that no matter how hard one tried to be the project manager that the theory said one ought to be, these glorified models of projects and methodologies of project management seemed unable to sustain the reality of everyday ‘getting the job done’ (Introna, 1997). At the centre of the world created by instrumental rationality (see Chapter 2) of the dominant belief system seem to be the idea of the thinking, rational, purposive project manager. The interpretations of the empirical material show some shortcomings of such a belief, illustrating situations of irrationality and purposelessness in which project managers (and project team members for that matter) frequently find themselves. The true implications of drifting environments will be only known in retrospect, after having run the system (Stacey, 2000).

Table V-1 represents a summary of issues raised in relation to questions 5 and 6 (Chapter 4, table IV-3) which are about the nature of knowledge perceived or experienced by different organisational members as useful for practitioners in order to cope with project work, project based organising, and project management role. The issues of project management action, skills and knowledge were imminently present throughout the interview conversations associated with other four questions, as they are inseparable from experiences with project working in general. Insights into the nature of that knowledge in the light of the interpretative framework are included in the subsequent sections of this chapter (Section 5.2).

5.1.5 Brief summary of the overall empirical analysis
In summary, this is what the empirical evidence provides in terms of insights, when project organising, working and getting the job done by organisational members is seen as a process of participation in conversations in the medium of symbols which form and are being formed by power relations:

- Communicative interaction is always present in project work and management either directly or through technology of artefact, but always in the medium of symbols involving the body itself, other bodies and the material environment of the body.

- Communicative interaction is also power relating which simultaneously forms and is being formed by labelling the set of activities as ‘project’; As the situation unfolds, influence is spontaneously arising in webs of power relationships in particular contexts, as people communicatively interact intensively in order to create meaningful forms of activity that move things on; For example, a strict design of a meeting and an over-specified agenda, prepared slide presentations and pre-definition of roles all conspire to reduce the experience of uncertainty as the experience of acting into the known is engineered.
the issues of talk, discourse, and conversation are central because that is how a great deal of social contact is mediated / sensemaking keeps in play a crucial set of elements, including self, action, interaction, interpretation, meaning, and joint action; The discussions have everyday quality, they are messy, branching, conflicting, associative and engaging. They involve formulating and making reference to proposals, feasibility studies, analytical frameworks, contracts, business cases, other people, previous experiences, anecdotes, and personal revelations.

- the practising project manager appears as a 'conversational author' able to argue persuasively for a 'landscape' of next possible actions, upon which the 'positions' of all who must take part are clear' (see case WS61, for example)

- Emotion, anxiety, feelings,

- The need for practical wisdom in the condition of radical unpredictability and temporal and spatial complexity, where communicative interaction and power relations perpetually construct the future of the arrangements labelled 'project'; the constructed nature of project plans and paradox of control

- Project management knowledge, skill, action and learning are situated in a specific context; the action relies on previous experiences, logic and universal rules only to an extent; intuition, deliberation and value-rational considerations of project success / failure play a major role in project manager's performance

- Technical complexity, knowledge creation, sharing and learning almost always expressed/ commented on in the accounts as a form of conversational / communicative action, power relations, and ideologies in the medium of symbols. (Table V-1)

Intrinsic pattern-forming properties and self-organizing qualities of these complex responsive processes of relating in local situations are an important characteristic of relational knowledge and learning. Only in free-flowing conversation, necessary variation could be introduced to change the 'stuck' patterns and themes, which will in turn reshape the patterns of power relating. The proposition is that it can be done only by people involved in the local situation, in the very process of communicative interaction and power relating, where knowledge is being created and shared. This is circular, reflexive, self-referential causality where human interaction is organised as the patterning of narrative and propositional themes. Ideologies unconsciously make the patterns of power within these patterns of conversations and symbols feel natural. This point is reproduced in practice through the ideological and power implications of 'iron cage' rationality and 'being ontology' of project work (planning, working to dates, and milestones, paradox of their construction).
A simultaneous need for both instrumental rationality and value/practical rationality has been identified in a number of interviews; for example:

*When someone has ‘lived’ a Project from commencement to completion it is difficult not to have an inherent feeling of whether Project was a success or not in overall terms. This subjectivity needs to be put to one side by looking at Project in a dispassionate way, collecting evidence and analysing what actually occurred.* (SK12:112, site team leader)

Participation by the manager appears as a more significant concern than any set of methodologies and techniques to be used in shaping the discussion. The interviews generated insights into the issues that practitioners felt are key to their experiences with project management: multiplicity of voices and expectations, which requires a combination of value rationality and instrumental rationality and situational competence in context in the living present. The following are insights from the material that indicate what the practitioners consider relevant for coping with project complexity:

- the ability and courage to operate effectively and carry on creatively despite ‘not knowing’ and ‘not being in control’, and to individually and collectively maintain their sense of self and their defences against anxiety that this brings. Intentional goal-oriented actions emerge in the conversations of managers at a local level and those conversations function as patterning, meaning making processes.
- display a greater spontaneity and have the ability to deal with the ongoing purpose or task for which others are interacting;
- able to deal with the unknown as it emerges from the known context and to enter into the attitudes of others, so enhancing connection and interaction between group members.

Throughout the preceding sections of this chapter, I discussed the process of thinking and inquiry that guided me in my original intention to explore the implications of the concept of complex responsive processes of relating in organizations for understanding of:

- what goes on in projects in local situations when people find themselves involved in jointly performing a sophisticated, co-operative activity,
- what it might mean managing a project from this perspective;

The subsequent discussion (Section 5.2) will address the remaining issues that the thesis set out to achieve through empirical analysis:

- to explore the implications of the concept of complex responsive processes of relating in organizations for understanding of:
  - the skills and competencies that enable a *virtuoso* social and political action in managing the arrangements labelled projects.
The chapter concludes with a general discussion of some of these insights related to value-rational deliberations that goes beyond conventional normative, instrumental thinking in project management. In Chapter 6, further in-depth discussion of how might these interpretations benefit practitioners and overall social and political action in projecticised society will be presented.

5.2 Knowledge and competence for social and political action under conditions of relational complexity and unpredictability in project-labelled arrangements

In Chapter 3, I explained and argued the key assumptions that the perspective of complex responsive processes of relating makes about knowledge, interaction and power in organisational arrangements, why such approach might be in resonance with the intellectual virtues promoted by phronetic social science, and why this concept was considered suitable as practical interpretative framework in the empirical study of practitioners experiences with action, management and decision making in project environments. On the basis of the empirical analysis (Chapters 4 and 5) and practical theoretical and philosophical considerations including the literature review and documentary analysis (Chapters 2 and 3), I expand further on the propositions put forward from the perspective of complex responsive processes of relating in organisations on what it might mean learning how to manage contemporary projects with a skill and wisdom of a virtuoso political and social actor. Therefore, the purpose of adopting this perspective is not to prescribe but to refocus attention in order to encourage and enable alternative kinds of action to instrumental control, monitoring, and intentional leadership ‘from outside the system’.

The study has illuminated the qualities required for social and political action in project settings that encompass both value-deliberation and instrumental rationality. The insights from interpreted accounts in the interview conversations show that these qualities are governed by reflexive holistic understanding and evaluation of the specific project-labelled arrangement where considerations of the present and deliberations about the future are key for creating possibilities of ‘going on’ together in accomplishing what is required for human living (see Section 5.1.5 above).

A virtuoso social and political action, according to the Dreyfus model (Chapter 1) is based on knowledge, skills and competencies that require refocusing attention to what matters in the social processes of project organising which are complex and paradoxical, to face as well as
exercise power, recognise conflict, and exercise judgement and intuition while joining agency and structure. The fourth and fifth level of skilful performance are defined in the Dreyfus model as:

Level 4 - proficient performer: The process of decision, choice and action is based on the ability to intuitively identify problems, and goals, and to check such intuitive choice of plan by analytical rational evaluation prior to action.

Level 5 - expert or virtuoso: Develops the capacity and behaviour for intuitive, holistic, and synchronic understanding of the given situation / problem; true human expertise of a flowing performance, which involves analytical deliberations in terms of values, power, and analytical thinking, but is not hindered by them. Characterised by situational behaviour (but not irrational) without conscious separation of thinking from doing, or decision from action by analytically dividing situations into parts and evaluating by using context-independent rules.

In the following sections I discuss how the interpretation of practitioners' experiences about what enables practical action in project situations through the lenses of complex responsive processes of relating correlates with the value-rational intellectual virtues or practical rationality. As mentioned before and discussed in Chapter 3, these virtues embrace judgement, intuition, and considerations of value and power in context. It also offers a set of alternative recommendations about what it might mean managing projects from this perspective by refocusing attention on reflective participation, quality of conversation and communicative relating in accomplishing a joint action, and anxiety and how it is lived with under conditions of radical unpredictability and paradox.

Reflection and participation

Participation by the project manager appears as a more significant concern than any set of methodologies and techniques to be used in shaping the project work. The interviews generated insights into the issues that practitioners felt were key to their experiences with project management: multiplicity of voices and expectations, which requires a combination of value rationality and instrumental rationality and situational competence in the local context.

As opposed to normative/ rational perspectives, and majority of processual, strategic choice, learning organisation and knowledge management theories, which take the methodological position of 'the objective observer where the manager stands outside the organisation understood as a system and thinks in terms of controlling it' (Stacey, 2003, p.414), the complex
responsive processes perspective takes the following position: The manager is assumed to him/herself be a participant in these processes of relating, continuously engaged in 'emergent enquiry into what they are doing and what steps they should take next' (ibid), and reflexive in thinking about the nature of their own complex processes of relating in their local situation. We note a strong parallel here with Level 5 of the competence scale in the Dreyfus model. What Stacey has proposed within the concept of complex responsive processes is that the agency lies simultaneously with individuals and the group since they form and they are formed by each other through self-organising experiences of relating. Even the most powerful individual, Stacey claims, is a participant in human interaction.

The whole purpose of the theoretical shift suggested by this concept is to focus attention on processes that managers are held to be engaging in, but which the other theories do not focus upon. The theory invites recognition of the uniqueness and non-repeatability of experience:

...in moving from the position of manager as objective observer to that of manager as enquiring participant, attention is focused on the unexpected responses of organisational members to managers’ intentions. Intention is understood as emergent and problematic. The emphasis shifts from the manager focusing on how to make a choice to focussing on the quality of participation in self-organising conversations from which such choices and the responses to them emerge. It becomes a personal matter of reflecting together on the quality of participation. (Stacey, 2000, p.407)

This resonates with the views put forward by project practitioners in this research as well as with the work of Laszlo (1994, quoted at the start of Chapter 6, p.138 and in Chapter 3, p.51), and Balck (1994, see Chapter 6, p.142) among others.

The term ‘emergent inquiry’ is introduced by Reason, 1988:

This is a reflexive methodology in which organisations are understood to be social constructions. ...Neither researcher nor manager can step outside the conversational processes that are the organisation simply because their work requires them to talk to others. What they say affects what they hear and what they hear affect what they say. From this perspective, then, a manager cannot stand outside organisational processes and control them, direct them or even perturb them in an intentional direction. All such intentions are gestures made to others in an organisation, and what happens unfolds from the ongoing responses.

The emphasis is on the everyday, ordinary conversation, and the role of manager is seen as their ability to participate in these conversations and power relations (that are projects), and to facilitate different ways of talking and conversing, thus creating a possibility for change and transformation. This requires sensitivity to the themes that are organising conversational
relating and power relating. From this perspective effective managers would achieve this if they reflexively ask why people are saying what they are saying and they will ‘seek opportunities to talk to people in other communities and bring themes from those conversations into the conversational life of their own organisations’ paying particular attention to the power relations and their ideological basis as expressed in conversations. (Stacey, 2003, p.418)

Living with anxiety

Despite problems with ‘project plans’ (see sections 5.1.1 and 5.1.2) which can be understood as the result of social construction, as objects or symbols to which various players attach different meaning, people are able to act jointly to accomplish a sophisticated co-operative action and to create future possibilities to ‘go on’ together. Stacey (2003) explains that this organising of experience happens through the processes of interrelating where people continuously account for themselves to each other via rhetorical-responsive conversations in ordinary, everyday life. The perspective of complex responsive processes of relating sees anxiety as inevitable in the process of human relating in conversations, particularly when conversational themes, which are also the expressions of identities as well as power relating, are being transformed and the outcomes of which are uncertain. People are concerned about the threats that the change imposes on individual and collective identities expressed in both public forms of conversations as well as those inner, private ones. Both anxiety and excitement emerge from these, and when project managers focus attention to these aspects of complex relating in their projects, they start to question ‘what it is about particular work, at a particular time, in a particular place, that gives rise to anxiety.’ (Stacey, 2003, p.418) This refocuses attention of managers to the issue of trust between those engaging in difficult conversions which is related to the nature of anxiety, and the need to explore together what it is that makes it possible to live with the anxiety so that it is also a creative process of learning and knowledge creation in the given project situation.

Introna (1997), and Stacey (2003) among other critical writers argue for the view that managers are exposed to the situation where they are simultaneously and paradoxically ‘in control’ and ‘not in control’. In practice, it is suggested, ‘involved-in-the-world-managers’ live with this paradox by displaying the courage to continue participating in the messy processes of communicative interaction through which making of meaning in the paradox is accomplished. Consequently, the distinguishing feature of project managers is not control but the ability to operate effectively, and to individually and collectively maintain their sense of self and their defences against anxiety. Intentional goal-oriented actions emerge in the conversations of practitioners, managers and non-managers alike, at a local level and those conversations function as patterning, meaning making processes. It is ‘courage to carry on creatively despite
not knowing and not being in control, with all the anxiety that this brings.' (Stacey, 2003, p.393), which was also apparent in the insights generated from the interpretation of the empirical material in this study. This is also a strong parallel with the level 5 of competencies in the model.

Jointly accomplishing a sophisticated cooperative action — complex processes of conversational relating

The analysis of empirical data indicates that project settings can be an exceptionally rich media of symbols which organise conversational themes and define the quality of intersubjective relating in performing an agreed or required cooperative activity. Patterned conversational themes organizing communicative interaction among people in accomplishing a joint action are apparent in the accounts from all groups of the interviewed practitioners. They frequently evolve around symbols and artefacts such as dates, the plan, the project (team), the customer, drawings, changes to specification, and similar, and manifest multifaceted themes of habit, tradition, value and belief sanctioned by custom and repetitive procedures in the local context. These are also indicative of how the boundaries around a project, the rest of the organisation, and other entities are constructed, then reified, and sustained through a patterned (conscious and unconscious) deployment of the conversational themes that organise people’s experiences of their being together in that environment. The reification becomes ‘undiscussable’ through the conscious and unconscious patterning and reproduction of power relations and what is legitimised as knowledge and practice. As Stacey (2001) notes, relationships between individual organisational members and groups always impose constraints on what may be done, what feelings may be acknowledged and even what may be thought, because they always resonate current power relations. The richness of interaction in project situation reinforces the view of inevitability of power which is the network of strategic force relations in such interaction rather than located in the sovereign (the agent).

Chapter 6 will build on the analysis presented in this chapter and provide a discussion of the major themes emerging from the empirical analysis. I will then discuss the process of developing knowledge and skills identified as adequate and desirable for moving beyond the image of project manager as ‘implementer’ towards ‘a virtuoso social and political actor’ in project arrangements.
Chapter summary

This chapter was devoted to the insights that emerged from the empirical study. The central concern in the analysis and interpretation of the empirical material has been to understand how participants (project actors / workers / managers) experience, and make sense of the situations labelled 'project' in their local environments, how they create knowledge about projects and project management and use it in practice, and on what basis they qualify projects as success or failure. By interpreting the empirical material through the lenses of complex responsive processes of relating, it has been possible to generate a number of alternative insights into what people do when they work in a project setting, how the links are made between managerial action and a project's performance, and what an individual can do to facilitate knowledge transfer and communication in project arrangements that would make projects more successful.

The following have been used as key themes organising practitioners' experience of participating in a project setting: references to symbols of project rationality (project goals, strategic intentions, projected benefits, project plans; control, failure and structural problems; project management methodology and body of knowledge); reference to unpredictability (paradox of control, interpretations of failure, power relations); reference to joint accomplishment of a sophisticated co-operative human activity (project working and organising as a process of relating in the medium of symbols; being together, getting the job done; communication and polyphony of voices, learning together, knowing, anxiety, trust, relating and power); reference to managerial action (project management skills, knowledge and action as complex processes of responsive communicative relating; practical wisdom, intuition, concern for the present and deliberation about the future possibilities and implications; social and political actor; holistic understanding in context). Insights from the analysis and interpretation of the empirical material draw attention to those aspects of the organisational arrangements labelled projects which are largely excluded from the mainstream project management concerns. These are the experiences with project work and management of projects which emphasise participation and reflexivity in thinking about own complex processes of relating with others in project-labelled situations; the quality of conversational life, sensitivity to themes that form and are simultaneously being formed by power relating, and the importance of 'free flowing conversation' for creation of novelty and change; anxiety and how it is lived with; coping with unpredictability and paradox of outcomes of individual and group complex conversational relating; ethical and moral concerns about actions both, intuitive and logical, taken while 'thinking on one's feet' while simultaneously 'knowing' and 'not knowing', 'being' and 'not being' in control of the project.
Chapter 6

From an Implementer to a Virtuoso Social and Political Actor – Project Management Knowledge, Skills, and Competencies

"Project management is no longer an organised and orderly game where the players pursue preconceived plans to achieve predetermined ends, but an ongoing play with chance and probability in an environment where not only players but also the rules of the game, are subject to change."

(Laszlo E, 1994, p.3-5)

The concluding sections of Chapter 5 (5.1.5 and 5.2) contain a discussion of how the issues related to project manager's role, knowledge and competencies could be understood when empirical material is interpreted from the perspective of complex responsive processes of relating in organisations. In the subsequent sections of this chapter (Sections 6.1 – 6.3), I will discuss other key insights emerging from the empirical analysis, how they relate to the themes identified in the literature and documentary analysis (Chapters 2 and 3), and how they correspond to the aims of the thesis. This includes the insights that provide a better understanding of why the 'implementer' role of project manager, implied by the mainstream body of knowledge, is inadequate for the complexities associated with the project-labelled situations. Then, I discuss the outcomes of the thesis against its aims, which are threefold (Section 1.2.1 p.9). Firstly, the intention has been to evaluate the relevance of the value-rational intellectual virtues or practical rationality embracing judgement, context, intuition, ethical deliberations, and considerations of value and power, for practical action in project environments. Section 6.4 contains a discussion of the overall outcomes related to this aspect of the thesis. Then, in Section 6.5, I discuss the outcomes of the research related to the remaining two aspects of the aim of this research project, namely:

- To offer some guidance in terms of how the intellectual foundations, including the formal body of knowledge of the discipline, can be broadened to include the value-rational virtues; and
- To develop some constructive trajectories for action and change in project management education, practice and research.

The empirical analysis confirms that neither linear-rational modelling nor scientific-normative thinking promoted by mainstream project management are helpful as the sole basis for the creation of knowledge which aspires to be relevant to managing, working with, and actively participating as a socially aware actor in project-labelled arrangements. By interpreting the
empirical material within the framework of complex responsive processes of relating in organisations, it has been possible to generate a number of alternative insights to those proposed by the mainstream body of project management thinking. This contributes to a different kind of understanding of what practitioners do when they work in a project setting, how the links are made between managerial action and a project's performance, and what an individual can do to facilitate knowledge transfer and communication in project arrangements that would make projects more successful along the criteria other than instrumental performativity. My intention, broadly, has been to contribute to individual and organisational capacity for value rational deliberation and action in projectised society, hand-in-hand with the necessary instrumental rationality underpinning the need for control in the 'risk society' (Flyvbjerg, 2001). The empirical analysis confirmed the hypothetical proposition that phronetic social science, as an approach, could be adequate for understanding, researching, and creating knowledge about project based working, organising and management – knowledge that is useful and relevant to practitioners in their local situations in the living present.

6.1 Problems with 'implementing' the planned – uncertainty, conflict, and failure

The insights generated through the interpretation of the empirical material, highlight both the contingent and constructed nature of both projects and the infrastructure, which accompanies the current conception of projects. As suggested in Chapter 2, Table II-1, in the heart of the practical experiences with projects are organisational and socio-political processes, symbolic action, conversational themes that form the narratives about project success / failure and, by implication, of the project goal. In Chapter 2, I have also discussed the controversial issue of evaluating project performance (success /failure debate) and used some illustrative narratives from public reports to draw attention to paradox and controversy linked to the multiple, multi-level issues of unpredictability and complex social interaction in project-labelled environments. These include, for example, a reference to the 'Three Gorges Dam' project in China, '...the world's biggest dam project ever. Is this a triumph or a disaster?' (Economist, 02/08/1997, p.47) Reports frequently make reference to the relationships among project parties as a major concern, calling for greater transparency and a more open dialog in order to build trust.

The mainstream project management belief system causally associates project failure with the level of appropriate and professional application of project management techniques, tools and even vocabulary (discussed in Chapters 2 and 3). The practical solution to learning, knowledge and action for improved performance of projects from the mainstream perspective is twofold: one aspect is the promotion of the robust project evaluation methodology for recording and
sharing 'lessons learned', while the other is a significant focus on the need to increase project management competencies within organisations and through professionalisation efforts for the occupation. The definitions of project and project management discussed in Chapters 2 and 3, portray the view that, ultimately, the ‘existence’ of a project and its successful management is conditioned by the clarity and achievement of right or predetermined results, outcomes, or goals, where the emphasis is on the process of structured project control as a major task of project management. The assumption of rational / normative approaches is that ‘projects’ are goal driven, where the goal can be explained and justified by the need to be fulfilled or the benefit to be achieved.

In the rationalised rendering of projects these needs and interests are logically prior to the formation of the project, and the definition of the specific task is believed to be nothing but an operationalization of such needs and interests. Where the project manager to influence the definition of needs and interests, it would be likely to be seen as manipulative and illegitimate behaviour... therefore, “best practice” instructs project managers to minimize the risk of ambiguous project goals and inefficient implementations, but to leave the issue of relevance to the assessment of others. (Kreiner, 1995, p.337)

The literature from the processual stream (see Chapter 2, Table II-1) argues that traditional project management concerns should be extended to a strategic level (Maylor, 2001, 2003, Meredith and Mantel, 1995, 2003; PMI 2000), in the sense that the organisations should 'rectify' the ways they select, evaluate and set-up projects by doing better pre-project analysis, aligning the project with its long term vision and available resources, and improving the precision and discipline in risk assessment.

Project management mainstream prescriptions often recognise and acknowledge that in practice the originally set project goals can never be perfectly achieved, but that managers nevertheless should strive to be in control as much as possible, by skilfully designing and using systems tools and techniques for monitoring of project performance and progress. This has been discussed in Chapter 2 in relation to critical success factors in project management, Fincham’s theorising of the paradox of qualifying a project as ‘success’ or ‘failure’, and Kreiner’s position on drifting project environments. To be ‘in control’, from the perspective of the project management mainstream body of thought, means to get project members to conform and sustain consensus, ultimately in order to avoid chaos and anarchy. It also assumes the possibility of

... ensuring that movement into the future realises or unfolds a future state already enfolded in the present or past as the intention or desire of top managers, or of the democratic intention or desire of organisational members. ... Control is [assumed
to be] ensured through conscious, formal, legitimate decisions based on the possibility of reasonably useful predictions of the future. (Stacey, 2003, p.391)

In relation to the discussion of deadlines, plans, and budgets being symbols of constructed project rationality (Chapters 3 and 5), statements, such as 'In a complex project, there is always the possibility that delays may occur'? (FT, 04/08/1999, p.4) or 'These projects never go according to plan'. (FT 24 / 11/ 1999, p.5) can now be given a different level of significance when it comes to project management knowledge, skills, and competencies (discussed in Section 6.3 below). This issue of managerial control over the unfolding of a project over time has continuously recurred in the interview accounts. The question 'Can managers be in control of their projects?' seem pointless unless some debate is developed about the assumptions behind the meaning of 'project control' and how it is 'performed' in practice.

The interpretation of the empirical material signifies the problematic nature of project implementation and the role of project managers as 'implementers'. Everyday experiences of a number of practising project managers who participated in this study suggest a completely different picture about the assumed 'orderliness' of projects. Projects seem to be messy, unanalysable, ambiguous, confusing, frequently with no logical beginning and no obvious logic, in a constant state of 'flux', and with fluid goals, objectives, and structures. These difficulties cannot be treated as independent of the confusions in the policy process (project conception processes, the definition of the initial requirements and design, conventionally termed as project selection, pre-project evaluation and feasibility studies). According to March (1989) and other writers taking a 'political coalition view' of organising, this process of project initiation could also be understood as the way of building winning policy coalitions. Project goals and plans are seen as frequently ambiguous, but their ambiguities are not only a result of shortcomings on the side of decision makers and planners but frequently an inevitable consequence of gaining necessary support for the project, and of changing preferences over time. Conflict of interest that is often commented on in research and practice of project management, can be understood as a general feature of continuous negotiation, internal struggle, and inconsistency in coalitions, where project goals and plans reflect contradictory intentions and expectations and considerable uncertainty (Baier, March and Sætren, 1986).

The empirical material has provided insights into how these processes affect the practitioners' understanding and knowledge of what is happening in the specific project-labelled situations in their environments and how it influences their action, decision and reflection as project managers and project workers. Illustrations of the intellectual process of empirical analysis and interpretation is provided in Chapter 5 where these issues with 'implementing' the plan, and
those related to uncertainty, conflict, and failure are clearly identified and commented on (particularly Section 5.1.2; Section 5.1.4, and Section 5.2).

6.2 Practical wisdom centred sociology of projects

This section builds on the analysis presented in the preceding chapters and contains reflections and discussion of the knowledge and skills identified in the empirical study as adequate and desirable for managing complex and dynamic arrangements labelled ‘projects’ in contemporary organisations and society. In Chapter 2, I discussed the assumptions behind the scientific/functional belief system of project management. These assumptions reinforce the view of managers as skilful technicians who face an objective reality, and apply value-neutral knowledge and competence in order to make rational decisions, collect information and implement a finite piece of work in a specified period of time, within a certain budget, and to agreed specification — the implementers. In this chapter, such assumptions are contrasted with what practitioners are experiencing in their local situations and how they get the job done, that is how they accomplish a sophisticated, co-operative project activity under the conditions of radical unpredictability, non-linearity and bounded instability of the complex processes of relating that are project.

Mainstream research into projects and project management relies heavily on the prescriptive and the instrumental, where the function of project management is taken to be the accomplishment of some finite piece of work in a specified period of time, within a certain budget, and to agreed specification. A phronetic-science centred sociology of project refocuses attention to the relevance of the four value rational questions (Section 1.2.1, p.9; and Section 3.5.2, p.68) and expands the scope of project manager’s role, skills, competencies and the nature of knowledge relevant to complexities, social relational dynamics and power asymmetry in the settings labelled ‘project’ in practice. The issues of project success/failure are not seen as polarised end-states, nor are they seen as purely social constructions which leave practitioners with no power to act. The value-rational intellectual virtues introduce important additional considerations to the extant approaches to evaluating projects and assessing the quality of project performance and project management action, as they combine and balance practical wisdom with instrumental rationality — the virtues in the heart of phronetic social science.

6.2.1 Managerial action: from an ‘implementer’ to ‘a virtuoso social and political actor’
Practitioners, in particular we as project managers, are well advised to rid ourselves of the constricting historical background of a mechanistic world image and rationalism. Without question the best method to help us correct our way of traditional thinking is "on-the-job training" that is, experiencing the real success and failures in dealing with our everyday business endeavours. (Balck, 1994, p.2-4)

As discussed in the earlier chapters of this thesis, scientific instruments and techniques have not given project managers the promised solutions to their practical problems. These are not helpful in dealing with changing, ambiguous, and unclear project objectives, and in directing and controlling work of project participants to achieve the predetermined ends. In Chapter 5, Section 5.2, on Reflection and Participation (p.134), I commented on the importance of the voices from practitioners, including Balck (1994) above, who acknowledge the limitations of the conventional belief system governing the mainstream project management thinking and the image of project managers as 'implementers'. The resulting alternative set of prescriptions to practitioners and scholars from this study has different qualities.

I also made reference, in the introduction to the thesis (Chapter 1), to the work of Atkinson (1999) who asserts that it has become an impossible, and, most likely, non-adding value endeavour to define project management in terms of the traditional 'iron triangle' principles. These principles emphasise the achievement of time, cost and quality objectives as the major justification of the role of project management. According to Atkinson, the attention should be refocused from these efficiency measurements, which are being questioned as appropriate measures of project success (see also Belassi and Tukel 1996, Chapman, 1998, Baldry, 1998, Maylor, 2001), to the nature of project as a complex organisational arrangement, 'a good management of which is a flexible attribute which could be a strength for achieving project success'. (Atkinson, 1999, p.339).

From the above discussion and the empirical analysis, a particular view of the nature of project leadership can be formed. It can be understood that project leaders emerge as those who display a greater spontaneity and have the ability to deal with the ongoing purpose or task for which others are interacting. Making reference to Mead (1934), Stacey suggests that the leader is individual who is able to deal with the unknown as it emerges from the known context and to enter into the attitudes of others, so enhancing connection and interaction between group members. This also includes the use of intuition, which is defined by Flyvbjerg as the ability to draw directly on one's own experience — bodily, emotional, and intellectual — and to recognise similarities between these experiences and new situations.
Holt and Rowe’s (2000, p.551) research into critical leadership of civil construction projects resulted in the following observation, relevant to the preceding discussion: ‘Project control, then, is not just delegated but socialized; values insist throughout the project such [sic] that implementation and direction are not seen as separated functions but core aspects of the overall endeavour.’ Holt and Rowe believe that in order to actualise critical leadership in practice, three important points need to be considered:

1. because of the multiplicity of actors representing an organisation within a project network there is no value equilibrium (nor monolithic culture), therefore critical project leadership relies on the capacity to dialectically cope with both rhetoric and technical devices, where, in an important way, ‘techniques are seen as themselves dependent upon the character of prevailing relations and the problems with which they are dealing.’ (Holt and Rowe, 2000, p.549)

2. a blend of critical and controlled implementation and facilitating vision is envisaged, as harmonising interest to focus upon singular goals, singularly met (the ideal of mainstream approaches to project management) thwarts potential value adding activity by limiting rather than enhancing options.

3. mutual learning in project environments about the advantages of systems of prevention over monitoring and appraisal systems for reconciling planned budgets with actual expenditure, can take place within non-adversarial regimes of flexible, ongoing, open contracts or partnerships.

These aspects have been clearly identified in the empirical analysis (particularly Sections 5.1.3, 5.1.4, and 5.1.5). Judging quality or appropriateness of managerial action, from the perspective of complex responsive processes and from a phronesis-centred approach to projects, involves different criteria to the mainstream ones. According to Stacey, quality actions are moral and ethical in nature. A quality action is one that creates a position from which further actions are possible and from which errors can be detected faster than other options. This requires managers’ ability to act on the basis of their own local understanding of a project’s micro diversity.

What would ‘quality action’ then mean in project settings? What would it mean effectively performing as social and political actor by paying attention to project’s unpredictability and uncertainty? It may mean, for managers, thinking how to cope with potential feelings of incompetence and shame that arise in the conditions of ‘not knowing’ what the consequences of one’s action might be. As discussed in Section 6.1, the conventional belief system in project management promotes the possibility of long-term predictability if one is well informed and
professional enough. The unpleasant surprises (project failure, not progressing to plan, etc) are viewed as the consequence of ignorance, incompetence and lack of discipline, appropriate behaviour, or compliance to procedures.

This thesis has intended to refocus attention to some key problems with the extant body of thought governing project management research and the field as practiced and, as the title suggests, to contribute to developing a practical-wisdom centred sociology of project work and project management. Phronesis is understood as capability for situated action in a concrete context based on reasoning beyond both analytical, scientific knowledge and technical knowledge, and 'involves judgements and decisions made in the manner of a virtuoso social and political actor'. (Flyvbjerg, 2001, p.2, italics added) The concept of complex responsive processes of relating has proved helpful and adequate as a practical interpretative framework for the reasons already commented on in Chapters 3, 4 and 5. A thorough analysis of the full potential of this theoretical perspective for broadening the intellectual foundations of both knowledge management and 'project based organizing' would be much beyond the scope of what could be achieved in this thesis (see Stacey, 1996, 2000, 2001, 2003). Here, I have attempted to illuminate and discuss two important and interrelated implications that are of imminent relevance to the theoretical frameworks, practical philosophical considerations, and concrete empirical material presented in this thesis:

1) the ontological representation of ‘project’ and conceptualisation of the nature of managerial knowledge and learning
2) the propositions related to competencies and desirable action by (project) managers in facilitating what is required for accomplishing project work as a cooperative, joint action.

6.3 Project ontologies – from ‘being’ to ‘becoming’
Managerialisation is an ontological issue (Fournier and Grey, 2000) – propositions to ‘project manage’ a particular business affair, strategic problem, political issues or change initiatives implies invoking a ‘technical’ solution through expert management. Project managers are perceived as having a privileged knowledge of the real world. The managerial status is legitimised on such ontological and epistemological grounds.

From the normative rational perspective, managers face an objective reality - ‘the project’ - as already there with their structures (which can take one of several suitable forms), multi-professional input, and designed system of collaboration, information and knowledge exchange and learning. These plannable elements of the arrangement labelled ‘project’ (project based
organization, project working, etc) are seen as beyond, or separate from, the actual activities of the project members (separation of agency and structure in this type of research approaches). In contrast to that, from the perspective of complex responsive processes of relating, adopted in the thesis, organizational members

‘... are resonating bodily with each other as they link their actions in order to “go on” together. In this “going on” together, they are interacting cooperatively and competitively in joint activities, usually employing tools of some kind, in order to express identities and “earn living”. ... [in this process] ... each individual responds to others so as to fit their actions into the actions of those others.’ (Stacey, 2001, p.195, emphasis added)

In addition, it is the process of communicative interaction in the medium of symbols and gestures that makes sophisticated co-operative action possible. As commented earlier, power and ideology of the unquestioned project rationality are simultaneously producing and are being reproduced by the self-organizing character of complex responsive processes of relating that are going on in the arrangements labelled ‘project’ in represented organizations.

6.3.1 Discussion of radical unpredictability and change
From the perspective of complex responsive processes of relating, the interview accounts, discourses, and reflections (including visual representations - drawings) related to the dynamics of project performance (unfolding) over time and the possibility of project control, have been interpreted to generate alternative insights into what happens when people perform ‘project work’ and what the practitioners do when they manage a project. We can note the following: as the situation unfolds, influence is spontaneously arising in webs of power relationships in particular contexts, as people communicatively interact intensively in order to create meaningful forms of activity that move things on.

Thinking about projects and their performance from the position of complex responsive processes of relating in organisations and assuming the ontology of ‘becoming’, we take the view that surprises are inevitable and they are part of internal dynamics of complex conversational interacting between individuals and groups over time. Acknowledging this, is already one of the ways of dealing with the anxiety of not knowing. But it also means departing from the image of rational, purposeful, knowledgeable, professional manager, who makes sense of what is happening in the organisation on the basis of information, then rationally analyses the situation, and designs the system of action that will ensure desired outcomes. However, in an unpredictable world, the outcomes of an action cannot be known in advance. Managing is seen as a process of continually rearranging the paradoxes of organizational life, through a different type of leadership.
How is one supposed to make decisions in advance about behaviour and performance of a project arrangement and to control the progress of a project if the long-term future is radically unpredictable?

If an assumption is made about the specific future of a chaotic system, then the only useful thing to be said about that assumption is that it will not happen. It then becomes difficult to see how the assumption helps one to make a decision. The real drivers of behaviour become what has just happened, not some hypothetical and unrealisable assumption about what might. There is no option but to create where the system is going through action and discovering where it is going as it is going there. This is a process of learning in real time. (Stacey, 2000 p. 268-9)

Consequently, cybernetic project control based on instrumental rationality, prediction, planning, and systems behaviour is not possible if the outcomes of future actions are not known at the important levels of detail.

6.3.2 Discussion of the symbols of project rationality
The interpretation of the empirical material provided insights into the operation of power in constructing a project (labelling a portion of organisational reality as ‘project’), where certain imperatives and ruling illusions are put forward as ‘rational’ drivers. Molloy and Whittington (2003, pp.8-9) drawing on the work of Bruno Latour, explore the possibility of viewing projects as deliberate attempts to stabilise equivocal state of affairs by constructing necessary matters of fact, such as dead-lines, mile-stones, budgets, stakeholders, contracts etc. These symbols and artefacts (‘matters of fact’) then take on a life of their own and become both ‘objects’ to which reference is made when planning and performing the project work and ‘actants’ or non-human actors actively influencing the movements and action of the ‘project’ over time and space. The insights generated from the interpretation of the empirical material (Chapter 5, particularly section 5.1.1) relate to how the label ‘project’ is formed as a pattern of conversational themes in the medium of relevant symbols which simultaneously reproduce and are reproduced by power relations that always exist among parties in project settings. In contrast to the accepted definitions of projects and project management which, as we discussed earlier in Chapters 2 and 3, rely on certain ruling illusions, imperatives and ideologies, labelling a portion of organisational reality as ‘project’ can be seen from an alternative angle as:

- making ‘non-normal’ work more ‘normal’ and understandable by imposing a scientific, rational approach thereby increasing the predictability of the outcomes: the acceptance of, belief in, and application of the conventional, instrumental and rational approaches to projects and project management;
- temporary closure is achieved by negotiation of roles and positions, and by heavy use of a repertoire of representational devices such as presentations communicating project goals, minutes of meetings, timetables, project plans, checklists, 'deployed at particular times to particular audiences, in order to establish what counts as a matter of fact and what is state of affairs' (Molloy and Whittington, 2003).
- projects often function as 'special situation' structural devises used where a separate, self-sufficient sub-unit is created to oversee the completion of a specialist activity.

From the discussion in Chapter 2 and Chapter 3, the orchestrated belief system governing the body of project management thinking assumes the role of the project manager as that of formulating and clarifying the project purpose (visions, aims, goals, objectives, performance targets) and controlling the movement of the project arrangement into the future so as to achieve this purpose. The unquestioned assumption is that the main stages of PLC, problem formulation/analysis, so frequently associated with 'defining and justifying the need for a project', decision making during project planning, project implementation, and project completion are separate activities. As discussed in the earlier chapters, various models of PLC allow some overlap of these activities (Frame, 1994), including the possibility that they may circle around many iterations (Young, 1998), but conceptually they are always seen as separate, reinforcing therefore the assumption that thought is separate from action. It emerges, though, that in practice thinking and talking are performed as action, in the form of the organising themes that are emerging in the conversation within a group of people who come to feel that there is some kind of situation in which they are together to jointly accomplish the action required for living.

6.3.3 Plans and change
The empirical material provides insights into how the joint action is performed and job got done on daily basis through self-organizing, reflective processes of arguing and criticising among the project members. All that was governed by their strategies for creating action in order to 'go on' together and 'get the job done' (see cases WS61, WS 62, and WS 64 in Chapter 5). Action is created / constructed by using relationships with others as a resource. In addition 'boundary objects' such as drafts, blueprints, plans, schedules are used in a sophisticated way by various project actors. The issue of problematic organisational goals, contingent decision making related to strategic change, and the political messiness of decisions involving multiplicity of agendas of the coalition members is also a frequent concern.
It is frequently concluded that planning is important for successful accomplishment of a project. I have already discussed how the mainstream project management body of thought including PMBoK approach these processes. But, paradoxically, it is also concluded in the practitioner’s accounts that projects rarely go according to the plan. Should the concluding recommendation be for managers not to plan at all as it is a waste of time? Or should more tools and techniques be developed to enable practitioners to produce more sophisticated plans? Introna, similarly to Weick, claims that ‘managers may get benefit from a planning process but it is not from plans’ (1979, p.186) and it is not because plans really help them know what to do.

In a related manner (see also Section 6.1), the authors who adopt the positions of social construction and sociology of science and technology have argued that ‘plans’ (and for that matter project plans) are not what normative / rational prescriptions promote. According to Introna (1997), project plans are not the first step towards control, but an opportunity to build alliances, negotiate meaning, reinterpret the project in moments of dislocation (Case WS62). Plans can be important as symbols (see the earlier section) – a troubled organization can use project plans to publicise a message about an intent which can be seen favourably by observers. Weick (1979, p.10) states: ‘it is in this sense that plans are symbols and that they negotiate a portion of the reality that then comes back and rearranges the organization’. From that point of view, it is less crucial that the organization is actually planning to implement the project plan than that ‘all concerned imagine this to be the case’ (p.10).

The importance of plans: symbols, advertisements, games, and excuses for interactions

On the other hand, there is an argument that plans have been overrated as a critical component for accomplishment of effective project actions. Although the empirical material draws our attention to the issues of poor project planning or lack of planning as being behind the problems experienced with project work, it is not obvious that even more planning or more disciplined planning would be the answer or solution to desired improvements. Weick suggests that plans are important in organisations, but not in the ways or for the reasons to which the reference is normally made. Citing some other authors, including Cohen and March, 1974, Weick describes a number of reasons behind the necessity of plans in organisational life, which are all related to specific types of projects. For Introna (1997), the process of planning makes sense in three alternative ways: - as an opportunity to for the participants to articulate their tacit knowledge; as a way to create opportunities to change moves and rules of the game, negotiate meanings, translate actions, and build alliances; as an opportunity for languaging by which socially agreed distinctions can be developed whether by coercion or consensus. ‘Languaging creates the
distinctiveness that makes social action possible; social action creates the distinctiveness that makes language possible'. (Introna, 1997, p.187)

Finally, in project situations described in the empirical material, plans are needed most frequently for providing excuses for interaction, ‘...in the sense that they induce conversations among diverse populations about projects...’ (Weick, 1979, p.11). As project plans are only best guesses or estimates about what may happen over a prolonged period of time in the future, it is relevant to note Weick’s argument that much of the power of plans and the planning process

...is explained by the people that it puts into contact and the information that these people exchange about current circumstances. When people meet to plan for contingencies five years away, contingencies that seldom materialise, they may modify one another’s ideas about what should be done today. But that is about all that can be accomplished. (ibid.)

This kind of propositions problematise the mainstream assumptions about the distinction between decision and action, thinking and doing, and about the role of intention and a possibility of an objective observer standing outside the system and directing it towards a desired state by design and control. It also challenges the image of ‘rational, purposeful, professional, thinking manager’ (c.f. Introna, 1997) who makes informed decisions based on information processing and then designs the system and acts. Other aspects emerging from the empirical data, to which this perspective attempts to draw attention are: quality of conversational life; anxiety and how it is lived with, and dealing and coping with unpredictability and paradox, which means managing under the conditions of simultaneously ‘knowing’ and ‘not knowing’, ‘being’ and ‘not being in control’ (see Sections 5.1.4, 5.1.5, and 5.2, Chapter 5).

6.4 The outcomes of the study: From instrumental rationality to practical wisdom

Therefore, in order to develop a capacity for a competent social and political action in project settings, rather than asking ‘What is a project’, one should ask ‘What do people do when they label an organisational arrangement as 'project'? Project management knowledge should encompass an awareness of How the decisions are made with reference to symbols and tools by paying attention to the patterns of conversational themes (propositional and narrative) that create and reproduce ‘project’. The intellectual virtues that support a virtuoso social and political action (practical wisdom) evolve around the ability to pay attention to How projects sustain, and are being sustained by, power relations and how these relations organise people's
experience of working together on a project in a specific context. A socially aware project actor is able to engage in 'reflective thinking'. This implies refocusing attention to their own participation in forming and being formed by these power relations in the project arrangement. Considerations of How anxiety is expressed and lived with in the conditions of radical unpredictability and change refocuses attention of a manager to the issue of trust in the conditions of radical unpredictability. It requires the ability to, on the basis of their local understanding of what is happening in their project in the living present, decide on joint action which creates future possibilities of continuing with the cooperative activity.

Practical wisdom in the context of project management means reflecting on project plans and goals and asking value-deliberating questions: Where are we going with this kind of intention, labelled project? Who wins and who loses and by which mechanisms of power? Is it desirable?, and depending on the nature of these answers, a final important consideration What should be done?, should result in practical deliberation on desirable action in the context of a variety of views. These resulting propositions from the study do not have an ambition to advise on 'how to do' project management and project work, but how to think about the 'project' labelled arrangements in local situations in the living present:

- It is non-productive to keep trying to get to the deeper definition of the true, real nature of projects; it is more useful to create knowledge about projects as constructions of values and power relations in local situations
- thinking of a project as the continually iterated processes of communication and power relating between people;
- Studying individual and group at the same level of analysis;
- Project planning and other types of decision making which project ideas into future, are essentially constructed in the ordinary relating between actors in local situations in the living present, and not a result of a scientific, technical actions of a skilful agent, who stands out of the system as an objective observer – planner;
- Adopting the methodological position in which people are both participants and observers at the same time, and where knowledge and reflexive understanding are rooted in the same intellectual basis – methodology of emergent inquiry which balances the conventional drive for rationality, logic and intention driven analysis with intuition, judgement and holistic understanding of the local context in the living present.

Table VI-1 presents a comparison of assumptions and concerns between instrumental rationality and practical wisdom, on the basis of the outcomes of this study, and in relation to its aim.
Table VI-1 Instrumental rationality and practical wisdom — a comparison of assumptions and concerns

<table>
<thead>
<tr>
<th>Instrumental rationality – key assumptions</th>
<th>Ontology of becoming, Practical wisdom centred sociology of PM</th>
<th>Value-rational evaluation questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practitioners face an <strong>objective reality</strong> - 'the project'</td>
<td>- Viewing 'project' as a pattern of conversational themes, constructed and reproduced in the complex process of communicative relating among organisational members in the medium of symbols, which are also power relating</td>
<td>1 Where are we going with the kind of intentions exercised in this context, and with labelling a portion of organisational reality as 'project'?</td>
</tr>
<tr>
<td>• A goal-oriented system of activity and structures -</td>
<td>- Awareness of social and political aspects of project plans and other project artefacts / symbols as a means for the ends other than the stated; 'actants' actively participating in the unfolding of the complex processes of relating that are the project, over time and space</td>
<td></td>
</tr>
<tr>
<td>• The 'Project life cycle' (PLC) model is a universal representation of the true nature of 'projects'</td>
<td>- Awareness of ruling illusions, strategic imperatives, and ideologies that create and reproduce a certain reality of the project in its context</td>
<td></td>
</tr>
<tr>
<td>• The model serves as a decision making tool with predictive and explanatory power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation (project plans reports, contracts, etc) and other symbols (deadlines, milestones, budgets, information systems) that it invokes are seen only as a means of project monitoring, control, and information storing; otherwise socially insignificant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental/rational approach to organisational decision making and management processes</td>
<td>- complexity of conversational relating between the actors (individuals and groups) enrolled on the project and outside the project</td>
<td>2. Who gains and who loses while going there, and by which mechanisms of power?</td>
</tr>
<tr>
<td>• Linearity of PLC model promotes the possibility of attaining project objectives through the sequential and progressive application of orderly methodology (which is control, content, and implementation focused)</td>
<td>- political coalition view of projects - no 'neutral ground' for success/failure attributions, polyphony of voices</td>
<td></td>
</tr>
<tr>
<td>• Decision/ action, thinking / doing, planning / implementation divide</td>
<td>- mechanisms of power behind temporal and spatial unfolding of projects; project working – joint accomplishment of a sophisticated, cooperative activity over time and across space but always in a social context where judgement, intuition and power play equally important role as logic, rationality, and science;</td>
<td></td>
</tr>
<tr>
<td>• Success / failure – polarised ends, causally linked to critical success factors</td>
<td>- talk and action / thinking and doing are inseparable, thinking on one's feet at the times of dislocation, lack of 'information' and knowledge; coping with the feelings of incompetence and anxiety (one's own and others) and creating the possibility for future joint action as well as considering the present</td>
<td></td>
</tr>
<tr>
<td>Managers are <strong>rational technicians</strong></td>
<td>- evaluates the situation using judgement, intuition, previous experience and holistic, multi-perspective approach as well as logic and universal principles of project management to act and perform in the specific local context in the living present</td>
<td>3 Is it desirable?</td>
</tr>
<tr>
<td>• skilfully use a well defined methodology to navigate through the stages of PLC to accomplish some finite piece of work in a specified time, within a certain budget, and to agreed specification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• responsibility for a competent control of the implementation process;</td>
<td>- complexity of conversational relating between the actors (individuals and groups) enrolled on the project and outside the project</td>
<td></td>
</tr>
<tr>
<td>• promotes a non-contingent approach to the desired competence profile of project manager, the policy of composing project team, the choice of planning methods and the evaluation criteria, the design of project communication system</td>
<td>- political coalition view of projects - no 'neutral ground' for success/failure attributions, polyphony of voices</td>
<td></td>
</tr>
<tr>
<td>Project management is a <strong>value-neutral competence</strong></td>
<td>- mechanisms of power behind temporal and spatial unfolding of projects; project working – joint accomplishment of a sophisticated, cooperative activity over time and across space but always in a social context where judgement, intuition and power play equally important role as logic, rationality, and science;</td>
<td></td>
</tr>
<tr>
<td>• specific language and terminology sustain the 'scientific' aura of the field</td>
<td>- talk and action / thinking and doing are inseparable, thinking on one's feet at the times of dislocation, lack of 'information' and knowledge; coping with the feelings of incompetence and anxiety (one's own and others) and creating the possibility for future joint action as well as considering the present</td>
<td></td>
</tr>
<tr>
<td>• project management methodology and structures are universally applicable as a neat and orderly solution to implementing complex organisational initiatives</td>
<td>- evaluates the situation using judgement, intuition, previous experience and holistic, multi-perspective approach as well as logic and universal principles of project management to act and perform in the specific local context in the living present</td>
<td></td>
</tr>
<tr>
<td>• Instrumental reason allows only for means-ends relationships and promotes itself as politically neutral.</td>
<td>- evaluation of cooperative action along value-rational criteria including asymmetry of power, polyphony of voices, recognition of winners and losers</td>
<td>4 What should be done?</td>
</tr>
</tbody>
</table>

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The original value rational questions suggested by Flyvbjerg as methodologically appropriate for an involved manager are used as a guide (the right-hand column of the table). They helped formulate the above propositions of what is required from a social and political actor in complex project-labelled settings to assess and evaluate the state of affairs, make decisions and perform on the basis of both practical rationality and instrumental rationality of the mainstream belief system. This refocuses attention away from a structured linear-rational decision making model of the universal project life cycle where the questions relate to clarity of goals, justification of plans, design of the work structure for the project, implementation and control of plans and intentions, management of changes, uncertainties and risks, and management of stakeholders expectations, towards reflexive holistic understanding and evaluation of the specific project-labelled arrangement where considerations of the present and deliberations about the future are key for creating future possibilities of 'going on' together in accomplishing what is required for human living.

6.5 Project management education and development – some implications

Orthodox theories of organising and managing encourage belief in the possibility of identifying necessary skills in a clear way and defining steps to go through in order to acquire them. The essential skills I am pointing to are much fuzzier and the steps to achieving them more nebulous. The response might be to stay with orthodox management perspectives. After all, they have applications and prescriptions that are much easier to grasp. However, I believe that this easier option is not viable in the increasingly complex world of organisations. (Stacey, 2000, p.412)

The aim of this thesis, its propositions, and the philosophical underpinning of the inquiry, are positioned within a context of contemporary thinking about the role of, and the interrelationships between, the processes of business knowledge creation, education, and learning. Mitroff and Linstone's term new business philosophy in creation, coined in response to their observation of the deficiencies of professional business education in the 1990s in the USA, summarises an emerging orientation of a number of other authors, in debating the purpose of professional academic education:

In today's professional education, particularly at business schools, there is, first and foremost, the need to replace a variety of specialised tools of analysis that ill equip the students for the complex, real life problems they encounter in their professional lives with the kinds of thinking skills, and knowledge that meet the challenges of the 'new knowledge / information age'. (Mitroff and Linstone, 1993, p.vii)
This involves the ability of an individual to

...examine problems from multiple perspectives. It also demands that one formulate multiple and conflicting definitions of critical problems. It further demands that one be able to examine how problem will affect and be affected by different persons scattered throughout every level of society, if not the entire world. It necessitates the ability to treat two of the most critical aspects of all problems – their aesthetic and ethical dimensions. (Mitroff and Linstone, 1993, p.viii)

The fundamental aspects of the implied complexity and challenge that need to be considered as part of the educational task, are formulated by Arbnor and Bjerke (1997) as:

• Awareness and considerations of environment, human wellbeing, ethics and aesthetics in creating and evaluating knowledge

• (mis)understanding of what learning means - creating knowledge involves being exposed to new ideas, which by definition, offer resistance to our old ideas and are difficult to adopt. The challenge that is faced by educators and practitioners in administering and adding value to project management knowledge stock is articulated by Arbnor and Bjerke (1997, p.480) as: ‘Many are those who want to go “back to basics”, few are those who actively want to change, to try something new by stretching their intellectual flexibility and their understanding of new areas; almost everyone else just wants to learn more of the same.’

• The role of the individual – the student’s ability to develop and use intuition, creativity and vision in linking knowledge and learning with both performative success criteria and future collaborative prospects of the project in question;

• Appreciation of the pedagogic process as another aspect of learning and knowledge acquisition, moving on from the analytical orientation to the social-action centred approach which develops skills and competencies relevant to practitioners in this increasingly projecticised society.

An important concern that has emerged from the body of reviewed work in this thesis is – why do we rarely speak about the continuous reproduction of the mainstream thinking in management education and the obstacles to doing away with the prescriptive notions of aims, learning objectives, learning outcomes, and quality audit trials, which make educators be compliant rather than creative? Why many feel powerless to change and refocus attention to the relational quality of knowledge and learning? Stacey offers the following as a possible answer: ‘a powerful reason has to do with the taken for granted validity of mainstream systems thinking, supported by cognitivist psychology, reflecting a particular ideology of control.’
(2001, p.226) This brings us back to the original Habermas’s claim about the nature of knowledge, and the inartistic role of human interests in the knowledge creation process.

The argument put forward in Chapter 3 is that project management mainstream presupposes that there is a coherent object, the project (ontology of being). The phrase (the label ‘project’) is part of the infrastructure that reinforces an unquestioned belief that there is a definite kind of work organisation called project. Similarly, a specific kind of person, project worker, project manager, project client, and the like, becomes reified. As Hacking explains, people start seeing others in their and other organisations, and interacting with them in those terms. Commonly, through business and management education and training, practitioners become well aware of theories about projects, project management, project clients, project success, and they adapt to, react against, or reject them. Conventional studies of the project workers, project managers, project clients, project arrangements themselves may have to be revised, because ‘the objects of study, the self-conscious human beings studied, have changed in virtue of what they believe about themselves.’ (Hacking, 1999, p.27)

The following thought captures the ultimate message of the argument and debate developed in much of non-mainstream work on management education (see for example Reed and Anthony, 1992 discussed in the introduction chapter) and resonates with the contribution to the intellectual system of project management, that this thesis claims:

Concepts developed by academic community ... must be recovered from operational and textbook definitions and reconnected to ways of seeing and thinking about the world. In the dialectics of the situation and the talk of individuals with different perspectives, the emergence of new ways of talking becomes possible. Such a process both enhances the natural language of social members and leads to the development of new concepts to direct the attention of the research community. (Alvesson and Deetz, 2000. p.146)

The outcomes of this study in relation to the nature of project management knowledge, skills, and competencies generated, from an alternative approach to projects and project working, resonate with Stacey’s work (2003) where the recommended action is: rather than pursuing cybernetic, long-term forecast based control mechanisms, organisations and managers should endeavour to develop skills that match instability, unpredictability and self-organising, relational character of contemporary organisations. It includes the capacity for self-reflection and development of self-knowledge; skill in facilitating free-flowing conversation, ability to articulate what is emerging in conversations and sensitivity to group dynamics. These skills cannot be effectively taught, but acquired in the experience of exercising them.
The Dreyfus model of learning - revisited

The remaining task, as stipulated in the aim of the thesis, is to suggest some guidelines about how the intellectual foundations, including the formal body of knowledge of the project management discipline, can be broadened to include the virtues of practical wisdom and value rationality implied by the above findings and discussion. The Dreyfus model of human learning is used to incorporate the outcomes of the study and form a version of this model relevant to project management learning and skill development. It also indicates what, according to this study, the skills of a 'virtuoso social and political actor' (expounded by this model at the highest level of performance — that is Level 5) in arrangements labelled 'project' in contemporary organisations and society, are relevant and desirable.

Table VI-2 below integrates the proposed positions and represents the final contribution of this study about knowledge, interaction, and project work, and its journey from instrumental rationality to practical wisdom. In summary, the following relevant propositions that have resulted from this research can be developed against the five steps of the human learning process suggested by the Dreyfus model of human learning imply:

- Rule governed analytical rationality of the first three levels, in project management context, is the kind of knowledge that forms the basis of text-books, project management software packages, prescriptive methods and procedures formulated in a number of checklists promoted on training courses, and in a majority of versions of PMBOK — people are trained in context-independent knowledge and rules.

- Analytical rationality alone is inadequate 'for the best results in the exercise of a profession, as student, researcher, or practitioner.' (Flyvbjerg, 2001, p.71) The importance of gaining concrete experience is precondition for reaching the top two levels of the intuitive, holistic, and synchronous performance of tacit skills. Analytical rationality and rules-based project management knowledge are important and should not be discounted, but ‘to make them the highest goal of learning is regressive’ (ibid.)

- Context-dependent knowledge and experience is at the crux of expert or virtuoso activity; these two final levels in the learning process can be reached only via a person's own experiences as practitioner of the relevant skills. (see Table VI-2)

- Predictive theories and universals cannot be found in the study of human affairs. The valuable time and effort is better spent in enabling the development of concrete, context-dependent knowledge by encouraging reflective participative understanding of organisational processes as circular complex responsive processes of conversational and power relating, in educational context a proposition of 'emergent inquiry' as a participative process of knowledge creation in local situations in the living present, should be encouraged.
Table VI-2: Expertise, competence and knowledge in project work and management: Empirical results combined with the ideas of Introna (1997), Stacey (2000, 2001, 2003), and Dreyfus (in Flyvbjerg, 2001)

<table>
<thead>
<tr>
<th>Level</th>
<th>Experience</th>
<th>Action based on</th>
<th>Comment</th>
</tr>
</thead>
</table>
| Novice        | Faces a given problem and a given situation in a given task area for the first time | • Instructions (training course, PMBOK)  
• learning to recognise objective facts about and characteristics of the situation (models and definitions of project)  
• learning rules of action, as generalised for all similar situations on the basis of identified facts, thus context-independent (project management methodology, procedures)  
• evaluating the performance of the skills on the basis of how well the learned rules are followed | The rules are necessary for gaining initial experiences but they can quickly become a barrier to acquiring skills at higher levels |
| Advanced beginner | Achieves some real-life experience                                             | • Learning to recognise relevant elements in relevant situations on the basis of their similarities with previous examples (typology of projects)  
• The context of experience becomes important and decisive in the choice of relevant elements, in addition to context-independent rules (learning from experience, limited reflection) PMBOK  
• trial-and-error | Personal experience via trial and error becomes more important than context-independent, verbally formulated facts and rules. |
| Competent performer | With more experience the number of recognisable elements and facts becomes overwhelming | • Learning from own experience and from others to prioritise elements of the situation  
• Organising information by choosing a goal and a plan  
• Dealing only with a set of key factors relevant to the goal and plan, thus simplifying the task and obtaining improved results  
• The choice of a certain goal and plan and the need to have a plan is paradoxical (simultaneous subjectivity and objectivity) – it is not unproblematic and requires deliberation, the relationship of involvement between performer and environment  
• Elements-rules-goals-plans-decision: the model of analytical, proficient performer  
• Ability to think on one’s feet (confidence, reflection, choice of action and risk taking) | The individual learns to apply hierarchical, prioritising procedure for decision-making on the basis of set priorities rather than on total knowledge of the given situation  
Choosing the goal and plan is not unproblematic – it implies personal involvement in actions, hence responsibility / ethics |
| Proficient performer | Away from cognitivist, analytical rationality (rules, principles, and universal solutions) towards perceiving situations rapidly, intuitively, holistically, visually, bodily, relationally | • The awareness of interpretation and judgement involved in such decision making, rather than logical information processing and analytical problem solving only  
• Deeply ‘involved-in-the-world’ manager/performer who already knows as he/she has evolved their understanding of the situation on the basis of prior actions and experience  
• Reflective understanding and participation in power relations | Intuitively understands and organises the tasks in the local situation in the living present but continues to reflect analytically on what will happen as the emergent situation unfolds |
| Expert or virtuoso | ‘emergent enquiry’ – participative methodology of knowledge creation in context intuitively, synchronously, participative critical reflection over the intuition – the self and the group  
• the thought, body, knowledge, and action are inseparable, are simultaneously forming and are being form by one another; thinking-doing (Introna, 1997)  
• understanding that power relating is an intrinsic part of intersubjective relating, always there considerations for the present and deliberation about the future | Characterised by effortless performance at the level of virtuosity;  
No thinking /doing, decision/action, or plan/implement divide;  
Action based on logic replaced by experientially based action; intuitive and rational at the same time |
6.5.1 PMBoK and the Dreyfus model of learning and skill development

I have already made reference to the generic meaning and purpose of the construct known as Project Management Body of Knowledge (PMBOK), its various versions in circulation, the efforts of professional institutions, academics, and practitioners to formalise its scope, purpose, and use, and the forms of documents through which it is represented. In Chapter 2, I discussed PMBOK in the context of the crisis of the project management discipline, by illuminating unsolved and problematic issues related to the nature of project management knowledge and the ways of creating that knowledge, that are recognised in the long-standing PMBOK debate. In Chapter 3, the key aspects of the PMI’s version of PMBOK known as *The Guide to PMBoK* were analysed to show the implications of the operation of the mainstream belief system based on the instrumental positivist assumptions for the quality of project management knowledge created in that tradition and for problematic relevance of such knowledge and prescriptions (the content of PMBOK) to action and performance in practice.

In this section, I will discuss the positioning of the PMBoK within the Dreyfus framework of human learning, with the intention to show that it relates to the lower levels (stages 1-3) of learning progression.

*Universal, context independent knowledge and rules*

In the document, *The PMBoK® Guide* – 2000 Edition, the link between the definition of ‘project’ and the relevant stock of project management knowledge is visibly made. In the introductory sections the point is made about strategic importance of projects and their unquestioned objective existence as inevitability in the modern business world. Instrumental rationality is reinforced by distinguishing between strategic planning and ‘a means of achieving an organisation’s strategic plan’ (p.4) which is the critical role of projects. These authoritative statements reinforce two things: 1) they insist on the separation between thinking and doing / planning and implementation; and 2) they promote and reinforce the view of rational, purposeful, thinking, and professional project manager, the one in charge. Further in the introductory chapters, the reference is being made to the complexities of project activities and the iterative process of project management related to temporary nature of project work, uniqueness, uncertainties of scope, progressive elaboration of requirements, competing demands, stakeholders with differing views and expectations, unstable requirements, and similar (pp.5-7). From there the nine areas of knowledge are identified (see Chapter 3), which resemble the assertion by Meredith and Mantel (2000) that project management is 'no place for the timid'.

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Furthermore, The *PMBOK® Guide* — 2000 Edition starts with a disclaimer that the document is neither comprehensive nor all-inclusive. It ‘identifies and describes that subset of the Project Management Body of Knowledge, which is generally accepted’ (p.3) emphasising the element recognised in the Dreyfus model and Flyvbjerg’s work as universal, context-independent knowledge. It acknowledges that ‘the full body of [project management] knowledge includes knowledge of proven, traditional practices, which are widely applied, as well as knowledge of innovative and advanced practices, which may have seen more limited use’ (*ibid.*). It, according to the statement in the introduction, also provides a common lexicon within the profession. The notion of *generally accepted knowledge* above is declared to be the knowledge and practices applicable to most projects most of the time, and that there is widespread consensus about their value and usefulness. As discussed in Chapter 3 – the anonymity of the author and the lack of transparency of how the conclusion has been arrived at, is apparent. Yet, we note the operation of the dominant scientific approach to professional knowledge creation in this case, and the relevance of Habermas’s theory of knowledge constitutive interests, already remarked upon in Chapter 3. It is important to pay attention to the following statements too, which subtly indicates the uncertainties that bother the creators of the PMBoK because they cannot be captured in the document without ‘compromising’ the belief in the normative/rational basis of that knowledge system:

‘Generally accepted does not mean that the knowledge and practices described are or should be applied uniformly on all projects; the project management team is always responsible for determining what is appropriate for any given project. ... The full body of knowledge concerning project management is that which resides with the practitioners and academics that apply and advance it.’ (*The PMBOK® Guide* —2000 Edition; p.3, italics added)

It is not stated anywhere in the document what skills, knowledge and competence is required in order to ‘competently’ determine and decide what is appropriate for any given project, and what the implications of the assertion that the project management team is always responsible for the above decision, might mean in the world of practice. I believe that the thesis has addressed this very concern by setting out to explore the relevance of a phronetic approach to developing knowledge about projects and project management, which could enhance and broaden the extant knowledge base. (see Section 6.4)

The research presented in this report set out to study those aspect that are not universal, common, and objectively accessible to scientific inquiry, i.e. those that are related to PRAXIS of project working, organising, and management, where unique context, judgement, valuerationality, and power relations are important aspects of organising, managing and overall social
action. The thesis has illuminated the issues that practitioners face in their dealing with project-labelled situations which lend themselves to a social scientific inquiry; a phronesis based approach to projects and project management in contemporary organisations. The Dreyfus model of human learning is a useful framework to locate the relationship between the propositions stipulated in The Guide and similar documents (see Chapter 3 and Appendix 3) and the propositions that emerge from this thesis. PMBoK positions itself within the first few stages of the skill development process. It does not provide any significant guidance compatible with the needs of practitioners in project settings understood from the position of phronetic-centred sociology of projects and interpreted in the empirical analysis presented in this research project. For example, Bourdieu’s ‘feel for the game’ is an obvious important element of project management practice. It means ‘true expertise is based on intimate experience with thousands of individual cases and on the ability to discriminate between situations, with all their nuances of difference, without distilling them into formulas and standard cases’ (Flyvbjerg, 2001, p.85) This type of knowledge cannot be created in a scientific approach striving towards a production of universal principles and explanatory or descriptive theories. Praxis has always been contingent on context-dependent judgement, on situational ethics. ‘Feel for the game’ is central to all human action of any complexity, and it enables an infinite number of “moves” to be made, adapted to the infinite number of possible situations, which no rule, however complex, can foresee’ (Flyvbjerg, 2001, p.136) Stacey’s interpretation of this issue is articulated as the radical unpredictability of the outcomes of the complex responsive processes of relating in the local situations in the living present, and their self-organising capacity to reproduce the power relations as well as to introduce variation to the pattern of relations and communicative action, due to micro diversity.

6.5.2 Combining research and education or Why is the phenomenology of human learning relevant?

The human learning process captured by Dreyfus and Dreyfus in the model explained above is seen by Flyvbjerg as especially useful in understanding the linkage between knowledge and context and because it directly addresses the question of whether knowledge about human activity can be context independent. It is both critical and constructive. It is critical as it draws attention to ‘rational fallacy’ and its attempt to raise analysis and rationality into the most important mode of operation for human activity focusing on those properties that most resemble machines or Weberian bureaucrats. Rule-based deliberation based on formal logic has been elevated to dominate our views of human activity to such an extent that other equally important modes of human understanding and behaviour are made invisible. The conclusion is that rationality has caused educators, researchers, and entire scholarly disciplines to become blind to
context, experience and intuition. The constructive role of the Dreyfis model is in its subsequent argument that both, rationality and intuition, in the proper context, are needed in order to comprehend the total spectrum of human activity ‘both in relation to human everyday activities and to rare virtuoso performances’. (Flyvbjerg, 2001, p.23)

... the position of intuition is not beyond rationality but alongside it, complementary to it, and insofar as we speak of experts, above rationality. The model specifies that what is needed is order to transcend the insufficient rational perspective is explicit integration of these properties characteristic of the higher levels in the learning process which can supplement and take over from analysis and rationality. These properties include judgement, practice, trial and error, experience, common sense, intuition and bodily sensation.’ (Flyvbjerg, 2001, p.23)

What might the values-and-power-centred sociology of projects mean for project management education and research? The prevailing view of project management as control mechanism actualises concerns about the limitations of management knowledge generated on the basis of reductionist representation of the management phenomenon in a research study. Alvesson and Deetz have commented on the problems with narrow, conventional approaches to studying the phenomenon of management and the need to adopt much more critical stance and varying theoretical lenses:

There is considerable agreement that conventional, universal statements of what management is about and what managers do – planning, organizing, coordinating and controlling – do not tell us very much about organisational reality, which is often messy, ambiguous, fragmented and political in character. (Alvesson and Deetz, 2000, p.60)

The ambition of this thesis has not been to contribute to cumulative theoretical or methodological heritage in the field, but to clarify and deliberate about problems, uncertainties and risks we face in the projecticised society, and to outline how they could be approached and dealt with differently. In this case, I have explored, to an extent, historic circumstances and current practices related to project work and project management, in order to find avenues to praxis (prudence, practical wisdom). Despite this orientation towards practice, it has not been the attempt of this research project to provide ‘quick fixes’ or ‘off the shelf’ solutions to management problems which is a characteristic of the research approaches which adopt a rational, scientific notion of management, but to encourage a different way of viewing and thinking about a social phenomenon of interest or to ‘consider other lines of reasoning and practice’ (Huczynski and Buchanan, 2001, p.xix).
The chosen methodological approach (active interviewing) and philosophical considerations including phronetic social science and both critical and constructive approach to human learning and knowledge creation (the Dreyfus model and the concept of complex responsive processes of relating in organisations), have a common intellectual requirement which is - increased participation of organisational actors through a dialog combining research and education. A similar proposition is summarised by Alvesson and Deetz (2000. p.145):

> While many researchers at the end of the twentieth century conceptualize and teach their subjects to be objects — to be known and acted upon — objects can be taught to be subjects who know and act. The point is then not to produce a new theory of domination as knowledge, but to produce ways of seeing and thinking and contexts for action in which groups can express themselves and act.

As asserted from the beginning, the research process within this thesis has been significantly embedded in the educational context. Interim research outcomes as well as resulting propositions of the thesis have been communicated to, discussed with, and reformulated to suit the context and experiences of a number of students / participants on under-graduate and post-graduate academic courses in project management and related subjects. The students are encouraged to reflect on what they learn and on what is presented to them as knowledge, and to explore the adequacy of such knowledge in their particular organisational and project contexts. They are encouraged to take a role of practitioner/researcher and conduct constructive inquiries of their specific practices as part of their assignments and dissertations as well as part of their everyday professional activity, and to do it from the perspective of participative inquiry.

Course participants commonly express an expectation that there might be a well defined and convincing body of project management knowledge and best practice and that project management courses and training should provide them with insights into that knowledge and understanding of how projects should properly be designed and managed, and what the secrets of the ‘right’ project management methodology are. It is my belief that this study has contributed to the ethics of management education (see Chapter 1), and the need for phronetic approach to knowledge creation, addressing power in that context and introducing the critical aspirations of social constructionist and similar views.

I have explored the risky avenues of actualising the ‘philosophy’ of the adopted approach in the way I design, conduct and reflect on what I do – as both lecturer and researcher. The course participants are exposed to the intriguing phenomenology of Dreyfus’s learning concept (related to both the knowledge, skills and conduct) and they are encouraged to use the methodology of phonic inquiry and probe the value-rational questions in their own enquiry of project related
practices in their organisational environments. Although some interesting and important results have been generated from such practice, the discussion of it is beyond the scope of this thesis.

The research has become an active part of the teaching activity – which has its awkwardly risky implications for one’s career but has also played an important part in nurturing my determination and enthusiasm about this doctoral research at the time of doubt, despair, and deliberation. As someone involved in academic management education, I see my moral task in keeping the virtues of concern for ‘truth’, reflective understanding, sceptical enquiry ‘as ends in themselves which may (or may not) turn out to be useful.’ (Reed and Anthony, 1992, p.608) As these authors claim - education, even for management, must ultimately be a matter of faith, or belief in values that are fundamental.

Flyvbjerg asserts that intuition, judgement and practical considerations for the present and deliberations about the future are, as much as rationality and rules, important for teaching, because ‘teaching can be directly compared with the model for human learning’ (2001, p.21). The Dreyfus model of human learning process is understood to range from the technical to the intellectual, and the five levels are differentiated by their proprietary, recognisable, qualitatively different ways of acting and performing in the process of learning a given skill. What is of particular interest here is ‘a qualitative jump’ (Flyvbjerg, 2001, p.21) that the Dreyfus model of the learning process implies as required to achieve the higher, (fourth and fifth) levels of learning and performance – evolving around the development of intellectual virtues over and beyond instrumental rationality.

Chapter summary

I set out to explore, by using a combination of practical philosophical considerations and concrete empirical analyses, how relevant the virtues of value-rationality and practical wisdom are to project managers and other types of project workers for understanding of and coping with uncertainties and complexities that they face in a variety of social arrangements that are labelled ‘project’. Ultimately, I am interested in the implications of phronetic-centred social studies of projects for broadening the knowledge system underpinning educational and research programmes in the area of project management, and by implications, for enhancing its intellectual foundations.

The analysis identifies some uncertainties and fundamental contradictions confronted by project practitioners which conventional mainstream project management prescriptions fall short in addressing at a level relevant to praxis. Mainstream research into projects and project management relies heavily on the prescriptive and the instrumental, where the function of project management is taken to be the accomplishment of some finite piece of work in a specified period of time, within a certain budget, and to agreed specification. The need for all
three intellectual virtues has been confirmed — theory, know-how (application), and praxis (intuition, interpretation, reflexive understanding, involved-in-the world manager). The issues of judgement, power and ethics are among those least addressed in the extant mainstream and formal body of knowledge. These are crucial for praxis — which has been the main concern of this study. Finally, I conceptualise more detailed guidelines and recommendations on how such knowledge and skills can be developed if one adopts the perspective of complex responsive processes of relating in organisations. I argue this would require refocusing attention on: the quality of participation and reflexivity in thinking about one's own complex processes of relating with others in project-labelled situations; the quality of conversational life, sensitivity to themes that form and are simultaneously being formed by power relating, and the importance of 'free flowing conversation' for creation of novelty and change; coping with unpredictability and paradox of outcomes of individual and group complex conversational relating; ethical and moral concerns about actions both, intuitive and logical, taken while 'thinking on one's feet' while simultaneously 'knowing' and 'not knowing', 'being' and 'not being' in control of the project.

The Dreyfus model of human learning is used to incorporate the outcomes of the study and form a version of this model relevant to project management learning and skill development. The implications of the revised model for research and education in project management are discussed and some practical recommendations made on How organisational actors can acquire knowledge and skills necessary for the high level of competence and virtuosity in getting the job done in the contexts labelled 'projects'? The outcomes of the research itself do not have an ambition to develop 'better' project management theory or models, but to contribute to projecticized society's practical rationality, i.e. to individual and organisational capacity for value-rational deliberation and action, hand-in-hand with instrumental rationality necessary for control in the 'risk society'. It is from this position that the analysis of empirical material has been undertaken.
Chapter 7

Evaluation of the Research Process, Outcomes, and Contributions of the Thesis

In this chapter I reflect on the research process, outcomes, and overall contributions of the study presented in this report. The chapter includes a discussion of what has been achieved in terms of the stated aims of the thesis (Section 7.1), concluding commentary of the research design and method and the limitations and scope for improvement (Section 7.2), and a reflection on the philosophical and theoretical grounding of the study, including the implications for project management research and education in more general terms (Section 7.3). In the final section, some trajectories for future inquiries, and other theoretical possibilities are signposted.

7.1 The research intention and aims - What has been achieved?

The thesis is, in most general terms, concerned with the phenomenon of projects in contemporary organisations and society, and with the intellectual system governing project management research and the field as practiced. It is an analytical project, which combines practical philosophical considerations and concrete empirical analysis to provide a pragmatically governed interpretation of the experiences that practitioners have with work and life in the arrangements labelled ‘project’. It aspires to generate insights into what goes on in such arrangements in local situations from the practitioner point of view, to examine the conditions under which useful knowledge can be created to support social action in project settings, and to suggest an alternative framework for understanding experiences that organisational members involved in project working have with accomplishing a sophisticated, co-operative activity ‘required for human living’ (Stacey, 2001) in their local contexts. I explored the possibility of developing intellectual virtues within the project management knowledge system that are relevant to complexity, intersubjective relational dynamics and power asymmetries surrounding project-labelled arrangements. The reason for implying the notion of label in this context is ontologically important and has been discussed throughout the thesis (see Sections 3.3 in Chapter 3; Section 5.1.1 in Chapter 5; Section 6.3 in Chapter 6).

In the introduction to the thesis (Chapter 1) I have outlined the features of Bent Flyvbjerg’s (2001) approach to a contemporary interpretation of the Aristotelian concept of phronesis (prudence or practical wisdom) as an overarching philosophical frame of reference that has guided this study into project based arrangements in contemporary organisations. Phronesis is
understood as capability for situated action in a concrete context based on reasoning beyond both episteme (analytical, scientific knowledge) and techne (technical knowledge), and ‘involves judgements and decisions made in the manner of a virtuoso social and political actor’. (Flyvbjerg, 2001, p.2, italics added) Practical wisdom, with its intellectual roots in value-rationality, has been of interest in this thesis. The belief is that the balancing of instrumentalism with value-rationality is important for the sustained wellbeing of any society and particularly our contemporary, ‘projecticised’ one. The aim that has guided the development of the thesis has been threefold:

- To evaluate the relevance of the value-rational intellectual virtues (practical rationality, and considerations of value and power) for practical action in project environments;
- To provide guidance in terms of how the intellectual foundations, including the formal body of knowledge of the discipline, can be broadened to include the value-rational virtues; and
- To develop some constructive trajectories for action and change in project management education, practice and research.

The thesis has drawn on the review of extant literature and on the analysis of some documentary evidence (various versions of the PMBoK document) and concrete empirical data from this study, to achieve the following objectives:

- to develop a critique of mainstream prescriptions offered to practitioners about how to manage projects for ‘success’;
- to offer an alternative account of project, project management and project performance to mainstream perspectives, emphasising relational, context-dependent nature of knowledge and skills, and processual properties of knowing and communicating in project-labelled arrangements;
- to explore the implications of the concept of complex responsive processes of relating in organizations for understanding of:
  - what goes on in projects in local situations when people find themselves involved in jointly performing a sophisticated, co-operative activity,
  - what it might mean managing a project from this perspective; and
  - the skills and competencies that enable a virtuoso social and political action in managing the arrangements labelled projects.

How might such a research study contribute to, or be important for, organisational members involved in project-labelled arrangements? Mainstream research into projects and project management relies heavily on the prescriptive and the instrumental, where the function of project management is taken to be the accomplishment of some finite piece of work in a
specified period of time, within a certain budget, and to agreed specification. A phronetic-science centred sociology of project refocuses attention to the relevance of the value rational deliberations and intellectual virtues of practical wisdom, and has a potential to qualitatively redefine the scope of project manager’s role, skills, competencies and the nature of knowledge relevant to complexities, social relational dynamics, and power asymmetry in the settings labelled ‘project’ in practice.

In the sections immediately below, I will outline and summarise the key issues that have emerged from this project.

7.1.1 Project management mainstream —the prescriptions
This study takes as its point of departure the need to re-examine the manner in which the issues of project success and failure, and knowledge and skills required for successful project management, have been addressed by the extant body of project management thought, and the pattern of prescriptions aimed at practitioners (project managers, team leaders, and other organisational members) emerging from these various analyses. The intention is to uncover some of the key assumptions that the mainstream wisdom makes about the nature of projects, the character of project work and the intellectual virtues on which knowledge and action are based. I have explored the crisis of project management both as an academic subject and as a form of organisational practice. Through a combination of traditional literature review and a critical theoretical discussion of the intellectual system governing project management research and the field as practiced, the following relevant aspects are addressed [Chapter 2]:

• Insights into problematic performance of contemporary projects as expounded in various reports in the public domain, initiating a debate about a paradoxical notion of project success / failure. This heavily draws on the literature review and secondary sources of data [Sect 2.1.1].

• In order to make a case against conventional, performance driven project management knowledge, a framework encompassing a range of well argued theoretical and methodological approaches to project failure in research literature has been adapted form the work of Fincham (2002). [Section 2.1.2]

• I have identified and discussed the implications of normative / rational / systemic and processual / behavioural perspectives on project success and failure for the nature of the mainstream project management body of thought and recommendations to practitioners created from these positions, including the developments of formal PMBOK. [Sections 2.2 -2.4; 2.6]

• I have also discussed the experiences with the application of project based working, organising, and management as ‘universal solution’ to contemporary organisational and managerial problems with effectiveness and efficiency; the implications for individual
knowledge and competencies; and the problematic process of ‘projectification of society’. [Section 2.5]

Finally, I have identified and reviewed some influential voices in literature calling for change and improvements in project management theory and research to overcome the crisis of the subject’s intellectual basis and in the filed as practiced. [Section 2.7]

Following from the outline of the research agenda and approach, a critical examination of the extant project management knowledge system has essentially aspired towards isolating and reviewing the fundamental concepts that underpin the mainstream body of thought in this field of study and practice. In order to uncover the assumptions behind the mainstream belief system, and to reconstruct the intellectual foundations of project management which would include value rationality together and beyond instrumental rationality, I endeavour to understand how the conventional wisdom operates in project management research and in the field as practiced and what the context of social and political action is.

7.1.2 A critique of the received wisdom - An alternative account of knowledge, management, and interaction in project based work

Having made a case for a critical examination of the extant knowledge system of project management and project working through the review of relevant literature and secondary sources of data [Chapter 2], my intention was to uncover the operation of the orchestrated belief system and ‘scienticism’ and their implications for studying project performance, creating knowledge about project working, and developing prescriptions of ‘good practice’ of project management aimed at practitioners [Chapter 3]. This material presents the initial creative and original input in the development of this research project.

I reviewed the literature that proposes alternative approaches to qualifying project performance as success / failure and advising on effective competencies and knowledge [Chapter 3, Section 3.1]. These alternative approaches include political frame of reference, critical management studies, narrative approaches to project performance, and social constructionist view of organisational arrangements. It is within this stream of thought that we also find the literature, research, and voices from the world of practice which echo the contemporary crisis of project management as a study area and a practising discipline, and articulates dissatisfaction with the technocratic and instrumental nature of conventional project management knowledge system. Building on the critique of the ‘performance’ driven project management body of thought (‘technical’ and ‘control’ driven knowledge constitutive interests) alternative approaches to
thinking and talking about projects, project success, and project management knowledge and skills were reviewed and two different project ontologies considered. I have discussed the proposition that the mainstream project management research and practice is rooted in the phenomenon of ‘false concreteness’ and positivist methodological approach. As in many other management fields, the positivism of the mainstream is rarely explicitly addressed, argued or defended. (Fournier and Grey, 2000) In mainstream project management research some form of positivism is assumed without any explicit reflection on epistemology or ontology, and discussion of methodology becomes quickly narrowed down to the issues of data collection method and statistical technique for data analysis. A more critical agenda in project management studies could unmask the ‘naturalness’ and ‘reality’ of projects as part of organisational life, or truthfulness of organisational knowledge about project management, project performance, and projects themselves. This thesis has raised some questions about the assumed alignment between knowledge, truth and efficiency in the project management knowledge system, and has invoked notions of power, control and inequality. The work within mainstream project management essentially assumes existing social and organisational relationships as natural and /or unavoidable. It also invokes certain ‘imperatives’ to legitimise a proposed course of action, such as customer / client satisfaction; triple constraints of time, cost and quality, increasing need for strategic competitiveness; time —to-market; cross-functional collaboration and teams, to mention a few (see Frame, 1995, 1994, Young, 1998 among others).

Problematising conventional views requires uncovering some fundamental contradictions evident in the operation of project management that lead to implementation problems. Making apparent these contradictions between project management and projects as processes of rationalisation compared with the imperatives about the flexibility and autonomy of project work and opening the filed up for practical discussion of dilemmas in local situations might contribute to creative and innovative discursive change. This includes the implications of the continual construction and reproduction of ‘projects’ as natural organisational ‘objects’ through the imposition of certain imperatives, ruling illusions and ideologies [Sections 3.2 and 3.3 in Chapter 3]. On the basis of literature review and documentary analysis (seminal text-books and documents such as an IPM version of PMBoK), I discuss the roots, reasons, and consequences of such reifications for project practitioners’ learning and skill development [Section 3.4 in Chapter 3].

In the literature review and analysis of the project management intellectual system, I have made a claim that conventional project management research and practice subscribes largely to the functionalist / instrumental view of projects and organisations and has been driven by the
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'technical' interest (Hanbermas, Flyvbjerg,) that constitutes the related body of thought. Similar to the 'technical' knowledge constitutive interest with the focus on 'control' is Lyotard's (1994, cited in Fournier and Grey, 2000) notion of 'performative intent' which is the intent to subordinate knowledge and truth to the production of efficiency by inscribing knowledge within means-ends calculation. Analysing the set of definitions of project management on which the mainstream research is based, we can identify and confirm that the principle of performativity (the effectiveness of managerial practice) is implied as an imperative towards which all knowledge and practice must be geared. Project management is therefore taken as given, and as such does not require questioning unless the critique will contribute to its improved effectiveness or a better model of it. At the same time, the attributions of success / failure qualifiers in the statements about project performance in public and organisational discourses have been found paradoxical and inapt to guide the development of the project management knowledge base exclusively along the criteria of performativity.

The alternative frameworks and ontologies of projects, explored in this thesis, have indicated that project and project management are far richer and more implicit concepts then suggested by the current techno-functionalist thinking, which forces the real to become an object (a representation or a model) before a subject (reason, values and senses). As Habermas argues within the theory of knowledge constitutive interests, normative, scientific approaches have been given legitimacy because the assumptions on which they are based are completely coherent with current thinking about instrumental rationality as the driving intellectual virtue of modern society. Governed by this tradition, the project management body of knowledge emphasise the role of project actors and managers as 'implementers' narrowing down their role to the issues of control (time and cost) and content (planned scope of work), marginalising their wider potential role as competent social and political actors in complex project-labelled arrangements.

7.1.3 Complex responsive processes of relating – a practical interpretative framework

On the basis of practical philosophical considerations, literature review, documentary evidence and empirical analysis, I have explored the extent to which we can argue that Flyvbjerg's value rational questions are relevant to projects in the world of practice and that practical wisdom centred sociology of project provides an alternative type of knowledge important to practitioners - actors in project environment. The concept known as 'complex responsive processes of relating in organisations' (Stacey, 1996, 2000, 2001, 2003) has been introduced and discussed in terms of potential implications for studying and creating practical knowledge about organisational arrangements labelled 'project' from this perspective [Section 3.5.3]. In most
general terms, the position from which organizing, relational complexity, knowledge creation and unpredictability (time flux, non-linearity, and paradox) are approached, resonates three theoretical traditions: Maed’s (1934) relational psychology, Giddens’s (1984, 1993) sociological method of ‘structuration’, and the experiences with applications of chaos and complex systems theory to studying organizations (Stacey, 2000).

I have adopted the perspective of complex responsive processes in organisations as a suitable, practical interpretative framework for the subsequent empirical analysis, resonating with the overarching philosophical approach taken in the thesis – a phronetic social inquiry into projects and project management [Sections 3.5.2 and 3.5.3]. The concept has proved useful and adequate because (Section 3.5.3, Chapter 3):

- it embodies the view that ‘humans have an ultimate need to relate’ and ‘joins agency and structure’
  
  - (as Giddens, Habermas and other sociologists have proposed)
- it defines complexity of organisational arrangements
  
  - as a consequence of self-referential, reflexive nature of humans, the essentially responsive and participative nature of human processes of relating, and the radical unpredictability of their evolution:
- It clearly states its assumptions about
  
  - nature of human interaction including the issue of power
  - human nature / psychology
  - what learning, knowledge creation and skill development mean from this perspective
  - dealing with paradox and unpredictability
- it engages in the debate about what success and effective management might mean by emphasising the paradox between control and radical unpredictability
- It proposes a non-orthodox approach to management skills and competencies – close to ‘involved in the world’ manager (Introna) and ‘a virtuoso social and political actor’ (Bourdieu and Flyvbjerg)
- it resonates my own understanding of the world

The way of looking at organisational arrangements, suggested by the concept of complex responsive processes of relating, is useful and relevant to this type of social scientific study (Section 3.5.2, Chapter 3) as it joins agency and structure, takes conversational relating in the medium of symbols as the core organising pattern, recognises both spatial and temporal dimension of organising and self-organising, focuses attention to unpredictability and relational circularity of power in local contexts in the living present, argues for the methodological
approach of emergent enquiry, putting the practitioner/manager/researcher in the position of a participating actor rather than an objective observer standing outside the studied arrangement. It meets another important criteria for an alternative research approach – engagement with practitioners. This has been achieved through a research design known as participative inquiry and 'active interviewing' as the method of data collection. The concluding comments and reflections on the methodology itself are included in Section 7.2.

### 7.1.4 Empirical analysis of practitioners' experiences with project arrangements

The empirical analysis in this study draws upon the material generated through a method known as 'active interviewing'. The research design can broadly be defined as a participative interpretative inquiry, as it included myself as a researcher participating together with the participating practitioners in the interpretation of the accounts, reflections, and thoughts that they offered in response to the interview prompts (the process of collection and analysis of the empirical material is explained in detail in Chapters 4 and 5). This is what the empirical evidence provides in terms of insights, when project organising, working and management are interpreted from the position of complex responsive processes of relating:

- **Communicative interaction** is always present in project work and management either directly or through technology of artefact, but always in the medium of symbols involving the body itself, other bodies and the material environment surrounding them;

- the issues of *talk, discourse, and conversation* are central because that is how a great deal of social contact in projects is mediated. Through patterned conversational relating themes are formed that involve formulating and making reference to proposals, feasibility studies, analytical frameworks, contracts, business cases, other people, previous experiences, anecdotes, and personal revelations;

- communicative interaction is also *power relating* which simultaneously forms and is being formed by labelling the set of activities as 'project'. As the situation unfolds, influence is spontaneously arising in webs of power relationships in particular contexts, as people communicatively interact intensively in order to create meaningful forms of activity that move things on; thus

- project labelled arrangements are experienced by organisational actors as situations where they find themselves *together* accomplishing jointly a sophisticated, cooperative action required, or accepted as necessary, for human living;
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- the practising project manager appears as a conversational author able to argue persuasively for a trajectory of next possible actions, which clarifies the ‘positions’ of those performing cooperative project activity;
- emotion, anxiety, feelings, are part of all relating in project settings;
- the need for practical wisdom in the condition of radical unpredictability and temporal and spatial complexity, where communicative interaction and power relations perpetually construct the future of the arrangement labelled ‘project’; includes reflexive understanding of the constructed nature of project plans and paradox of project control;
- project management knowledge, skill, action and learning are situated in a specific context; the action relies on previous experiences, logic and universal rules only to an extent; intuition, deliberation and value-rational considerations of project success / failure play a major role in project manager’s performance

By interpreting the empirical material through the lenses of complex responsive processes of relating (see Chapter 5, p.109 where the interpretative themes are indicated), it was possible to generate a number of alternative insights into what people do when they work in a project setting, how the links are made between managerial action and a project’s performance, and what an individual can do to facilitate knowledge transfer and communication in project arrangements that would make projects more successful along the criteria other that ‘performativity’. The emphasis is on the relational, communicative nature of organising and on knowledge as the process in which organizational actors engage via symbols, gestures and language in their local situations in the living present, making sophisticated co-operative activity possible. I argue that this would require, as suggested by Stacey (2003) refocusing attention on: the quality of participation and reflexivity in thinking about own complex processes of relating with others in project-labelled situations; the quality of conversational life - sensitivity to themes that form, and are simultaneously being formed by, power relating, and the importance of ‘free flowing conversation’ for creation of novelty and change; anxiety and how it is lived with; coping with unpredictability and paradox of outcomes of individual and group complex conversational relating; ethical and moral concerns about actions both, intuitive and logical, taken while ‘thinking on one’s feet’ and simultaneously ‘knowing’ and ‘not knowing’, ‘being’ and ‘not being’ in control of the project.

7.1.5 Skills and competencies that enable a virtuoso social and political action in managing the arrangements labelled projects.

The interpretation of the empirical material signifies the problematic nature of project implementation and the role of project managers as ‘implementers’. Everyday experiences of a number of practising project managers who participated in this study suggest a completely
different picture about the assumed ‘orderliness’ of projects. On the bases of empirical analysis, I strengthen the case for phronetic-centred sociology of projects (Flyvbjerg, 2001), for studies which would create knowledge through research capable of addressing the paradoxical and complex issues in project environments. (Table VI-1, Chapter 6, p.152) The notion of complexity and paradox in projects are seen here as inseparable from values, judgement, polyphony of voices, and context, and has already been raised in critical and sociological work. The need for all three intellectual virtues has been confirmed – theory, know-how (application), and praxis (intuition, interpretation, reflexive understanding, involved-in-the world manager). The issues of judgement, power and ethics are among those least addressed in the extant mainstream and formal body of knowledge. These are crucial for praxis – which has been the main concern of this study.

Practical wisdom in the context of project management means reflecting on project plans and goals and asking value-deliberating questions: Where are we going with this kind of intention, labelled project? Who wins and who loses and by which mechanisms of power? Is it desirable?, and depending on the nature of these answers, a final important consideration What should be done?, should result in practical deliberation on desirable action in the context of a variety of views. (Table VI-1, Chapter 6, p.152) These resulting propositions from the study do not have an ambition to advise on ‘how to do’ project management and project work, but how to think about the ‘project’ labelled arrangements in local situations in the living present:

- It is non-productive to keep trying to get to the deeper definition of the true, real nature of projects; it is more useful to create knowledge about projects as constructions of values and power relations in local situations.
- Thinking of a project as the continually iterated processes of communication and power relating between people.
- Studying individual and group at the same level of analysis.
- Project planning and other types of decision making which project ideas into future, are essentially constructed in the ordinary relating between actors in local situations in the living present, and not a result of a scientific, technical actions of a skilful agent, who stands outside the system as an objective observer – planner.
- Adopting the methodological position in which people are both participants and observers at the same time, and where knowledge and reflexive understanding are rooted in the same intellectual basis – methodology of emergent inquiry which balances the conventional drive for rationality, logic and intention driven analysis, with intuition, judgement and holistic understanding of the local context of a studied project.
Finally, I conceptualised more detailed guidelines and recommendations on how such knowledge and skills (Section 5.2, Chapter 5, and summarised above in Section 7.1.4), can be developed if one adopts the perspective of complex responsive processes of relating in organisations. These have been incorporated in Table VI-2 which represents a framework of learning and skill development in the context of project management, taking the Dreyfus model as a basis, and integrating the interpreted empirical material / experiences of practitioners and the relevant theoretical work of Stacey (2001), Introna (1997), and Flyvbjerg, (2001). Section 6.5, particularly 6.5.2 is devoted to this discussion.

In conclusion, a virtuoso political and social actor in project arrangements participates in the complex responsive processes of relating reflexively, sees projects not as linear, objectively existing phenomena, but as forming and being formed by these complex processes of communicative interaction in the medium of symbols, which are also processes of power relating. The purpose of information for a virtuoso project actor is not decision making and problem solving, but progressive reinterpretation of a project’s unfolding (various versions of plans) over time and space, where doing-thinking rather then thinking then doing, is *modus operandi*. Project plans are not the first step towards control, but an opportunity to build alliances, negotiate meaning, reinterpret the project in moments of dislocation (simultaneously ‘knowing’ and ‘not knowing’, ‘being’ and ‘not being in control’). Calculation, rationality and reason are balanced with intuition, judgement and a feel for local situation in the living present. Paying attention to anxiety which rises as the patterns of relating (communicative and power) shift and novelty emerges, is also important. Introna has identified similar characteristics of, what he terms, ‘involved-in-the-world’ manager:

For the involved manager there is only coping in getting the job done. For the involved manager success is: thinking on your feet, drawing on tacit understanding, staying open to possibilities, exploiting opportunities as they arise, building alliances, covering some options and hedging others.

The assumption is that managers (and other organisational members), are *always already involved-in-the-world actors*, rather than being objective observers standing outside the system, running the programme and navigating action towards the achievement of predetermined ends (Stacey, 2000). The argument is that this alternative set of skills is conditioned upon the ability and willingness to refocus attention to different qualities of project arrangements than those prescribed by orthodox project management theory or the official belief system governing the development in the field. (Section 5.2, Chapter 5)
7.1.6 The implications of the thesis for action and change in project management education, practice, and research

The point of departure taken in this study was a critical evaluation of the body of thought on which project management research and practice draw. Consequently, from the very outset of this study, the research strategy has encompassed a reflexive consideration of the management education environment, and was extensively informed by the work of Habermas (1972), Easterby-Smith et al (1991), Reed and Anthony (1992), Mitroff and Linstone (1993), Arbnor and Bjerke (1997), Introna (1997), Alvesson and Deetz (2000), Fournier and Grey (2000), Flyvbjerg (2001), and Stacey (2000, 2001, 2003). This body of work formed the foundation for the chosen research methodology. The procedures within the research method were planned in such a way that they allowed the exploration and exploitation of the educational environment with the intention of listening to (reflective) practitioners and allowing wider participation. (Chapter 4 and Section 7.2, Chapter 7)

Practice
Rather than producing definitive, empirically verifiable knowledge, the long-term vision of the study has been to enter into a dialog with individuals and organisations and to assist them, after they have assisted this research by participating in it, in reflecting on their values and experiences, which are composed of actions, feelings, and beliefs. The objective is to balance instrumental rationality with value-rationality by increasing the capacity of individuals, organisations, and society to think and act in value-rational terms. As mentioned in Section 7.1.5 above, the Dreyfus model of human learning and skill development has been used as an influential framework to explore and discuss the qualitative changes and interventions that could be introduced to address the levels 4 and 5 of skilful performance in project-labelled arrangements, in addition to and above a didactic and normative approaches (levels 1-3) at which most of project management development programmes stop. (discussed in Section 6.5, Chapter 6 and Section 1.3, Chapter 1). This has been recognised in the contemporary work as a long-overdue contribution to the extant knowledge system of project management and its intellectual basis, in order to critically and constructively tackle the apparent crisis of the discipline and its universally defined rules and tools.

Research
The implications for methodological approaches to studying projects from the perspective of complex responsive processes of relating are, in my view, significant. In order to capture conversational aspects of working on and managing projects, their role in constructing and
reproducing power relations, ideologies and knowledge in local ordinary situations of organising and labelling organisational arrangements as projects, ethnographic research approaches using active interviewing and text analysis (see, for example, Silverman, 2001) can be justified. These acknowledge reflective participative creation of meaning and knowledge in interaction by both researchers and practitioners, participants in a research study. Generated empirical material was analysed and interpreted against the themes important for refocusing attention to the issues outlined above as key to the concept of complex responsive processes of relating in organisations. It includes, for example, paying attention to how a situation becomes a 'project', i.e. the construction of the label through the use of symbols, language, and tools; Rather than asking What is a project, we should ask 'What do people do when they label an organisational arrangement as 'project'?, and how the decisions are made with reference to symbols and tools. Also, paying attention to the patterns of conversational themes and how they sustain and are being sustained by power relations, and how they organise people’s experience of working together on a project. It is also important to capture the ways anxiety is expressed and lived with when the patterns of conversation are being transformed to create novelty that is organisational change. Most importantly, how managers and other organisational actors deal with the conditions of radical unpredictability, and still are able to create the possibility of deciding on action as they go on together, on the basis of their local understanding of what is happening in their project in the living present. As Packendorff stated:

‘The main source of information about the course of action pursued within a project should be the individuals forming the project organization; action has to be understood as enactment of the subjective and inter-subjective realities of individuals and groups of individuals. Such an approach will require a change in epistemology, in that there will not be any “truth” beneath or beyond the narration of the project member. An understanding of decision making and organizational politics in a project, for example, means creating sense-making descriptions of the project reality which it is possible for practitioners to subscribe to’. (Packendorff, 1995).

7.2 Research design and method – Reflections and comments
As explained in Chapter 4 and discussed again in section 7.1.6 above, the active interview was a primary method of data collection. It proved a useful and appropriate method for making connections that are not obvious and for asking difficult questions. Answers to these questions required not just an evaluation of argument and evidence, but ethical reflection, too. I have adopted this method in the belief that new knowledge and the knowledge creation process are conversational in nature, as they involve both participants in the process - the interviewer / researcher and the respondent. The narrative character of such knowledge is a product of the talk between interview participants, where both are actively constructing knowledge in
collaboration. As a member of society, the activated subject pieces experiences together and mediates and alters the knowledge that she / he conveys to the interviewer as ‘always already’ an active maker of meaning (cf Introna, 1997). This represents a move from traditional stance where respondents are seen as repositories of knowledge about their ‘reality’ which can be transmitted to the researcher through carefully thought out process of asking questions and recording answers. The researcher’s responsibility (and competence), on the other hand, is to formulate questions and provide an atmosphere conducive to open and undistorted communication between the interviewer and respondent.

Treating the interview as active allows the interviewer to encourage the respondent to shift positions in the interview so as to explore alternate perspectives and stocks of knowledge. Rather than searching for the best or most authentic answer, the aim is to systematically activate applicable ways of knowing — the possible answers — that respondents can reveal, as diverse and contradictory as they might be. (Holstein and Gubrium, 1995, p.37)

This has been used to a significant extent and proved to be helpful in this research. Particularly in the instances where it was important to elicit or create understanding of what is meant by certain experiences with ‘project’, its management and performance (technical knowledge vs. intuition), when seemingly contradictory accounts were being given by the same participant to different questions within the interview (see Section 5.1 in Chapter 5). Also, it was the case when tiny amplifications or significant phrases and symbols of expression, written or verbal, had a huge potential for generating insights and interpretation of experiences. Illustrations are provided in Chapter 5 and in Appendix 5. The philosophical approach underpinning the active interview method for generating empirical material in qualitative research, resonates along the key terms with the concept of complex responsive processes of relating in organisations chosen as a practical interpretative framework, and with the intellectual virtue of phronesis or prudence. The main propositions of these approaches are the methodology of emergent enquiry (participative reflective understanding in context) and the belief that it is ‘through discourse followed by reflection that we also can make changes within our community.’ (Raelin, 2001, p.16)

Although the meaning of what emerges is then actively constructed within the interview interaction, the active interview does not promote the view that anything goes. Based on interpretative practice, the aim is twofold: to gather the information about the research topic / subject area, and to explicate how knowledge concerning that topic is narratively constructed. Collaborative construction of meaning happens through a mutual coding experience where different coding schemes are recognised to be emerging during the interview, rather than
accepting only those that have been prepared beforehand, and constructed after the interview by the researcher only. This process broadens horizons of meaning which are used as patterns to establish and organise narrative linkages. (Holstein and Gubrium, 1995)

The chosen methodological approach (active interviewing) and philosophical considerations including phronetic social science and both critical and constructive approach to human learning and knowledge creation (the Dreyfus model and the concept of complex responsive processes of relating in organisations), have a common intellectual requirement for increased participation of organisational actors through a dialog combining research and education. This is summarised by Alvesson and Deetz (2000, p.145):

While many researchers at the end of the twentieth century conceptualize and teach their subjects to be objects – to be known and acted upon – objects can be taught to be subjects who know and act. The point is then not to produce a new theory of domination as knowledge, but to produce ways of seeing and thinking and contexts for action in which groups can express themselves and act.

This study has not been about contributing to the cumulative body of knowledge governing the project management discipline; it was not intended with the aim to develop ‘better’ project management theory with predictive, performative power. My intention has been to contribute to individual and organisational practical rationality and capacity for value-rational deliberation and action, by generating in this study alternative insights and perspectives, clarifying certain aspects of practical experiences with project working, organising, and management, and possibly opening up the scope for intervention. The contribution has been a combination of concrete empirical analysis and practical philosophical considerations, and has been actualised through the process of participative enquiry. The intention of the ‘participative inquiry’ approach has been to propose and construct a platform for thinking and action, with the capacity to:

- embody a variety of approaches to creating useful knowledge about 'projects' in contemporary organisations
- offer alternative ways of seeing, representing, and making sense of people's varying experiences with the situations labelled as 'Project'
- empower consciously reflective practitioners to adopt new 'thinking skills' (Introna, 1997; Flyvbjerg, 2001, Stacey, 2001, 2003), with the reflexive approach to their own assumptions in elucidating where they are, where they intend to go with their project(s), and what is desirable according to diverse sets of values and interests; and
- encourage considerations of alternative, reflexive approaches to project management education. (Reed and Anthony, 1992; Mitroff and Linstone 1993; Arbnor and Bjerke, 1997, Flyvbjerg, 2001)
7.2.1 The limitations of the overall research design and potential for improvements

The inquiry presented in the thesis has been, for me as a researcher, about thinking and learning (Introna, 1997): thinking in writing and reflecting, and learning in thinking and engaging with practitioners in understanding and interpreting their experiences with the world of practice. This process of thinking and learning has made it difficult to coherently structure this report. It has been done on reflection at the end. As I reiterated in several places and made transparent throughout this thesis, and particularly in Chapters 4 and 5, I do not claim to have come up with traditional research ‘findings’ which give a clear direction about where to go from here. The intention has not been to ‘add’ to the cumulative body of project management knowledge already available to academics and practitioners. With this awareness, I have endeavoured to structure this report in a way which hopefully allows the reader to clearly trace the journey from the empirical material to conclusions, by: providing explanation of the overall philosophical frame of reference (Chapter 1, Section 1.2; Chapter 3, Section 3.5); of the practical interpretative framework (Chapter 3, Section 3.5.3); explanation of the research design, procedures and method of data collection (Chapter 4), examples illustrating the process of interpretation and analysis (Chapter 5), discussion of the major outcomes in relation to the aims and objectives (research questions of the thesis) (Chapter 6) and finally this summary of the overall process (Chapter 7).

Opting for an interpretative and critical study in management fields is always a risky and challenging decision. As discussed in Chapter 4, the researcher is aware of the constructed nature of knowledge as well as of their own intellectual baggage that they bring into the empirical study. There is always a personal tension within the author of a research report him/her-self. As Silverman puts it:

... one wants to provide a comprehensive and fair coverage of the filed. On the other hand, it is impossible to escape one’s own assumptions, preferences and ... prejudices. (Silverman, 2001, p.285)

Silverman argues that the intellectual baggage that authors bring to their writing can even be a valuable and enhancing contribution to the reader’s understanding of arguments made in the material, provided that ‘...the reader is given the opportunity to register’ (2001, p.285) such intellectual baggage. Openness about the way that personal prejudice has shaped the approach to the particular project is recommended in that respect (see Appendix 1, and Chapter 4, Section 4.3). I have endeavoured to address these issues throughout the entire report and to show my awareness and potential shortcomings of the outcomes that can be attributed to these subjective processes.
The overall reliability, generalisability and validity of this thesis (see also Sections 4.4 and 4.5 in Chapter 4), its outcomes, and claims and propositions that I am making as a result of the concrete empirical analysis and the practical philosophical debate developed here, I believe will be ultimately judged by the degree to which they:

- make sense to others engaged in this field of study and practice,
- become part of everyday coping with life and work in project based arrangements, in getting the job done in local context in the living present, and
- make difference to those concerned about their engagement as educators in business and management development programmes.

It is in this spirit that this thesis is intended; as an attempt to open up the project to alternative perspectives by problematising the basis of current technologies and techniques, by highlighting the political and ethical imperatives embedded within current 'taken-for-granted' conceptions of the project.

**Scope for improvement**

On reflection, there is a wide scope for improvement in the process of the conducted research study. They fall into two groups. One contains those that I was aware of during the research, but due to various constraints under which the thesis was being pursued, they were realistically not possible to address (discussed in Chapter 4). The other group of trajectories for improvement are those that resulted from the learning process integral to this research study. These have a lot to do with learning from experience and, truly, by reflecting on how one moves up the stages suggested by the Dreyfus model. I believe that the achievement of the competence of 'a virtuoso political and social actor' is relevant in the business of academic research. I am aware now how I could have made a much better use of empirical material and improve the interpretation and analysis. I am also aware of potential problems with justifying why the research method chosen (active interviewing of practitioners on academic courses in the educational environments) is entirely appropriate to the research question. In the section below I discuss some of the most obvious areas in which this research project could have been improved.

Ideally, the result of a social scientific research guided by phronesis is, according to Flyvbjerg, a pragmatically governed interpretation of the studied practices. In order to capture conversational aspects of project working, organising and managing, and their role in constructing and reproducing power relations, ideologies and knowledge in local ordinary situations of organising and labelling organisational arrangements as projects, in the living present, a case
study research or action research approaches, using active interviewing and text analysis, (see for example Silverman, 2001) would have been more appropriate. A selected number of longitudinal studies would have given a much richer picture of specific projects, and would theoretically be perfectly in line with the aims of a phronetic inquiry. Much deeper insights into experiences would have been gained, and a wider scope could have been created for an integrated, holistic approach to accounts of different organisational members about the specific project situation. In such a way, hidden, subtle and ideological aspects of these experiences would have surfaced, which would contribute to the actualisation of a critical project. This would be possible as richer concrete examples and detailed narratives of the practitioner's accounts about, and researchers' observations of, who is doing what (to whom) in concrete project-labelled situations in the living present, could be generated in a case study type of research design. This would enable us to understand how power relations simultaneously form and are being formed by intersubjective relating among actors in a specific (project) context, in the living present, and how practitioners use their skills and knowledge to cope / manage these situations. Only by listening to, and observing the organizational members as they perform work in their local situation in the living present, would it be possible to generate insights into how projects are continuously being constructed and reproduced in the ongoing communicative interaction between people including both their formal members and people in other entities / organizations.

Although some attempts had initially been made for this thesis to incorporate the case study approach, it became obvious that it would not be possible to arrange an access to project situations over a necessary duration of time to facilitate a longitudinal case study. The recommendations for future research that emerge from this thesis (Section 7.3.2) embrace the preceding insights.

7.3 Concluding remarks on the theoretical and philosophical grounding of the thesis, its outcomes, and contributions

In this section I will comment upon the implications of this study for project management research and education in more general terms, some trajectories for future inquiries in the field, and other theoretical possibilities that may enhance the academic and practitioners discourses and action in the projecticised society. My intention has been to create with this thesis an opportunity to stand back, problematise that what seems known and accepted, and ask some fundamental questions:
• Is there a universally true explanation of what projects are and how projects evolve?
• What is the meaning behind the vocabulary in use, the terms such as ‘project’, ‘project management’, and ‘project success’?
• How do organisations and individuals create knowledge about these phenomena and how useful and communicable this knowledge is in practice?

7.3.1 A reflection on the philosophical and theoretical concepts
In the introductory chapter, I stated that the research intention of this kind needs to be located in the broader context of its field, which has historically attracted lots of interest, development, and criticism. One way of opening up a range of relevant issues and avenues of thought and inquiry is to ask the very question: Why do projects matter? Why should we be concerned with organisational arrangements of that type beyond their instrumental and performative possibilities for organisations? The research presented in this thesis suggests that projects are morally significant because they embody values and interests which enrol organisational members into particular programmes of action. The research has defined a starting point for acknowledging such an ethics — to revise our notion of projects as organisational objects, as value-neutral phenomena that are ‘just there’, unproblematic. Obviously, it may be difficult to initiate such a radical turn at this time when projects are becoming an intrinsic part of organisations and increasingly complex. The findings of the research propose that we ought to ‘open up’ the complex black boxes of this projecticised society and read them out ‘aloud’ — in a language accessible to those that may potentially be enrolled, academics as well as practitioners. Projects are not merely innocent, just-there structures that we encounter, but they are political reified organisational phenomena, where values and interests are negotiated and inscribed in the definition of such an ‘object’ As Introna (2003, p1) claims

‘Through such inscriptions, which may be more or less successful, those that encounter and use these inscribed things may become, wittingly or unwittingly, enrolled into particular programmes, or scripts for action. ... Furthermore, those that draw upon them use them in unintended ways, ignoring or deliberately ‘misreading’ the script they may endeavour to impose.’

Although it may be tempting to, with a full awareness of risk associated with such a thought, come to a conclusion that ‘project management’, as we know it, is outdated (cf Atkinson, 1999), and should be replaced by alternative positions promoting the views of ‘projects’ being socially created in retrospect; with the practical social action being intrinsically linked to conversation, communication, literary artefacts, and language (Weick, 1995, p.41). But, as the intellectual virtue of phronesis carefully guards such a haste, the balance is important. Competencies are in essence codified behaviours, a homogenised view of what managers do which is often quite
different from what they actually do. Therefore, while generalisations via the introduction of management competencies, may sometime help, ‘they also obliterate difference and may stifle individual flair; because there is a pressure to do things according to the defined behavioural indicators’. (Blacketer in Stacey, 2003, p.461) Strictly scientific approach to competency definition can also prevent genuine enquiry into how a manager actually gets things done. As discussed in the preceding chapters, narrative accounts by organisational members (experiences organised in a form of narrated knowledge) play an important role in bridging the gap between codified behaviour and living experience.

I have tried through this thesis to highlight the contingent and constructed nature of both projects and the infrastructure which accompanies our current conception of projects. I should at the same time be open about the situated position I have inevitably taken in this debate. I believe there are significant dangers and problems resulting from existing positions taken, and have tried through this and other work (Hodgson and Cicmil, 2003) to highlight these hazards. As Bowker and Star note;

"We have a moral and ethical agenda in our querying of these systems. Each standard and each category valorizes some point of view and silences another. This is not inherently a bad thing – indeed it is inescapable. But it is an ethical choice, and as such it is dangerous – not bad, but dangerous" (1999: 5-6)

Three important questions have been interwoven with my work on this thesis:

1. How might this type of research study contribute to, or be important for, organisational members involved in project-labelled arrangements?
2. What would it mean developing skills of a ‘virtuoso social and political actor’ in such arrangements in contemporary organisations and society?
3. Why might it be important to include the virtues of value rationality and practical wisdom on the agenda of project management development, education, and research?

I have relied on both critical and constructive qualities of the Dreyfus model of human learning, and the notion of ‘virtuoso or expert social and political actor’ (explained in Chapter 1 and Chapter 6) to address the questions above. For this reason, the thesis is not an anti-managerialist, critical piece of work, distant from practice and practitioners. My objective has been to develop some constructive trajectories for changes in project management education and research, not by replacing the view that decisions related to projects should be rational and informed, but by balancing that view with practical wisdom and intellectual virtues of value rationality.
7.3.2 Recommendations for future research and other theoretical possibilities
The study has opened up a scope for alternative theoretical considerations in studying projects, project based working and organising, and project performance in the future. The perspective of complex responsive processes of relating in organisations seems to offer a significant potential as a conceptual framework for different ways of thinking and talking about what it is that people do when they engage or get enrolled in working on or managing a portion of reality which is bracketed and labelled ‘project’ (Weick, 1979).

Another possibility for future research lies in the exploration of the issues of learning and knowledge creation about projects and project management. The notion of ‘ethical knowing’ is of interest here, depending on which particular ontology of project is in operation in the local context (of both research and practice) and on the power asymmetry that legitimises certain knowledge as valid while silencing other possibilities. Linked to this would be future effort to pursue some non-mainstream ways of studying the processes of knowledge creation, sharing, transfer and dissemination within and beyond project organisation – the area of research that has grown in popularity over the recent years (Blackler, 1995; Nonaka and Takeuchi, 1995; De Fillipi, 2001; Bresnen et al, 2003;).

Future research projects done from the phronetic social science position could contribute to reinforcing the significance of phronesis to projects and project management in practice. In the projecticized society, relating the Aristotelian intellectual virtues of episteme and techne in the way it matters: values, conflict, power, and the ordinary, appears to be of great relevance. The primacy is not given to the basic theory (episteme) which prescribes rules for know-how application (techne) but to a balanced interrelationship between the three virtues. A phronetic approach is involved in its role as techne ‘with a head on it’ (Flyvbjerg, 2001, p.168), meaning that it is governed by developing the capacity for value-rational deliberation, and discussion of goals and values in the concrete, practical project situations in which actors are involved in the living present. It is a balance between instrumental reason necessary to sustain the progress of the ‘risk’ society and the considerations of conflict, values and power in project-labelled situations, particularly in relation to environmental risks, work, health, security, political stability, and possibility for action.

Another aspect might be of importance. That is the methodological proposition of emergent enquiry, which Stacey argues as appropriate from the perspective of complex responsive processes of relating. The researcher / practising manager is a participant in these processes of relating in the specific local situation in the living present rather than an objective observer.
standing outside the studied arrangement and intentionally perturbing and directing the system
toward the desired outcome. Therefore, a form of practitioner led collaborative inquiry might be
considered as an option in future which is again related to the implications of this research
approach to management education. It is also known as ‘transformative redefinition’ in critical
management methodologies (Alvesson and Deetz, 2000).

The thesis also argues that we cannot talk about project management without critically
addressing the social construction of ‘projects’ in contemporary organisations. Drawing
attention to some problematic aspects of research in this area, it is suggested to investigate how
projects are constructed in contemporary organisations and society and to illuminate politics- or
interest-laden sides of professionalisation of project management (Hodgson, 2002). A critical
management agenda could initiate a departure from the dominant or taken-for-granted forms of
rationality in project management research. In the case of project management as discussed
above, particular task would be to draw attention to asymmetrical power relations related to
project management as a structured control mechanism, and explore the partiality of claims
behind ‘shared project goals’ and ‘clear objectives’. One of the avenues for future research
would be to consider the implications of the broad intellectual project of ‘social construction’
for creating knowledge about projects, summarised in the following statements (Hacking,
1999):

- in the present state of affairs, project is taken for granted; project appears to be inevitable;
- project need not have existed, or need not be at all as it is. Project, or project as it is at
present, is not determined by the nature of things; it is not inevitable but brought into
existence or shaped by social events, forces, history, all of which could well have been
different;
- project is quite bad as it is; and
- we would be much better off if project were done away with, or at least radically
transformed.

The aim of such a study would not be necessarily to present projects as bad. The aim is to, by
undoing the matrix of rules, practices, and material infrastructure in which they are embedded,
open up the intellectual field of project management to different kind of questions and
illuminate subtle and less visible aspects of project based organising, project working and
project management.

There are two other possible streams of future inquiry that the thesis has triggered. There are
obvious parallels between project management and other managerial sub-disciplines (e.g.
quality, accounting) in which the academic project of de- or re-construction is more advanced. It
would be enlightening to make some comparisons with work in these fields in the future research projects. Finally, and related to the above, it would be useful to look into the issues of international transfer of project management knowledge in the projectised society – the phenomenon that has been increasingly perpetuated by academic activity, research and networking.

The final note

'Since there is no final picture of the world that is open to human beings, this establishes that the decision to pick a particular picture on which to base one's actions is ultimately a heroic act and not a "logical" one. The choice of a particular action and the associated belief in it are among the greatest risks humans ever face'.


Phronetic social science, which underlines this study, is not a common approach in the mainstream project management body of thought. On reflection, had this research been shaped in any other way, the nature of this thesis, the discovery, message and experience would have been a different story altogether.

THE ROAD NOT TAKEN

TWO roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with the sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I -
I took the one less traveled by,
And that has made all the difference.

(Robert Frost, "The road not taken", from Mountain Interval, 1920)
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Autobiographical positioning

It is not a common practice to include a personal account of this kind in a PhD report. I am convinced, though, that some aspects of my educational and professional background, together with the fact that over the 17 years of my professional life I have lived almost equally long in three different countries on two continents, will to a certain extent bias the way I engage with the issues in this thesis, and will, inevitably, affect its quality.

Before I started my career in business and management education, I worked as an engineer in design of seismically resistant concrete structures. Having studied engineering science in one of the prestigious traditional European academic establishments which prides itself with total dedication to rigour in scientific research, I entered the professional world with a strong bias towards mathematical logic and operational research tradition (Critical path calculations, Monte Carlo simulations of risk, PERT probability programming). Subsequently, my professional working environment was almost continuously evolving around an international project of one kind or another. In that context, I started learning about the ‘messy reality’ of projects and project management. It was the social experience with projects, that made me rethink the robustness, power, and self-sufficiency of technical knowledge and the neatness of various project management methodologies, as I observed how important the interrelationships, conversation, and communication among individuals and groups were in seeing even the largest and most complex projects through, or, in Introna’s (1997) terms, ‘getting the job done’.

It is what I recognise in Mitroff and Linstone’s (1993, p.92-94) assertion that ‘... there are no elementary or simple acts in any science or profession to which supposedly more complex situations could be reduced’. My knowledge of the engineering science alone was insufficient to explain a variety of professional, managerial, and social experiences I have encountered in project environments. So, I started questioning it.

It was over the recent years which I have spent in business research and education, that I became aware of the streams of thought questioning the dominant approaches to scientific inquiry and method, including the arguments about ‘objectivity’, practicality, and truthfulness of measurement. The ancient comment of Aristotle that ‘... the primary question was not What do we know, but How do we know it.’ has become real.

With that in mind, I have continued to observe the phenomenon of projects as they appear in contemporary organisations, and individual and group processes associated with them. This has been facilitated by my roles of a management consultant and lecturer which exposed me to the ‘realities’ of management of projects in a wide range of organisations and industrial sectors and to the opportunity to discuss in a varying political environments the critical issues in project settings.

When we have spent some time working with matters of business and management education, we eventually start questioning what it is that we are doing. This inevitably includes self-reflection on responsibility, ethics and ideals as an educator, researcher and professional. This is where my interest in the nature of the knowledge system governing the project management discipline and a feel about the need to broaden or alter our understanding of the nature of contemporary projects, stem from.
Figure 2.3  The four phases and the dynamic action cycle.

Figure A2.1 Imported from Young, 1998, p.20
Creating formal PMBOK and professionalisation of the PM discipline—a continuing debate

PMBOK, as a concept, has been undergoing numerous revisions nationally and internationally (Walta 1995, Wideman, 1995; Turner, 1999; Turner, 2000b; Morris et al, 2000, Themistocleous and Wearne, 2000). The earlier mentioned 'struggle' in conceptualising the PMBOK construct entails several unsolved issues. Most prominent ones are about its nature and purpose, and are articulated as a lack of agreement about:

- defining what project managers should know,
- what areas of knowledge should be included in PMBOK,
- what 'physical' form (a document, a codified database, a compilation of publications, etc) PMBOK should have, and
- how PMBOK should be structured.

Some authors focus on the scientific and methodological issues in conceptualising and constructing the PMBOK, and ultimately, defining project management as a unique professional discipline. Wideman (1995), for example, argues that the conditions under which professionals operate in project environments demand much more structured and reliable knowledge system than 'learning by experience or trial and error' (Wideman, 1995, p.71). Facilitating knowledge transfer is, according to Wideman, critical to the purpose of a professional body of knowledge and, by implication, professional education. Wideman insists on the application of the six stages of the scientific method of evolution to be used as the approach of constructing a new and independent discipline from a concept of PM as a multifaceted skill. Thus, having defined the purpose of such intellectual endeavour, Wideman proposes its subsequent stages as:

- defining the phenomena of interest that differentiate the 'new, independent discipline' from any other existing discipline: projects as distinct organisational and operational arrangements, and project management consisting of a set of management activities (planning and forecasting, organising, commanding, coordinating, and controlling) and associated processes, tools and techniques applicable to the nature of project work.
- Subsequently formulating inclusive criteria (Wideman, 1995, p.72) to reflect the definition of project management
- Formulating exclusive criteria (Wideman, 1995, p.73) in order to draw the boundary with the associated bodies of knowledge (general management, technical management, and supporting disciplines) and, at the same time, to recognise its multidisciplinary nature;
- Defining the areas of learning (Wideman, 1995, p.73) to facilitate assimilation and classification of relevant sources of knowledge and learning, including the latest concepts, research and observations associated with project management: project life cycle, project
environment, project integration or interfacing, project process, and elements of project success., (presented for the purpose of this Thesis in a tabulated format in Table All-1)

This approach introduces a number of propositions to supplement the extant methodologies of constructing PMBOK published in recent years, ranging from the recognition of the complexity of project environment to multidisciplinary nature of its management, including the considerations of critical factors and criteria of project success.

Table All-1 Areas of learning incorporated in the model of PMBOK proposed by Wideman, 1995, p.73

<table>
<thead>
<tr>
<th>Area of learning</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project life cycle</td>
<td>This sequence of phases is a logical and progressive basis for learning about project management</td>
</tr>
<tr>
<td>Project environment</td>
<td>This sets the context of a project. It includes accommodating to the external environment into which the product of the project will be launched, whether this is simply the management culture and support services of the parent organisation, or the greater environment beyond. It also includes accommodating to the technology vested in the project, and the four internal constraining and interactive objectives of 'scope', 'quality', 'time' and 'cost'.</td>
</tr>
<tr>
<td>Project integration or interfacing</td>
<td>This covers the administration relating to the people responsible for the component parts of the project and their correct interfacing. It includes dealing with 'uncertainty, opportunity and risk', 'team building and temporary teamwork', project production and productivity', and above all, the need for effective 'communication and data storage and retrieval'.</td>
</tr>
<tr>
<td>Project processes</td>
<td>These are inherent in both 'project' and 'management', and they include the essential processes of 'justifying', 'setting direction', and 'control'. This also provides an opportunity to describe appropriate applications of project management and its benefits.</td>
</tr>
<tr>
<td>Elements of project success</td>
<td>Success flows from satisfying the project's stakeholders and constituents, and it provides the motivation (driver) for effective project management in the first place. The elements include learning from past experience, and success is closely associated with effective communication and the quality of the resulting product. These are the issues that are remembered long after limited euphoria is experienced as a result of simply meeting objectives of time and cost.</td>
</tr>
</tbody>
</table>
Walta (1995) sees the idea of knowledge circulation within the PM profession as central to the policy of creating a universal PMBOK. He recognises that the response to the general requirements contained in the extant versions of PMBOK, demonstrate neither unity of knowledge nor unity of approach to the constructing of the professional PMBOK. He notes two problematic issues, or in other words, two ultimate conditions for maintaining the required unity of knowledge:

1) the need for a single BOK model for the whole profession, and 2) identification of its content including both localisation and circulation of the available elements on the cross-national and cross-industrial basis.

Walta subsequently elaborates the concept of the PMBOK methodological pyramid based on the principles of layered structure for normative knowledge, as a methodologically viable way to make ‘the huge domain of PM knowledge manageable’ (Walta, 1995, p.103). (Fig A2.2) The first two layers have been found as most problematic in terms of the current agreement on their meaning and content, as follows:

- **foundation layer** — the purpose and objectives of professional PMBOK (currently ranging from support to professionals, to knowledge circulation and transfer, to professional education courses, to certification of professionals); definitions of the concepts of project and project management, and the relations between them, the identification of type and nature of PM knowledge, the knowledge domain and the relations with other disciplines;

- **general theory layer** — ontological and epistemological approach to creating professional knowledge within a business discipline expressed through schemes and theoretical models, ranging from systems approach (German PMBOK,) to a multiple theoretical approaches encompassing socio-economic, classical organisational management and process based approaches (USA / PMI PMBOK); Walta (1995, p.106) states:

  We have the feeling that the modelling of the theory is underdeveloped. The modelling is rather informal and incomplete.

Other writers have also noted and explored some of the issues identified by Walta (1995), and related to the two fundamental layers of the methodological pyramid.
The relation between the layers is one of specification. A higher level develops the content of the lower layers. Feedback flows from the use level.

**Relations:**

**Use**

**Tools:** contains the tools (e.g. computer programmes) that embody the methods

**Application area specification:** contains the specification of the general theories and methods that match the uniqueness and requirements of specific application fields such as construction, IS etc.

**General methods:** or general accepted practices, independent of the application filed; specify pieces of the conceptual scheme; e.g. activity and time concepts are developed into time management

**General theory:** this layer is built on the foundation layer; embodies the available PM theory, which is perceived as conceptual in nature

**Foundation or the world view:** gives the fundamental concepts, the knowledge domain, the legitimisation of the existence of the PM profession, and the basic assumptions of the profession; this layer is also called a world view.

Figure A2.2 PMBOK pyramid,

*Source:* Walta 1995, p.103
Figure A2.3 indicates the basic structure and indicative content of the PMI's PMBoK as comprising of eight knowledge areas. The PMI Guide to the PMBoK document is based on the PMI's decision to adopt a process-based view of project management reflecting the nature of project work and relevant management processes, tools and techniques, associated with these areas.

Figure A2.3 PMI PMBoK – knowledge areas and component processes
Adapted from PMI, (2000) original number codes omitted
Turner (2000) proposes the content and structure of the PMBOK from a viewpoint of the editor of a PM dedicated scholarly journal, based on the range of topics and areas that have been addressed by the papers published in the journal and reflected in the fields of interests and expertise of the IJPM International editorial board and referee community. He claims that this version of PMBOK (Table AII-2) is broad enough to encompass other existing national and institutional versions of PMBOK, and to cover the aspect of management of projects such as finance and contracts, that are generally addressed in insufficient depth with these other versions (Turner, 2000, p.2).

Table AII-2 IJPMBOK structure and content (Adapted from Turner R, 2000, Table 1, pp;2-3)

<table>
<thead>
<tr>
<th>A</th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Implementing strategy</td>
</tr>
<tr>
<td>A2</td>
<td>Managing Programmes</td>
</tr>
<tr>
<td>A3</td>
<td>Managing Projects</td>
</tr>
<tr>
<td>A5</td>
<td>Processes, Procedures</td>
</tr>
<tr>
<td>A6</td>
<td>Systems, Project Office</td>
</tr>
<tr>
<td>A7</td>
<td>Audits, Health Checks</td>
</tr>
<tr>
<td>A8</td>
<td>Systems Approach</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>B</th>
<th>External context</th>
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<tbody>
<tr>
<td>B1</td>
<td>PEST</td>
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<tr>
<td>B2</td>
<td>Legal</td>
</tr>
<tr>
<td>B3</td>
<td>Environmental</td>
</tr>
<tr>
<td>B4</td>
<td>Value, Benefit, Finance</td>
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</tbody>
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<thead>
<tr>
<th>C</th>
<th>Implementation</th>
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<tbody>
<tr>
<td>C1</td>
<td>Functionality, Value</td>
</tr>
<tr>
<td>C2</td>
<td>Configuration</td>
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<tr>
<td>C3</td>
<td>Scope of work</td>
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<tr>
<td>C4</td>
<td>Organisation Resources</td>
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<td>C5</td>
<td>Quality</td>
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<td>C6</td>
<td>Cost</td>
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<td>C7</td>
<td>Time</td>
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<td>C8</td>
<td>Risk</td>
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<td>C9</td>
<td>Safety and Health</td>
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<tr>
<th>D</th>
<th>Life-cycle</th>
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<tbody>
<tr>
<td>D1</td>
<td>Integration-Lifecycle</td>
</tr>
<tr>
<td>D2</td>
<td>Start-up</td>
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<tr>
<td>D3</td>
<td>Proposal and Feasibility</td>
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<tr>
<td>D4</td>
<td>Design and Appraisal</td>
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<tr>
<td>D5</td>
<td>Implementation</td>
</tr>
<tr>
<td>D6</td>
<td>Progress</td>
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<td>D7</td>
<td>Commissioning and Close-out</td>
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<th>E</th>
<th>Commercial</th>
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<td>E1</td>
<td>Value and Benefit</td>
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<td>E2</td>
<td>Finance</td>
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<td>E3</td>
<td>Cash Flow Management</td>
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<td>E4</td>
<td>Taxation</td>
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<td>E5</td>
<td>Insurance</td>
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<tbody>
<tr>
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<tr>
<td>F2</td>
<td>Partnership, Alliances</td>
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<tr>
<td>F3</td>
<td>Procurement</td>
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<td>F4</td>
<td>Bidding</td>
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<td>F5</td>
<td>Contract Administration</td>
</tr>
<tr>
<td>F6</td>
<td>Materials, Purchasing &amp; Supply</td>
</tr>
<tr>
<td>F7</td>
<td>Commercial Law</td>
</tr>
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<td>F8</td>
<td>Claims</td>
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<td>F9</td>
<td>International Projects</td>
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<thead>
<tr>
<th>G</th>
<th>People</th>
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<tbody>
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<td>G1</td>
<td>Management Structure</td>
</tr>
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<td>G2</td>
<td>Teams</td>
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<tr>
<td>G3</td>
<td>Individuals</td>
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<tr>
<td>G4</td>
<td>Managing and Leading</td>
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<td>G5</td>
<td>Stakeholders</td>
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<td>G6</td>
<td>Competence</td>
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<td>G7</td>
<td>Culture</td>
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<td>G8</td>
<td>Ethics</td>
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<td>H2</td>
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<td>H3</td>
<td>Operations</td>
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<tr>
<td>H4</td>
<td>Information Technology</td>
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<tr>
<td>H5</td>
<td>Finance &amp; accounting</td>
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<tr>
<td>H6</td>
<td>Strategy</td>
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<tr>
<td>H7</td>
<td>Technology, Innovation</td>
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The final stages of the investigation presented in this thesis coincided with the publication of reports on the revision of the UK Association for Project Management (APM) version of the PMBOK (Morris, 1999; Morris, Themistocleous and Wearne, 2000, Themistocleous and Wearne, 2000). Outcomes of that exploratory research (Figure A2.4), which is a collaboration between academia (the UMIST based Centre for Research in Project Management – CRPM), the APM as a professional body, and industry, has enhanced timeliness and relevance of this thesis to the contemporary problems with, and the activity aimed at strengthening, the PM knowledge system. The major insights from the CRPM research will be reported here and subsequently critically evaluated and interpreted within the framework of this thesis’s research proposition.

The major concerns throughout the CRMP investigation appear to have been:

- explaining the nature and purpose of project management, and by implication of PMBOK;
- justification of PM as a unique discipline which can claim its professional status
- explaining the nature of knowledge that a practising professional need in order to be competent in managing projects (generic and useful at the practical level, etc)
- identifying the sources of such knowledge (empirical evidence and research)
- construct and representation of PMBOK
<table>
<thead>
<tr>
<th>General</th>
<th>3 Project context</th>
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<tbody>
<tr>
<td>Project Management</td>
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<td>Programme Management</td>
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<td>Project context</td>
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<td>Project Success Criteria</td>
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<td>Strategy / Project Management Plan</td>
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<td>Value Management</td>
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<th>Control</th>
<th>10 Work content &amp; Scope management</th>
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<td>11 Time scheduling / Phasing</td>
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<td>12 Resource management</td>
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<td>13 Budgeting &amp; Cost management</td>
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<td>14 Change Control</td>
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<tr>
<td>15 Earned value management</td>
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<td>16 Information management</td>
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<thead>
<tr>
<th>Technical</th>
<th>20 Design, production &amp; hand-over management</th>
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<tbody>
<tr>
<td>21 Requirements management</td>
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<tr>
<td>22 Technology management</td>
<td></td>
</tr>
<tr>
<td>23 Value engineering</td>
<td></td>
</tr>
<tr>
<td>24 Modelling and testing</td>
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<tr>
<td>25 Configuration management</td>
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<tr>
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<tbody>
<tr>
<td>31 Marketing &amp; sales</td>
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<tr>
<td>32 Financial management</td>
<td></td>
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<tr>
<td>33 Procurement</td>
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<td>34 Legal awareness</td>
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<tr>
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<th>40 Life cycle design &amp; management</th>
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<tbody>
<tr>
<td>41 Opportunity</td>
<td></td>
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<td>42 Design &amp; development</td>
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<tr>
<td>43 Production</td>
<td></td>
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<tr>
<td>44 Hand-over</td>
<td></td>
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<tr>
<td>45 (post) project evaluation review</td>
<td></td>
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<tr>
<td>[O&amp;M/ILS]</td>
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<tr>
<td>50 Organisation structure</td>
<td></td>
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<tr>
<td>51 Organisational roles</td>
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</table>

<table>
<thead>
<tr>
<th>People</th>
<th>60 Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>61 Teamwork</td>
<td></td>
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<tr>
<td>62 Leadership</td>
<td></td>
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<tr>
<td>63 Conflict management</td>
<td></td>
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<tr>
<td>64 Negotiation</td>
<td></td>
</tr>
<tr>
<td>65 Personnel management</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity identification</th>
<th>Design &amp; development</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 Cost management</td>
<td></td>
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<tr>
<td>18 Change Control</td>
<td></td>
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<tr>
<td>19 Earned value management</td>
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<td>20 Information management</td>
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<table>
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<tr>
<th>Production</th>
<th>Hand-over</th>
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<tbody>
<tr>
<td>21 Requirements management</td>
<td></td>
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<tr>
<td>22 Technology management</td>
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<tr>
<td>23 Value engineering</td>
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<tr>
<td>24 Modelling and testing</td>
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</tr>
<tr>
<td>25 Configuration management</td>
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<thead>
<tr>
<th>Hand-over</th>
<th>Post-project evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 Make, build &amp; test</td>
<td>Operation &amp; maintenance</td>
</tr>
<tr>
<td>27 Test, commission start-up</td>
<td>Integrated logistics support</td>
</tr>
</tbody>
</table>

Figure A2.4 CRMP Project Management Body of Knowledge – the most recent proposition (Morris et al, 2000, p.161)
<table>
<thead>
<tr>
<th>The nature of human interaction: Environment, internal mechanisms of change, time dimension, prediction, level of analysis, diversity</th>
<th>Strategic choice theory</th>
<th>Learning organisation theory</th>
<th>Open systems theory / psychoanalytic perspectives / soft and critical systems, KM</th>
<th>Chaos and complexity theory (as imported into org. thinking)</th>
<th>Complex responsive processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• systemic notion of interaction</td>
<td>• systemic notion of interaction</td>
<td>• systemic notion of interaction</td>
<td>• systemic notion of interaction</td>
<td>• communicative interaction: a process of communication and power relating</td>
<td></td>
</tr>
<tr>
<td>• organisations adapt to their environments in order to achieve their goals</td>
<td>• acknowledges both positive and negative feedback</td>
<td>• focus on regulation at permeable boundaries between system and environment, and between subsystems of the system</td>
<td>• the interaction does not result in a whole / a system, but in further patterns of interaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• adaptation happens in a self-regulating, negative-feedback (cybernetic) manner</td>
<td>• systems dynamics is that of non-equilibrium</td>
<td>• primitive human behaviour imported through the 'membrane' disrupts organisational learning; the dynamics of the system is somewhat turbulent</td>
<td>• spatial metaphor of inside / outside is replaced by a temporal metaphor of continual reproduction and potential transformation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• movement to states of stable equilibrium</td>
<td>• unexpected outcomes are possible; but the implications of radical unpredictability not explored in prescriptions for managerial action</td>
<td>• attention drawn to the possibility of unpredictability but not essential</td>
<td>• organisations and managerial action are fundamentally conversational in nature, forming and being formed by power relations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• managerial action on the basis of prediction not problematic</td>
<td>• level of analysis is the macro level of the organisation: linear, cause and effect relationships, and uniform and harmonious interaction where micro-diversity is not recognised</td>
<td>• level of analysis is macro-level of organisation</td>
<td>• unpredictability is central to this theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• level of analysis is the macro level of the organisation: cause and effect linked in non-linear manner and distant over time; recognises obstacles to the achievement of harmonious interactions but assumes harmony as successful interaction; micro-diversity is not recognised</td>
<td></td>
<td></td>
<td>• the level of analysis is micro-level, focused on bounded instability in which through self organisation emergent novel forms of relating and conversation can be produced.</td>
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<td></td>
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<td>• Micro-diversity and creativity recognised as essential for internal capacity to change spontaneously</td>
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</tr>
<tr>
<td>Table AIII-I (cont)</td>
<td>Strategic choice theory</td>
<td>Learning organisation theory</td>
<td>Open systems theory / psychoanalytic perspectives / soft and critical systems, KM</td>
<td>Chaos and complexity theory (as imported into org. thinking)</td>
<td>Complex responsive processes</td>
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<tr>
<td>The views on human nature / psychology</td>
<td>• Cognitivist view • Mind is the property of individual brain • Mental models are formed by brain/mind processing symbolic information and forming representations of a pre-given reality • Humans act on the basis of their mental models; • Knowing, behaving and relating to others is entirely a property of individual personality • Individuals form groups and groups can subsequently change their behaviour • The intentions formed and expressed by individuals are primary in organisational and managerial action • Rational choice capacity is seen as important characteristic, which can be disrupted by emotions • Power is understood as an attribute of an individual – mainly as official authority • Creativity is an attribute of an individual</td>
<td>• Cognitivist view with some notions of humanistic psychology – the driving force behind individual behaviour is the urge to actualise themselves, finding their true selves… • Individuals form groups and groups can subsequently affect their behaviour • Leadership is a competence possessed by individuals • The intentions formed and expressed by individuals are primary in organisational and managerial action • Emotions of a positive kind are emphasised • Power is an attribute of charismatic individuals • Creativity – resides in individual, but can also be ascribed to cohesive teamwork</td>
<td>• Psychoanalysis • Individual mental processes structured by the social (prohibition possible) • More interactive approach to individual/group relating • Leadership is no longer possible only as a competence of an individual; individuals can be sucked into leadership positions by unconscious dynamics of the group • Power and emotions increasingly important – both positive and negative connotations • Creativity is an individual attribute - the ability to hold anxiety and engage in play</td>
<td>• Combine cognitivist, constructivists and humanistic views on human nature • Chaos and complexity theory are imported into the studies of organisations through cognitivist and constructivists perspectives on psychology • The individual remains central</td>
<td>• Makes a radical shift: individuals and groups form and are formed by each other simultaneously. • The fundamental motivator of human behaviour is the urge to relate • There can be no human individual outside of relationship: the individual is de-centred, yet not lost sight of. • Silent, private conversation (mind) is structured by and always resonating and changing with, public conversations in groups. • Power relations, ideologies, fantasies, and emotions are central; theory of interaction and theory of human nature are the same • Intention is not an attribute of an individual, but emerges in conversational relationship, and is articulated by an individual. • While in theories where the individual is primary, there is a tendency to equate agents with individual human beings and retain the orthodox notions of empowerment and delegation through the notion of self-organisation, in CRP the analogue of agents is themes that organise experience. Self-organisation of these themes retains emergent unpredictability; causal dualism of systems thinking is replaced by paradoxical transformative causality of CRP • Leadership is no longer an individual competence but a form of relationship</td>
</tr>
<tr>
<td>Methodological position</td>
<td>Strategic choice theory</td>
<td>Learning theory</td>
<td>organisation theory</td>
<td>Open systems theory / psychoanalytic perspectives / soft and critical systems, KM</td>
<td>Chaos and complexity theory (as imported into org. thinking)</td>
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</tbody>
</table>
|--------------------------|-------------------------|------------------|---------------------|--------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------
| Both SC and LO theories adopt the methodological position of the objective observer who stands outside the organisational system and observes it as a pre-given reality. The aim is to ascribe the manager a role and provide prescriptions of how to control, direct, or at least disturb and perturb the system. | | | | Psychoanalytic perspectives advocate action research, in which 'the researcher participates with members of an organisation and uses his or her feelings as information' Stacey, 2003, p. 412. Still, some objective position is retained by the researcher, and the manager, one at the boundary of the system preventing him / her to be sucked into unconscious group processes. SST and critical systems perspectives (csp), and some KM and communities of practice (cop) approaches adopt reflexive and participative methodologies: argue for co-constructed nature of knowledge and multiple perspectives (MP) on any situation. Still the human interaction is understood as producing a system where there is a strict delineation and dualism of position in and outside the system. | Chaos and complexity theorists adopt a similar stance to SC and LO ones. They are all based in cognitivist thinking. | CRP advocates the methodological position in which people are both participants and observers at the same time. A manager cannot stand outside organisational processes that are the organisation and control them, direct them or perturb them in an intentional direction. Such intentions are only gestures made to others and what happens unfolds from ongoing responses - methodology of emergent inquiry (Stacey, 2003, p.413). The notion of the 'edge of the chaos' (eotc) from this perspective is not the one of others where managers nudges/pushes the system into instability and crisis, and puts people under more stress until they are motivated to change and unleash the power of self-organisation which removes stress. Here 'eotc' is free-flowing conversation, where the pattern of people's interaction provides good enough holding of anxiety in facing unknown. Stress and crisis cannot contain anxiety, rather they increase it. Exciting patterns of relationship in free-flowing conversations are safe enough not terrifyingly stressful. |

| Dealing with paradox | Paradox is not central to SC, LO, KM, cop, chaos and complexity theories. Contradictions, tensions, and dilemmas are recognised but seen as resolvable through good management. This view is rooted in the systemic underpinning of all these theories – systems thinking is essentially concerned with eliminating paradox in dualistic thinking. In psychoanalytic theories, paradox is seen as fundamental to human life. (see developments in) CRP | | | | | - The individual and the group are paradoxically formed by and are forming each other simultaneously. Paradox of predictability and unpredictability important. - Paradox cannot be resolved or harmonised, only endlessly rearranged. |
Form 1

Covering note

I would like to invite you to participate, as part of your course experience, in a research study which intends to contribute to the development of the project management body of thought and the intellectual foundations of this subject area in a way which is relevant to, beneficial for, and reflects the world of practice.

The research is designed for academic purposes only and takes the form of a participative interpretative research design, known as 'cooperative inquiry'. I am interested in

- the interpretation of the experiences that people have with projects and project management,
- the nature of these phenomena in specific organisational contexts, the nature of activities required to be performed, and knowledge used by practitioners to cope with complexities of projects
- reconstruction of the intellectual system on which project management as an academic field of study and a practising discipline is based;

The empirical material which I would like to generate should fully reflect your experiences with projects, project management and project organising, as you are practitioners who face projects frequently if not on a daily basis. The method is known as active interview. It would involve your initial considerations of the six questions enclosed in the attached document and then a conversation during which I would like to record the detail of your experiences, accounts and reflections (written and verbal) on the issues raised. The interviews will be arranged and scheduled to take place either within the regular class sessions or outside the class, at your convenience.

The empirical material that you provide will be analysed with the aim of developing theory of practice. The evidence, transcripts and records of the interviews will be treated with sensitivity and strict confidentiality. The outcomes of the research process will be made transparent and will be integrated with course / class discussions. Your feedback will be invaluable and highly appreciated.

Please consider the six questions in the attached document to start with, and please let me know if you object to your further participation in this research project.

Thank you.

Svetlana Cicmil
Bristol Business School
UWE
Bristol

e-mail: Svetlana.Cicmil@uwe.ac.uk
tel: 0117 344 3464
fax: 0117 344 2289
Form 2

1. Use words or images to, as closely as possible, represent your experience and understanding of the situations labelled as ‘PROJECT’.

   (this is then followed by further prompts – expanding the narrative about a particular project situation to enrich the account and interpret the meaning behind the initial response)

2. What are, from your experience, the most challenging issues that organisational members face during their involvement in such situations? Which of those are most difficult to cope with?

3. Using words and/or drawings of your own choice, please describe your experiences with PROJECT MANAGEMENT as it is practised in your working environment.

   (this is then followed by further prompts – expanding the narrative about a particular project situation to enrich the account and interpret the meaning of the initial response)

4. What are, in your view, the most critical issues surrounding the role of project managers in your working environment? How does your organisation facilitate this role?

5. In your view, what areas of knowledge, awareness and behaviour are most relevant to the practitioners of involved in project work? Which of those areas require most urgent / fundamental developments?

   (this is then followed by further prompt, such as - If you were in a position to develop a training scheme in project management to an audience with a professional profile similar to your own, what knowledge areas would you cover and why)?

6. How is relevant project management knowledge created, captured, retained, shared and utilised in your organisation? What is the role of learning from experience?

   (this is then followed by further prompts - e.g. If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications for life within your working environment, what would you say?)

Please state:

Industrial sector / type of business you are involved in:

Your professional qualification and position in the company:

Your experience with projects:
- project manager
- project team member
- member of senior management team / decision making group
- functional manager facilitating projects
- end user of project outcome
FORM 3

BACKGROUND AND ROLE OF THE PARTICIPANT  
(Participant Code: )

PROJECT CLASSIFICATION: by type, by contractual / procurement arrangement, by size, by duration, by end product / deliverable; (Project Case No)

YEAR / TIME SPAN

INDUSTRY / CONTEXT

PROJECT

ORIGINAL NAME:

STATUS AT THE TIME OF INTERVIEW

PERFORMANCE

COMMENTS, REFLECTIONS, INTERPRETATIONS OF:
Project goal, reason, benefit,
Performance
Interaction / Communication
Individuals / groups /Politics / stakeholder agenda / organisation
Critical issues
Knowledge and skills

ASSUMPTIONS MADE ABOUT MODELLING AND REPRESENTATION OF THE PROJECT (what is seen as important/not important)

VIEW ON MODES OF LEARNING AND TYPES OF KNOWLEDGE USEFUL FOR UNDERSTANDING AND ANALYSIS OF CRITICAL ISSUES IN PROJECT MANAGEMENT

OTHER INSIGHTS AND MY REFLECTIONS (particular narrative themes, subtle issues, gestures, artefacts, cross-reference to other empirical material)

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Project Management

Please indicate:
Industrial sector / type of business you are involved in

Your professional qualification and position in the company

Sales director.

1. Please use graphical and textual means (drawings and words) of your own choice to represent the images, perceptions, understanding and experiences that you have or hold of PROJECTS and PROJECT MANAGEMENT.

2. What 'real-life experience' have you already got in terms of your involvement and participation in project situations.

Setting up of H+S System within organisation.

Gaining 6.6A Standardisation for production.

Setting up the organisation.
3. If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications to life within your working environment, what would you say?

- Teamwork / lack of formal hierarchy.
- Knowledge of all staff important as everyone is involved in all projects.
- Everyone is part of each project.

4. If you were in a position to teach a course in project management with a professional profile similar to your own, what critical areas and skills would you focus on and why?

- Capital requirements / expected returns
- Staff motivation / involvement / teamwork
- Design / implementation / degree of complexity of project
- Time scales
- Assessment of results / how to analyse failure or success

- A4 - vision
  - ideas about sustainability of project
  - ideas about leadership of project... "communication interaction"
  - major uncertainties
Project Management

Please indicate:
Industrial sector / type of business
Your professional qualification

1. Please use graphical aids to represent the images, per PROJECTS and PROJECT MANAGEMENT:

- Requirement → IDEA/CONCEPT
- Resources → PLAN
- Personnel → PROJECT
- Expertise → RESOURCES
- Management → EVALUATION

2. What ‘real-life experience’ have you already got in terms of your involvement and participation in project situations.

No project experience in commercial situations.
3. If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications to life within your working environment, what would you say?

If embarking on a project ensure that it is sustained, followed through and actually evaluated and complete.

4. If you were in a position to teach a course in project management to an audience with a professional profile similar to your own, what critical areas would you cover (i.e. what knowledge areas and skills would you focus on and why)?
Please indicate:
Industrial sector / type of business you are involved in
Your professional qualification and position in the company

Pathology in NHS, Chief Path (Section Head)

1. Please use graphical and textual means (drawings and words) of your own choice to represent the images, perceptions, understanding and experiences that you have or hold of PROJECTS and PROJECT MANAGEMENT.

Please indicate:

- Objective
- Formation of a team
- Monitor progress
- Consider problems + solutions
- Organise strategy + implement

2. What 'real-life experience' have you already got in terms of your involvement participation in project situations.

Current: - Purchasing new computer system for dept. + access for Avan via web.

Past: - Relocation of dept.
      - Building work in refugee camp.
3. If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications to life within your working environment, what would you say?

Generally managing a project is not carefully monitored. Deadlines & feedback regularly. Self motivation is key or the project will not succeed.

4. If you were in a position to teach a course in project management to an audience with a professional profile similar to your own, what critical areas would you cover (i.e. what knowledge areas and skills would you focus on and why)?

- Think beyond your segment of the profession/department. (danger of partial solution)
- Talk to others as much as possible.
Industrial sector and type of business you are involved in:

**Mobile Communications - Information Systems dept.**

Your professional qualification and position in the company:

**IS Licensing Manager.**

Your experience with projects:
- project manager ✓
- project team member ✓
- member of senior management team / decision making group
- functional manager facilitating projects
- end user

1. Please use graphical and textual means (drawings and words) of your own choice to represent the images, perceptions, understanding and experiences that you have or hold PROJECTS and PROJECT MANAGEMENT.
2. If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications for life within your working environment, what would you say?

(a) Projects do not always deliver their objectives.
(b) When funding is requested/justification forms proposed objectives which are subsequently never met.
(c) Many aspects of project management result in issues that are discovered once the project is delivered.

3. If you were in a position to develop a training scheme in project management to an audience with a professional profile similar to your own, what critical areas would you cover (i.e. what knowledge areas and skills would you focus on and why)?

Communication between employees/resources.
Understanding overall objectives.
On time.
Within budget.

Communication interaction.
Please indicate:
Industrial sector / type of business you are involved in: Meat products industry
Your professional qualification and position in the company: Production Manager

1. Please use graphical and textual means (drawings and words) of your own choice to represent the images, perceptions, understanding and experiences that you have or hold of PROJECTS and PROJECT MANAGEMENT.

2. What 'real-life experience' have you already got in terms of your involvement and participation in project situations.

- Machinery introduction and Commissioning - inconclusive Intalment
- Change Management + attributes.
- New Seasoning Raw Process Changes + Equipment
- Personnel Cooperation Levels.
- Levels of Funding
- Expectations of Projects "Miracle Cures" - Actual outcomes
1. Please use graphical and textual means (drawings and words) of your own choice to represent the images, perceptions, understanding and experiences that you have or hold of PROJECTS and PROJECT MANAGEMENT.

2. What 'real-life experience' have you already got in terms of your involvement and participation in project situations.

- REDEVELOPMENT/REFITTING LABORATORY
- ATTAINING ACCREDITATION
- INTRODUCING MX60 RATE ON CALL SYSTEM
3. If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications to life within your working environment, what would you say?

- **Adherence to Regulations**
- **Red Tape**
- **Working within a Team** (Compromise)

4. If you were in a position to teach a course in project management to an audience with a professional profile similar to your own, what critical areas would you cover (i.e. what knowledge areas and skills would you focus on and why)?

- **Legislation** - Follow Requirements/Regulations
- **Co-Operation** - Communication - Need to Integrate
- **Flexibility** - Modify Requirements to Meet Stakeholders' Criteria
- **Endurance** - Meetings to Discuss All Process Elements
4. What 'real-life experience' have you already got in terms of your involvement and participation in project situations.

I'm responsible for managing the development of a number of projects which are all service-based, e.g., a project to develop mechanisms for ensuring that young people in care are not further abused by the Care System.

I am currently responsible for implementing a performance management strategy which will require project management.
If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications to life within your working environment, what would you say?

Not well resourced - often 'add-ons' to the organisation - not monitored and reviewed as well as they should be. The organisation is not a good finisher.

4. If you were in a position to teach a course in project management to an audience with a professional profile similar to your own, what critical areas would you cover (i.e. what knowledge areas and skills would you focus on and why)?

Define your project. Be clear what it would like if you'd finished it. Set clear goals + objectives. Resource it well.
Project Management

Please indicate: New Mathematics (Science, Fast Stabilisation)
Industrial sector / type of business you are involved in: Fresh Produce (Migrant Workforce)
Your professional qualification and position in the company:

1. Please use graphical and textual means (drawings and words) of your own choice to represent the images, perceptions, understanding and experiences that you have or hold of PROJECTS and PROJECT MANAGEMENT.

Having an idea, normally to benefit company.-looking at all consideration of development and carrying out project from idea to research, planning and inception of project.

2. What 'real-life experience' have you already got in terms of your involvement and participation in project situations.

Looking at changing from Handwritten Sales System to computerised point of sale equipment.
Both financial & Non - Financial considerations.
Looking at tele-Cons systems - both purchase of systems and least - cost routing of calls.
Application for export licence for New Zealand apples & pears.
Viability of setting up own pre-packing facility as opposed to paying another company.
3. If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications to life within your working environment, what would you say?

Costs are not the only issue to be looked at.

A cheaper alternative may cause great upheaval and be less beneficial to the company in the long run.

4. If you were in a position to teach a course in project management to an audience with a professional profile similar to your own, what critical areas would you cover (i.e. what knowledge areas and skills would you focus on and why)?

Getting everyone involved in the project to see the benefits for themselves for a project to work, everyone must believe in it.

\( \text{Eq 1} \quad \frac{7}{8} \)
Please indicate:
Industrial sector / type of business you are involved in
Your professional qualification and position in the company

1. Please use graphical and textual means (drawings and words) of your own choice to represent the images, perceptions, understanding and experiences that you have or hold of PROJECTS and PROJECT MANAGEMENT.

2. What 'real-life experience' have you already got in participation in project situations.

Building houses
Running Houston Rescue TEC
Installing TAF
Changing operating practices
Building Royal Mail sorting

A (oney ear)
B (common)
D (independent time/spaces)
F (no commitment)

User needs for issues 3, 5, 6

Experience
Paper waste sorting
3. If you were in a position to advise newcomers to your organisation at any level, about critical issues related to the performance and management of your projects and their implications to life within your working environment, what would you say?

Ego's
Politics
Communication
Men

You will rarely achieve what you want. You need to be aware of your own requirements.

4. If you were in a position to teach a course in project management to the audience of a professional profile similar to your own, what critical areas would you cover (i.e. what knowledge areas and skills would you focus on and why)?

Gaining an understanding of what the project objective is - surfacing individual agendas.

Understanding how loyalty to other communities can distort the project process.

Understanding how to achieve win-win outcomes.
1. Using words and/or drawings of your own choice, please describe your experiences with PROJECT MANAGEMENT as it is practiced in your working environment.

Project management is the skill of managing a team of people in such a way as to complete a project. It is also a buffer against external pressures (client, own management, etc.) that could be damaging to individuals within the team.

2. Use the image that as closely as possible represent the way you experience and understand the phenomenon called PROJECT.

![Diagram of project management with umbrella symbolizing protection]

Svetlana Csemil, BBS, UWE
Svetlana.Csemil@uwe.ac.uk
3. What are, from your experience, the most challenging issues that practitioners face during their involvement in projects? Which of those are most difficult to resolve?

The success of being all things to all people. The most difficult part of the job being live need to provide the client with everything the need and also maximising the profit from that client.

4. What are, in your view, the most critical issues surrounding the role of project managers in your working environment? How does your organisation facilitate this role?

The most critical issue is ultimately communication. This is a system that needs a good judgment in order to provide the right balance.
5. What are, in your view, the areas of knowledge on which project practitioners should rely or should be familiar with, in order to improve their contribution to project success? Which of those areas require most urgent / fundamental developments?

6. How is relevant project management knowledge created, captured, retained, shared and utilised in your organisation? What is the role of 'learning from experience'?

Please state:

Industrial sector / type of business you are involved in

Construction

Your professional qualification and position in the company

Quantity Surveyor - BSc

(Simon Evans)
1. Using words and/or drawings of your own choice, please describe your experiences with PROJECT MANAGEMENT as it is practiced in your working environment.

Fixed structure on sites, team meetings, promenades, integration with the client, seem to be split between programme requirements (getting the job done on time) and the commercial aspect. Needs better links and real time information.

Success depends on how good a strong the project manager is and the team he builds.

2. Use the image that as closely as possible represent the way you experience and understand the phenomenon called PROJECT.

Objective to build a certain structure which involves the creation of a team, consisting of various skills and disciplines to complete. Normally a bespoke operation.
3. What are, from your experience, the most challenging issues that practitioners face during their involvement in projects? Which of those are most difficult to resolve?

"Often receiving design information early enough to plan the project and ensure resources and commercial issues can be addressed properly. Traditional contracts were easier to project manage, when the goal posts constantly change, it makes the tasks far more problematic."

4. What are, in your view, the most critical issues surrounding the role of project managers in your working environment? How does your organisation facilitate this role?

"Working as a team, not individual units. The PM must always have a big picture view and direct/lead his team towards that goal.

The company does run team building exercise courses at the beginning of contracts with the client to help build up team spirit and relationships."
5. What are, in your view, the areas of knowledge on which project practitioners should rely or should be familiar with, in order to improve their contribution to project success? Which of those areas require most urgent / fundamental developments?

Need good management skills (people management)
Need good planning skills
Need information management.

Planning seems to be the most urgent issue with information management. Need to know, at a snap shot, what has been done, cost, what has to be done, how much time to do it in. No systems or process company tender / programme / costs / work complete.

6. How is relevant project management knowledge created, captured, retained, shared and utilised in your organisation? What is the role of 'learning from experience'?

Skanska have a skills database at head office where experience is noted. However, perception of success is normally responsible for choosing project manager for new contracts.

Please state:

Industrial sector / type of business you are involved in

UK CIVIL ENGINEERING

Your professional qualification and position in the company

PROCUREMENT MANAGER

CIPS, Certificate in Management, Diploma in Purchasing.

Svetlana Cemul, BBS, UWE
Svetlana.Cemul@uwe.ac.uk

Rob Bohunski.
1. Using words and/or drawings of your own choice, please describe your experiences with PROJECT MANAGEMENT as it is practiced in your working environment.

- Damage limitation
- Identification of key milestones and organisation of resources to achieve them in step by step process to completion
- Social interaction with common goal

2. Use the image that as closely as possible represent the way you experience and understand the phenomenon called PROJECT.
3. What are, from your experience, the most challenging issues that practitioners face during their involvement in projects? Which of those are most difficult to resolve?

- Keep eye on big picture
- Conflict of interests - steering through
- Effective communication

4. What are, in your view, the most critical issues surrounding the role of project managers in your working environment? How does your organisation facilitate this role?

- Finishing on time
- Keeping within budget
- Forging the table
- Changes to adapt to changes
5. What are, in your view, the areas of knowledge on which project practitioners should rely or should be familiar with, in order to improve their contribution to project success? Which of those areas require most urgent / fundamental developments?

- Communication techniques
- Contractual detail obligations
- Planning
- Contractual understanding

6. How is relevant project management knowledge created, captured, retained, shared and utilised in your organisation? What is the role of 'learning from experience'?

- Watching others
- External training courses
- It is not shared.
- Limited.

Please state: 

Construction contractor

Industrial sector / type of business you are involved in

Your professional qualification and position in the company

Senior engineer, MICE.
1. Using words and/or drawings of your own choice, please describe your experiences with PROJECT MANAGEMENT as it is practiced in your working environment.

2. Use the image that as closely as possible represent the way you experience and understand the phenomenon called PROJECT.
3. What are, from your experience, the most challenging issues that practitioners face during their involvement in projects? Which of those are most difficult to resolve?

- **Time Constraints.**
- **Development of Team in Short Time.**
- **Administering Client Alterations.**

4. What are, in your view, the most critical issues surrounding the role of project managers in your working environment? How does your organisation facilitate this role?

- **Control of Sub-Contractors.**
- **Relationship with Client.**

Svetlana Cicmil, BBS, UWE
Svetlana.Cicmil@uwe.ac.uk
5. What are, in your view, the areas of knowledge on which project practitioners should rely or should be familiar with, in order to improve their contribution to project success? Which of those areas require most urgent / fundamental developments?

IMPROVED COMMUNICATION BETWEEN THE PROJECT MANAGER AND HIS TEAM.

6. How is relevant project management knowledge created, captured, retained, shared and utilised in your organisation? What is the role of 'learning from experience'?

MENTORING BY SUPERIORS.

FORMAL TRAINING.

LEARNING IS ASSESSED ANNUALLY AND ACTION TAKEN.

Please state:

Industrial sector / type of business you are involved in

CONSTRUCTION INDUSTRY / UK CIVIL ENGINEERING

Your professional qualification and position in the company

B. ENG. C. ENG. MICE - AGENT

Svetlana Cimnul, BBS, UWE
Svetlana.Cimnul@uwe.ac.uk
1. Using words and/or drawings of your own choice, please describe your experiences with PROJECT MANAGEMENT as it is practiced in your working environment.

_Project Management as a theory should work on a construction site; however, due to resource and time problems the Project Manager rarely has the opportunity to practice the theory. The Project Manager tends to be drawn into the day to day issues and misses the "big picture."_

_Project Management seems to be with the site management team and does not filter down to the actual site team who have little concern of regarding Project Management._

2. Use the image that as closely as possible represent the way you experience and understand the phenomenon called PROJECT.
3. What are, from your experience, the most challenging issues that practitioners face during their involvement in projects? Which of those are most difficult to resolve?

- Relationships with other members of the team
- Defining the goals (for all people, not for each organisation)
- Managing the risks
- Maintaining the program

The most challenging are
- Defining the goals
- Managing the risks

4. What are, in your view, the most critical issues surrounding the role of project managers in your working environment? How does your organisation facilitate this role?

1.0 - The project manager should always be able to see the "big picture".

2.0 - Should have a knowledge of the programme and set his plans accordingly.

3.0 - Should form and maintain a well structured team with good relationships and communication.

Unfortunately, time restraints can prevent 1.0, where possible a full time planner is used to facilitate and prepare the plan to help in 2.0, partnering and team building workshops are used for 3.0.

Svetlana Cicmil, BBS, UWE
Svetlana.Cicmil@uwe.ac.uk
5. What are, in your view, the areas of knowledge on which project practitioners should rely or should be familiar with, in order to improve their contribution to project success? Which of those areas require most urgent / fundamental developments?

Programme and Planning  
Budget Control  
Team Building  
Risk Management  
Communication Skills

What are the areas of knowledge which would help all the above.

6. How is relevant project management knowledge created, captured, retained, shared and utilised in your organisation? What is the role of 'learning from experience'?

Mainly in house: training courses which allow transfer of knowledge  
Word of mouth from Project Manager to Project Manager.

Please state:

Industrial sector / type of business you are involved in  
Civil Engineering

Your professional qualification and position in the company  
- Chartered Quantity Surveying  
- Managing Quantity Surveyor

Svetlana Cimcil, BBS, UWE  
Svetlana.Cimcil@uwe.ac.uk