EXPLORING THE 'LIVED EXPERIENCE' OF PROJECT WORK WITH CONTINENTAL PHILOSOPHICAL PERSPECTIVES

A Thesis submitted by

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Abstract

In this thesis, it is demonstrated that Continental philosophical perspectives can assist in accessing, understanding and communicating the 'lived experience' of project work. For some time now there has been growing dissatisfaction with the theoretical foundations of the project management discipline and with the continued prominence of project failures. In this work, an alternative theoretical approach to the conceptualisation of project work and project managing is provided. It is demonstrated that this alternative approach enables the discipline to better access the realities or 'lived experiences' of project work and to develop tools or approaches that respond to these 'lived experiences'.

This thesis is 'by publication' and integrates six studies that have been published in international, peer-reviewed, project management journals. The six studies include both theoretical and empirical work and are thematically related in that their grounding is in Continental philosophy and the 'lived experience' of project work. The findings of this thesis include a new conceptualisation of 'what is a project' and 'what is project managing'. The thematic scope of a Continental philosophical agenda for the discipline of project management is also established. There is a contribution to our understanding of what is the *experience* of project work through the use of an arts-based research method. Finally, a new project management tool: **the project-space model** is theoretically developed and through an action research case study is found to have efficacy in the case study project.

The thesis has several important implications. Firstly, it provides further evidence of the value of exploring alternative frameworks for thinking about project work and, in particular, the value of the Continental philosophical lens. Secondly, the empirical research provides further evidence that project work is messy, dynamic and challenging, and pushes our capabilities and demonstrates that alternative research methods can be fruitful in disclosing this experience of project work. Additionally, a new tool (the project-space model) that is grounded in the theoretical constructs developed in this thesis is found to be a valuable tool in a case study setting. The project-space model is a new tool for the practitioner community.

Certification of Thesis

This Thesis is entirely the work of Bronte van der Hoorn except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Student and supervisors signatures of endorsement are held at USQ.

Associate Professor S.Jonathan Whitty

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Statement of Co-authorship

Article title	Authors	Percentage Authorship of Bronte van der Hoorn	Confirmation of Co-author
CHAPTER 3: A Heideggerian paradigm for project management: Breaking free of the disciplinary matrix and its Cartesian ontology	van der Hoorn, B Whitty, SJ	80%	
CHAPTER 6: Projectyness: A spectrum of greater or lesser capability	van der Hoorn, B Whitty, SJ	80%	

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Dedicated
to my amazing Mum

Additional works not forming part of the thesis

The following work was completed during the period of doctoral candidature and is of relevance to this thesis. However, these works do not form part of the examinable thesis.

Table 0.1: Additional works not forming part of the thesis

Title	Citation/link	Abstract/description
Signs to dogma: A Heideggerian view of how artefacts distort the project world **[Journal Article]**	van der Hoorn, B & Whitty, SJ 2015, 'Signs to dogma: A Heideggerian view of how artefacts distort the project world', *International Journal of Project Management*, vol. 33, no. 6, pp. 1206-19.	There are a variety of artefacts that are commonly associated with projects and their management. This article uses the Heideggerian concept of signs to disclose the elements of the 'lived experience' of project work that are veiled or distorted by these artefacts. The exploration also identifies the elements of the dominant thinking of project management (dogma) that are referred to by these artefacts. The reason for this veiling and distortion is discussed with reference to the linguistics concept of veiled intention. A key implication of these findings is that effort is being expended on these artefacts which reinforce thinking that is not aligned with the 'lived experience' of projects. It also indicates the relationship of the dominant project management dogma to the discipline's artefacts.
Let's discuss aesthetics for projects **[Journal Article]**	van der Hoorn, B & Whitty, S 2016, 'Let's discuss aesthetics for projects', *Project Management Journal*, vol. 47, no. 3, pp. 63 - 76.	Aesthetics is concerned with the knowledge and affects related to sensory experience and corporeality (the body). While there has been an increase in the literature based on non-positivist foundations and focusing on the ‘lived experience’ of projects, there remains a need to recognise aesthetic factors—for example dress, office layout, and body language—in the project experience. Aesthetics enable us to access facets of the project experience that are beyond the rational and analytic. This article uses Heideggerian concepts to explore this “missing mass” in project management and proposes the need for further research and education in this area.

Title	Citation/link	Abstract/description
The project-space model: A tool for sensemaking in projects **[Journal Article]**	van der Hoorn, B & Whitty, S In press2017, 'The project-space model: Enhancing sensemaking', *International Journal of Managing Projects in Business*, vol. 10, no. 1, pp. 185 - 202.	**• Purpose** This paper proposes the project-space model as interacting with sensemaking in the project context. There is currently minimal discussion of the tools used by project managers, teams and stakeholders to build their map of the project terrain or to make sense of a project's status. However, such sensemaking is critical to ongoing decision-making and action in any project. **• Design/methodology/approach** This paper uses framework analysis to examine the results of a completed action research case study that utilised a tool: the project-space model. Three frameworks are then utilised as a lens to examine how the project-space model interacted with sensemaking. **• Findings** The project-space model is found to enhance sensemaking within the case study. Specifically, it's visual nature, the focus it brings to the plurality of experience and the need for plausibility rather than precision in understanding. **• Research limitations/implications** The findings are based on a single case study. Further studies could be undertaken to confirm extensibility. **• Practical implications** The project-space model is identified as having a favourable impact on sensemaking in the case study project. There is a need to consider what other tools are currently used or could be used by project teams to enhance sensemaking. **• Originality/value** Empirical, contextualised case study research highlighting the value of the project-space model as a sensemaking tool. Contribution to evidence on the efficacy of the project-space model as a tool for project managers.

Title	Citation/link	Abstract/description
The project manager is condemned to be free: A continental model of angst in projects **[Conference Paper]**	van der Hoorn, B & Whitty, SJ 2015, 'The project manager is condemned to be free: A continental model of angst in projects', in *IRNOP 2015 Conference*: proceedings of the IRNOP 2015 Conference London.	This paper develops a continental philosophical model for angst (anxiety) in projects in an attempt to understand its sources and connections to the project manager's recurring practice of decision-making. The model is grounded in the work of Heidegger and Sartre. It combines the concepts of temporal unity; the anxiety and despair that results from the freedom and responsibility to choose and the uncertainty of how others may act; and how perceived current choices are informed by past actions. The model highlights the sources of angst in projects, the criticality of 'soft skills' for those involved in projects, and the effect of past experiences in the choices adopted by project managers and stakeholders.
Chocolates, cats, dips and loops: The lived experience of managing projects **[Conference Paper]**	van der Hoorn, B & Whitty, SJ 2015, 'Chocolates, cats, dips and loops: The lived experience of managing projects', in *IRNOP 2015 Conference*: proceedings of the IRNOP 2015 Conference London.	It is project work that powers the building, maintenance, and resilience of communities and enterprise. However, there has been a relatively limited exploration of the 'lived experience' of managing projects. This study uses an arts-based research method to elicit 16 project managers' personal experience of project managing. The findings indicate that project work is experienced as restoring messiness, confusion and disorder to certainty and order (often multiple times within the one project). The study further highlights the criticality of the professional capabilities (thrownness) of project managers to move teams from uncertainty to certainty to enable projects to deliver for community and enterprise.
From the project manager's desk: the lived experience disclosed **[Conference Paper]**	van der Hoorn, B & Whitty, SJ, 2015, 'From the project manager's desk: the lived experience disclosed', in *APROS/EGOS 2015 Conference*, Sydney.	This study uses the 'deskspaces' of project managers as a sign to their 'lived experience' of project managing. The paper contributes to the 'lived experience' project literature and adopts a non-traditional research method (using photography and focus-group discussions). The participants' deskspaces indicate that the experience of project managing includes an ongoing struggle to gather information on the unfolding situation they need to manage – all the while being watched.
Talking with Russian Dolls: revealing the project "lived experience" through Heidegger's spatiality and temporality **[Conference Paper]**	van der Hoorn, B & Whitty, SJ, 2015, 'Talking with Russian Dolls: revealing the project "lived experience" through Heidegger's spatiality and temporality', in *APROS/EGOS 2015 Conference*, Sydney.	This paper proposes the metaphoric tool of nested Russian Dolls through Heidegger's concepts of spatiality and temporality to reveal facets of the "lived experience" of project managing. The paper is a conceptual discussion of Heidegger's notion of space and time applied to the experience of project work. The metaphoric tool enables us to place the project manager's personal experience as primary; to access facets of the experience that may not be on the "official" record (because they were unknown or concealed); and highlights that there is a non-linearity and complexity in the task of project managing.

Title	Citation/link	Abstract/description
A "lived experienced" tool for managing and building project delivery capability **[Conference Paper]**	van der Hoorn, B, Duffield, S & Whitty, SJ, 2016, 'A "lived experienced" tool for managing and building project delivery capability', for *ANZAM Conference*, Brisbane.	This paper discusses a new, integrated tool-set for project managing. This tool-set is a response to calls for project managers to be able to apply new project managing thinking 'in practice'. The tool-set integrates the project-space model and the Syllk model. Together, they bring visibility to enablers and constraints to project delivery capability, and these learnings can then be integrated into the organisation's systems to build in a tailored manner ongoing project management capability. Specifically, the tool-set highlights the hindrances to project delivery and what capabilities need to be 'wired' into an organisation to remove them. This tool-set integrates into future organisational initiatives the learnings from concrete 'lived experiences' of project managing.
Gully & Friends **[Animation Series]**	https://www.youtube.com/playlist?list=PLvtub9pNjKQPUMM9soKWmQIaAhF-uVQ3c	This 16-part animation series uses Heideggerian concepts to reflect on the experience of project work. The objective of the series is to make this alternative philosophical lens for exploring the discipline accessible to a practitioner audience.
Lucy & Alfred **[Animation Series]**	https://www.youtube.com/watch?v=Gu1K1ityelU&list=PLvtub9pNjKQNxV3wGRzQjw3U8IQ5K5nF5	This nine-part animation series applies various Continental philosophical concepts to the experience of project management. The objective of the series is to make many of the concepts discussed in my publications accessible to a practitioner audience.

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1 Introduction

1.1 Background

The use of projects and project management is increasingly prolific in organisations across the globe (Morris 2013; Wells 2012; Winter, Smith, Morris, et al. 2006). No longer are projects just the domain of the construction sector or aeronautics. Today, we use the concept of projects and the practice of project management in a diverse range of sectors and for a variety of purposes: including banking and finance, transportation and telecommunications; manufacturing and utilities; health care and education (Holzmann 2013; Themistocleous & Wearne 2000; White & Fortune 2002). Furthermore, there is an entire supporting industry profiting from the propagation of bodies of knowledge and associated training and certification (Whitty 2011b; Whitty & Schulz 2006). In May 2015 there were over 462,000 members of the Project Management Institute in 205 countries and territories, and 660,338 Project Management Professional certified persons across the globe (Project Management Institute 2015).

However, the prevalence of "project failure" continues to be a dominant commentary (KPMG 2013; Moore 2015; Project Management Institute 2014a; Shergold 2015). Furthermore, there is a drive to reduce these failure rates including a plethora of recommendations on how this can be achieved (KPMG 2013; Moore 2015; Project Management Institute 2014a). Underpinning the traditional project management discourse is a Cartesian and positivist philosophy; a black and white, objective, frequently physical sciences-based view of the discipline (Bredillet 2004, 2010; Bredillet 2013; Cicmil & Hodgson 2006a; Rolfe 2011; Thomas & Mengel 2008). In 2006 the Rethinking Project Management Network marked a milestone for the discipline (Winter, Smith, Morris, et al. 2006). Resulting from two years of collaborative work and scholarly analysis, this network proposed a new research agenda to address the challenges facing the discipline (Winter, Smith, Morris, et al. 2006). Central to the agenda was a focus on the 'lived experience' and challenges of project management practice (Cicmil et al. 2006; Winter, Smith, Morris, et al. 2006). Further information on the network is provided in section 2.1.

The agenda proposed by the network has been embraced by various scholars. There have been proposals of alternative philosophical approaches to the discipline (Cicmil 2006; Hällgren & Soderholm 2011; Lineham & Kavanagh 2006; Rolfe 2011; Whitty 2011b) (refer section 2.2). There are propositions of alternative research methods to increase the scope of our understanding of practice (for example: Er, Pollack and Sankaran (2013); Leigh (2013); Whitty (2010a)) (refer section 2.3). Descriptions of the 'lived experience' have also become more prominent (for example: Lindgren and Packendorff (2006); O'Leary and Williams (2013); Packendorff, Crevani and Lindgren (2014); Shipton, Hughes and Tutt (2014)) (refer section 2.4). However, as per Svejvig and Andersen (2015), there remains considerable opportunity to continue contributing to the agenda. This thesis contributes to the ongoing exploration of project work in accordance with the agenda of the Rethinking Project Management Network. The thesis' contribution is multifaceted; however, at its core is accessing, understanding and communicating the 'lived experience' of project work.

1.2 Research approach

This thesis reflects the outcomes of 14 research studies that have been published in international peer-reviewed journals or presented at international academic project management conferences over the period of doctoral candidature. Six of these articles have been selected for formal inclusion in this thesis (refer chapters 3 - 8). However, the remaining articles are summarised in Table 0.1. They are also referenced throughout the thesis. The thesis has three themes (refer Figure 1.1):

- New thinking to access the 'lived experience'
- Accessing the 'lived experience'
- Communicating the 'lived experience'

Together, these themes provide an exploratory contribution to an increased understanding of and communication of the 'lived experience' of project work.

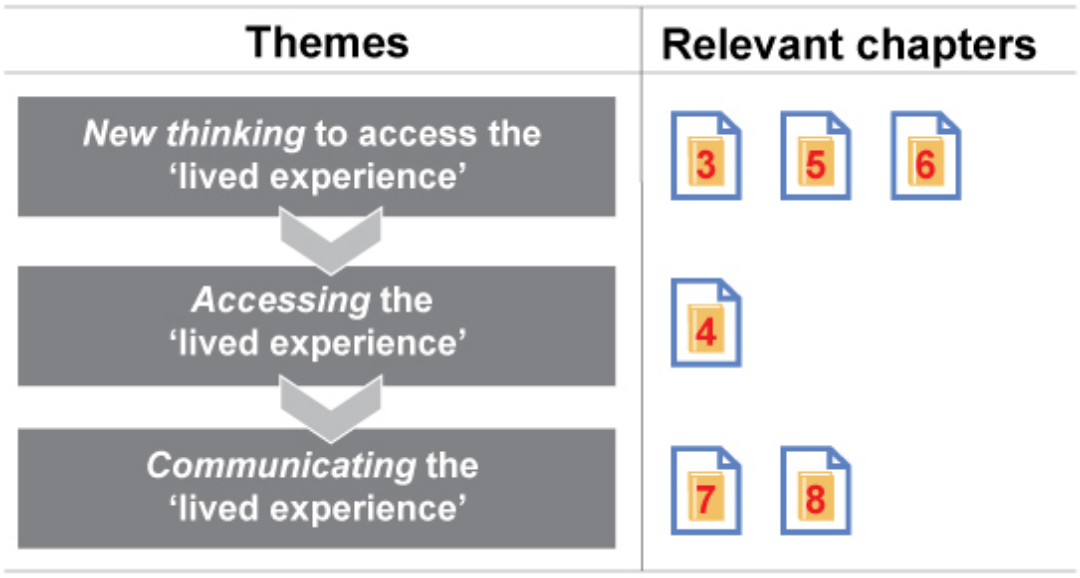

Figure 1.1: Thesis themes with chapters

1.2.1 New thinking to access the 'lived experience'

These studies are theoretical explorations drawing strongly on philosophical concepts. Chapters 3, 5 and 6 are work aligned with this theme. These works provide new ways of thinking about the discipline drawing on Continental philosophical concepts. The selected philosophical concepts have been chosen for their capacity to assist in disclosing the 'lived experience' of project work. It is argued that the philosophical perspectives proposed in these studies enable increased access to, and understanding of, the actuality of project work and its management. These Continental concepts stand in contrast to the traditionally dominant Cartesian, positivist and objective lenses. It is recognised that an inquirer's philosophical lens (or paradigm) will affect what is observed in a situation (O'Leary 2007). If we continue to use the same lenses in our exploration of projects and their management, we will continue to see the same things and likely remain mystified by their failings

(for example, refer Müller and Söderlund (2015) regarding replication of Type I and Type II errors in project management research).

In Chapter 5 significant attention is given to the term Continental philosophy, however, the term will be introduced briefly here. Continental philosophy is in contrast to Analytical philosophy. Currents of thinking aligned with Continental philosophy include: existentialism, the criticality of context, aesthetics, subjectivism, phenomenology and anti-scientism (Critchley 2001; West 2010). The work of Husserl, Heidegger, Sartre, Merleau-Ponty amongst others are associated with the Continental tradition (Brogaard & Leiter 2014; Critchley 2001; Levy 2003; Pasch 1959; West 2010). A Continental approach brings the unique, concrete and subjective experiences of project work into focus. It provokes inquiry into the emotional and personal aspects of project managing. As Critchley (2001, p. 11) states Continental Philosophy "seems to be truer to the drama of life, to the stuff of human hopes and fears and the many little woes and weals…".

1.2.2 Accessing the 'lived experience'

This alternative philosophical lens is used to examine the 'lived experience' of project work. Chapter 4 is an example of such a study - van der Hoorn and Whitty (2015d, 2015c) have conducted similar studies, but these have not been been included in this thesis (refer Table 0.1 for abstracts). These studies are important in building the discipline's understanding of what actually occurs in project work. Without understanding this actuality, the proposed refinement of project managing tools is bound to be problematic. As an analogy, it would be no different to building an IT system without understanding the user's requirements and their operating environment.

The work within this second theme is an empirical study that asked project practitioners about their experience of project work and project managing. In contrast to extant empirical work of this purpose, a key aim was to decrease the likelihood of practitioners relying on dominant project management dogma to describe their experience. Subsequently, arts-based research methods were used to encourage a more personal and less sanitised reflection on their experiences.

1.2.3 Communicating the 'lived experience'

The final theme builds on both prior themes and provides a strong contribution to practice. Chapters 7 and 8 reflect this theme. Their focus is in proposing and testing a new project managing tool: the project-space model. The project-space model is underpinned by the philosophical concepts examined in chapters 3, 5 and 6, and with the aim of reflecting the 'lived experience' of practitioners (as described in chapter 4 and similar studies). The tool mobilises the new philosophical approach 'in practice' and allows a project manager to discuss and communicate the 'lived experience'.

Figure 1.2 illustrates these themes and the mix of theoretical and empirical work across the Chapters in this thesis. Figure 1.3 is an expanded illustration showing all works that have been undertaken during the candidature with reference to these themes and research type.

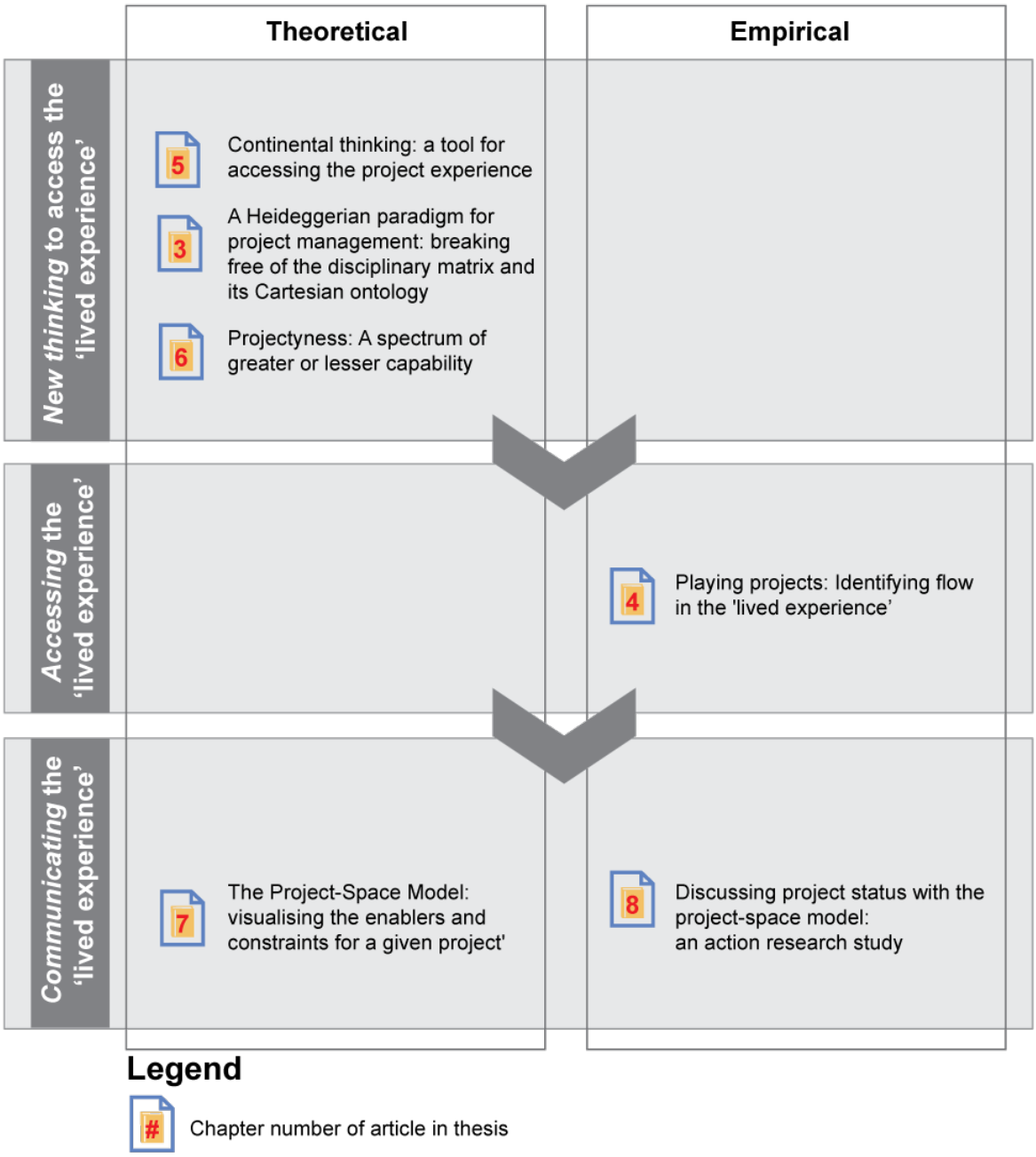

Figure 1.2: Thesis chapters by theme and study type

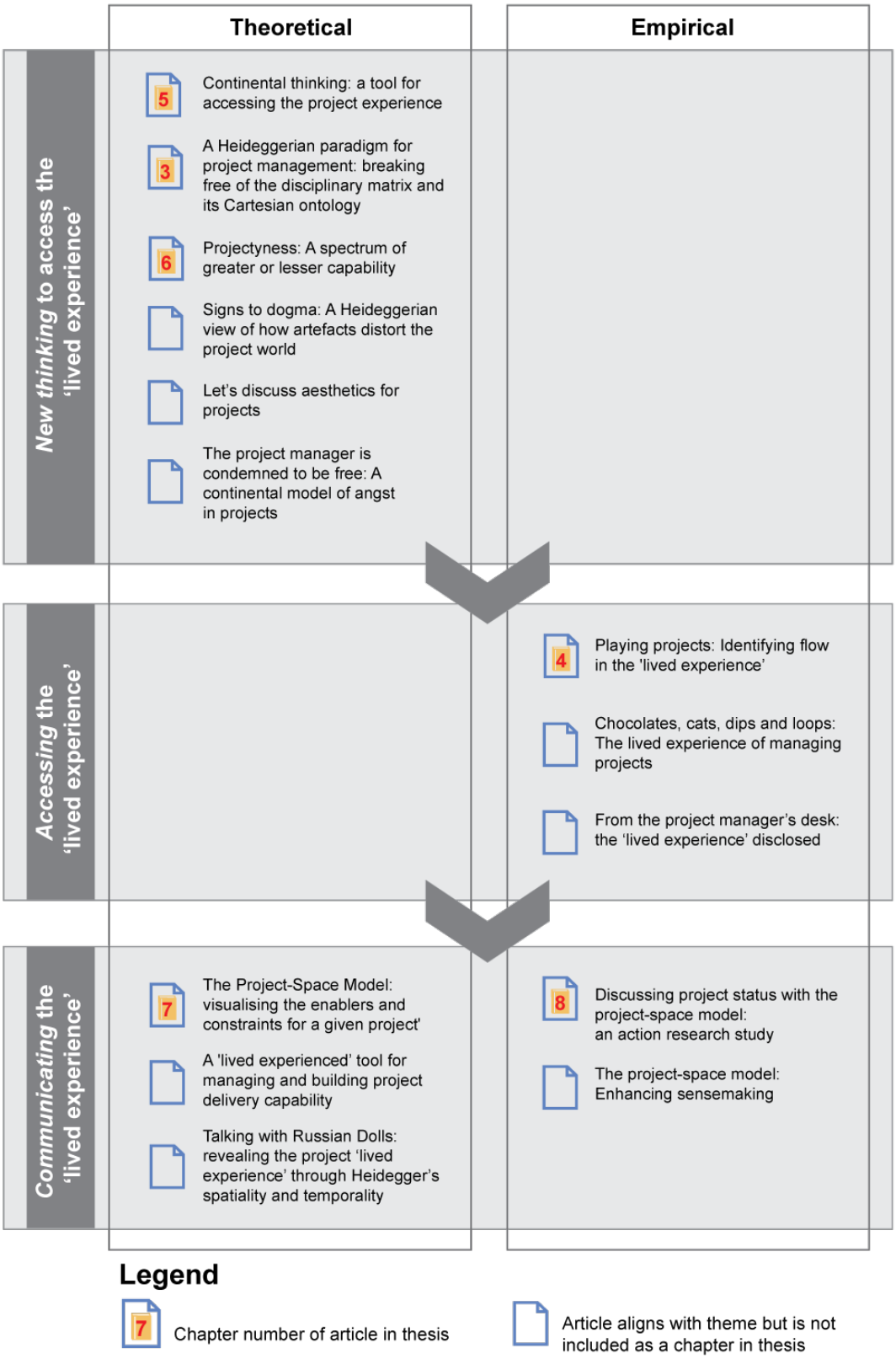

Figure 1.3: All relevant work by theme and study type

1.3 Synopsis

1.3.1 Literature review

The second chapter of the thesis provides a summative literature review. The literature examined is the grounding for the thesis' exploration and also the domains into which the thesis contributes. Firstly, an introduction to the Rethinking Project Management Network is provided. This is followed by a discussion of various alternative philosophical foundations for the discipline that have resulted from the network. Next, an overview of extant discussion on alternative project management research methods (stemming from this new thinking) is provided. Literature that has disclosed the 'lived experience' of project management is reviewed. Finally, and with reference to the final theme (communicating the 'lived experience'), is a review of existing tools within the project management domain.

1.3.2 Chapter 3

The first theoretical paper is "A Heideggerian paradigm for project management: breaking free of the disciplinary matrix and its Cartesian ontology" (published in the International Journal of Project Management). This paper was developed from a conceptual exploration of Martin Heidegger's *Being and Time* (1967). *Being and Time* (1967) was selected for exploration due to its holistic and non-positivist foundations and therefore provided a significant contrast to the positivist, reductionist foundations of much existing project management research and practice. Key concepts from *Being and Time* (1967) are discussed in the paper and these are used as a theoretical lens to consider the phenomena of project work. This experiment demonstrates how a change in theoretical grounding can significantly change our understanding of projects. This paper proposes an alternative definition of projects and a differentiation between 'project management' and 'project managing'. The findings of the paper triggered a further exploration of works grounded in a continental philosophical thinking. Chapter 3 provides an important contribution to the 'new thinking' theme.

1.3.3 Chapter 4

Whilst undertaking the initial Heideggerian theoretical work, the first empirical experiment was undertaken with the aim of accessing project managers' 'lived experience'. Aligned with the 'accessing 'lived experience'' theme, this experiment leveraged a new research method in project management: musical elicitation accompanied by the participant's narrative explanation. In this experiment, project managers were asked to improvise on a percussion instrument their experience of managing a project. The participants were then asked to explain why they had played what they had (i.e. to interpret for the researcher their improvisation). These experiments revealed an emotional perspective of project managing: the challenges and issues, ups and downs, the variations in their emotions during the project work. A similarity was identified between these findings and Csikszentmihalyi's flow theory concept. The findings also supported the Heideggerian definition of a project, particularly that it was an activity for which there was not inherent capability in the organisation or individuals undertaking it. This experiment is reported in the International Journal of Project Management paper: "Playing projects: Identifying flow in the 'lived experience'".

1.3.4 Chapter 5

Building on the insights that had been derived from the Heideggerian lens (chapter 3 and van der Hoorn and Whitty (2015b)) and a theoretical work drawing on Sartre (van der Hoorn & Whitty 2015a), attention was turned to Merleau-Ponty. These explorations, coupled with previous philosophical work resulted in what is a central theoretical paper in this thesis: "Continental thinking: a tool for accessing the project experience". This paper, published in the International Journal of Managing Projects in Business, discusses the 'currents of thinking' that are central to the continental philosophical approach. Existing examples of Continental work in project management are discussed and avenues of inquiry and insights that are likely to be derived from Continental philosophy are proposed. It highlights how this new thinking, a distinct contrast to the dominant analytical perspectives in project management can assist in disclosing the 'lived experience'. It emphasises the

subjectivity, the being-in (involved) nature, and contingent nature of projects that is observed through continental lenses.

1.3.5 Chapter 6

Building on the insights from chapter 3 and chapter 5, and with reference to the 'lived experience' disclosed in chapter 4 (and other publications – refer Table 0.1), this chapter further challenges the ontological foundations of the project management discipline. "Projectyness: A spectrum of greater or lesser capability" is published in the International Journal of Project Management and is the focus of this chapter. The chapter's aim is to propose that no activity is innately a project. Rather, what is experienced as project work is due to a lack of capability (for completing that task) by the people undertaking it. Furthermore, because capability is on a spectrum, it is possible to have greater or lesser capability for any task or work activity. Work is therefore on a spectrum of being more of less *projecty*. This chapter is philosophically and methodologically aligned with the preceding chapters in that it is grounded in continental philosophical concepts. This chapter's proposition is a radical shift from thinking of projects in terms of finite start and finish etcetera. In fact, with this new thinking, it is seen that at the core of project managing is the management of a lack or hindrances to capability.

1.3.6 Chapter 7

Having argued in van der Hoorn and Whitty (2015b) (a paper building on chapter 3), that the dominant project management artefacts did not reflect the 'lived experience' of project managers, this chapter describes the prototype of an alternative tool that would assist practitioners to disclose their current experience of the work they were managing**.** The tool draws on the concepts examined in the new thinking papers and the challenges faced by practitioners. The tool's purpose is to realise the discussed continental concepts in a highly pragmatic, practice-ready manner that assists project managers in 'communicating' the 'lived experience' (as disclosed, for example in chapter 4). A key objective was to move beyond compartmentalised thinking of project work and to provide a tool that enabled the project manager to have a conversation in concrete terms about where there were problems and where senior management attention was most needed (as per chapter 6 – where there were

hindrances to, or lacking capability). The paper "The Project-Space Model: visualising the enablers and constraints for a given project" explains the key features of the prototype tool (the project-space model), its anticipated use in practice, and the theoretical grounding for the prototype tool. The paper is published in the International Journal of Project Management. It is the first of two papers in the 'communicating the 'lived experience'' theme.

1.3.7 Chapter 8

The final paper in this thesis is the article "Discussing project status with the project-space model: an action research study". This paper, published in the International Journal of Project Management provides empirical testing of the project-space model proposed in chapter 7. An action research method is employed to assess the impact of the tool in enabling the project manager to discuss with the project board (and project team) the constraints (barriers to capability) and enablers to the case study project's progress. The tool is seen to be valuable in providing a concrete and holistic method of communicating the reasons for the project's status (particularly where the project board's attention is required). The project manager describes the tool as being able to communicate their 'lived experience' of the project and that it can trigger conversation that enables this 'lived experience' to be dealt with. This chapter demonstrates a mobilisation of some of this new thinking in a practice context.

1.3.8 Discussion

This chapter draws together the prior chapters into a series of significant contributions. The contributions are grouped into four themes. It is noted that additional works not forming part of the thesis, but undertaken during the candidature have been linked to the relevant contributions, where relevant. The primary contribution is that through adopting a continental philosophical perspective there is an ability to access the 'lived experience'. And through a tool such as the project-space model (grounded in this new thinking) to communicate and discuss this 'lived experience' of project work. This contribution is proposed to be significant given that it identifies an alternative way to consider the discipline and therefore perhaps to gain traction in improving how we understand project work, and therefore our approach and expectations regarding its management.

1.3.9 Conclusions, implications and future research

In the closing chapter, a summary of the contribution to the discipline is articulated. This is followed by a discussion of the theoretical and practical implications of this contribution. Limitations of the thesis and opportunities for future research are also discussed. In this thesis, alternative thinking is examined. Thinking, which is shown to bring us closer to dealing with, and communicating the 'lived experience' of project work.

2 Literature Review

This chapter provides a summary of the literature in which this thesis is grounded and into which it makes a contribution. Firstly, a brief introduction to the Rethinking Project Management Network is provided. This is pertinent as it was a catalyst for much of the other literature that this thesis responds to. This is followed by an examination of the discourse on the philosophical foundations of the discipline and the alternative perspectives that have been proposed since the network. Next, discourse on new project management research methods that align with alternative research foundations is provided. In closing, actual examples of empirical 'lived experience' work are introduced. Such empirical work is important in understanding how the alternative research foundations and research methods result in a more practice-based understanding of project work (and therefore respond to the agenda of the Network). It is noted that more detailed literature reviews pertinent to each study are included in the relevant chapter.

2.1 Rethinking Project Management Network

The outcomes of the Rethinking Project Management Network are foundational drivers to this thesis. The outcomes of the network have been fundamental in the argument for alternative philosophical foundations in the discipline (refer section 2.2), the need for alternative research methods (refer 2.3) and in the necessity for research focussed on the 'lived experience' (refer 2.4). And this thesis contributes to these related domains.

The Rethinking Project Management Network was convened over a two year period (2004 – 2006) (Winter & Smith 2006). The Network was funded by the United Kingdom's Engineering and Physical Sciences Research Council and was a collaborative research program that engaged both practitioners and academics to determine a future research agenda for the discipline. Seven meetings were central to the network as were a series of sensemaking papers to capture key concepts (Winter & Smith 2006). A core process underpinning the work of the network was the reciprocity of theory and practice (Winter, Smith, Cooke-Davies, et al. 2006). That is, theory leading to practice; and practice generating theory. This recognition of the coupling of theory and practice also aligns with the approach grounding the work in

this thesis. The outcomes of the network were captured formally in an *International Journal of Project Management* special edition (Maylor 2006).

The potential agenda for future project management research gave a strong primacy to 'practice'. Specifically, 'Theory *about* practice', 'Theory *for* practice' and 'Theory *in* practice' (Winter, Smith, Morris, et al. 2006). The *about* theme is focussed on project complexity. The *for* theme recognises projects as social processes; value creation as the prime focus; and a broader conceptualisation of projects. The *in* theme highlights the importance of reflective practice. Other themes derived by the Network included criticism of the dominant bodies of knowledge, that the discipline's foundational theory is too narrowly focussed, and criticism of the intellectual and philosophical foundations of project management. These themes are also responded to in this thesis. For example, chapters 3, 5 and 6 propose alternative philosophical foundations.

As introduced above, practice is central to the Rethinking agenda. As such, it is no surprise that research on the 'lived experience' or actuality of projects is a strong theme that emerged from the Network. Cicmil et al. (2006) discuss this focus specifically highlighting the value in giving primacy to the 'lived experience' and that traditionally research has failed to draw on themes from the practitioners' experience. They reiterate the need to focus on praxis and context-dependent judgement. And for practitioners to reflect on and interpret their experience as a process of co-production and knowledge. Also in this 'lived experience' area is the concept of "espoused theories" versus "theories in use" (Argyris & Schon 1974). It is noted that Cicmil et al. (2006) reference Heidegger's work in their contribution to the Rethinking agenda and researching the 'lived experience'. Subsequent extant contributions to 'lived experience' are discussed in section 2.4.

However, a literature review by Svejvig and Andersen (2015) found that there is a significant opportunity for the network's thinking to be further developed and diffused amongst the discipline. They highlight that research on the actuality of projects and their social and political aspects remains minimal and there is a need to offer practitioners alternative project management practices. Again, and as will be discussed with greater specificity in sections 2.2 - 2.4, the work in this thesis responds to this call for further work reflecting the network's agenda.

2.2 The foundations of project management research

As introduced in section 2.1, the Rethinking Network called for alternative thinking or philosophical foundations for the discipline. In this section, examples of the extant discussion on these foundations and potential alternatives are summarised. However, before discussing these alternatives it is necessary to highlight the importance of foundational paradigms or philosophies in shaping project research and therefore knowledge.

Following the network, there was significant agreement on the limitations of the traditional foundations of the discipline. A variety of researchers commented on this. Cicmil and Hodgson (2006b, 2006a) criticise the traditional positivist foundations, particularly in terms of rationality and normativity and the limitations of these in the scope of inquiry. Blomquist et al. (2010) propose that the existing foundations are insubstantial in their ability to reflect practice. Rolfe (2011) also criticises the traditional normative approach in the discipline and its inability access facets of project work actuality. Bredillet (2013) too is critical of the traditional foundations, reiterating his sentiment from Bredillet (2004).

The concept of project management 'schools' is useful in understanding how paradigms and research philosophy affect research and knowledge. For example, Bredillet, Anbari and Turner (2008) propose nine project management schools. In a table, they effectively show how different influences (such as soft systems methodology, or operations research) can affect what becomes the key idea or focus of research and how projects are conceptualised (for example, "project as an algorithm" or "project as a billboard"). Gauthier and Ika (2012) suggest that ontology has received minimal attention in project research and propose an ontological framework with six elements. They argue that when you adopt one of these six positions you are excluding the other elements and therefore what knowledge is disclosed or accessible. Whitty (2013) also highlights the risk in not recognising the lenses we wear when examining projects. He draws on Plato, Aristotle, Locke, Hume and Kant and states that we need to be more vigilant to the metaphysical and epistemological assumptions in our inquiry. Finally, Söderlund (2013) proposes the need for differing foundational paradigms for research but there does need to be a

degree of integration or focus. He argues that there is a need for more research which is grounded in approaches that reflect project actuality.

The criticisms of the dominant paradigms or ontologies have been balanced with proposals of alternative thinking or research foundations (ontology and epistemology). For example, there is a drive for embedding a practice philosophy in research. Blomquist et al. (2010) argue for the concept of 'project-as-practice', and that there is a need to go beyond the bodies-of-knowledge and focus on what people actually do in projects. This concept focuses on actors and their actions rather than on models and their application (Blomquist et al. 2010). It has a bottom-up (rather than top-down) approach and is strongly subjectivist utilising qualitative research methods. This practice focus is also recognised by Bredillet (2004) and Bredillet (2013) who draws on Aristotelian concepts such as praxis and phronesis for their value in linking reflection, understanding, and action.

Adoption of a 'critical' approach has also been gaining momentum. Cicmil and Hodgson (2006b, 2006a) have highlighted how such approaches offer mid-range theories on different types of projects and that they enable the disclosure of oppression and exploitation in projects and enable a transition from 'performative' inquiry to a focus on the 'lived experience'. 'Critical' thinking tends to be more descriptive and grounded in empirical narratives with a focus on humans and their interaction. They also argue for engagement with all people involved and affected by projects (not just project managers).

Related to the 'critical' approaches is the recognition of 'being' versus 'becoming' thinking. Traditional project research thinking is associated with the more stagnant 'being' approach. Chia (2013) argues that the 'becoming' approach has links to continental philosophical concepts and that is has a relational focus. Lineham and Kavanagh (2006) state that a 'being' ontology aligns with production management and has inappropriately assumed as suitable for project management inquiry. They argue that the fluidity of 'becoming' thinking aligns with the dynamism of projects and is more authentic and 'human' for the project context.

An evolutionary approach has also been proposed as diversifying project management thinking and increasing understanding of the phenomena (Whitty 2011b). This

evolutionary approach is grounded in the work of Darwin and Dawkins and concepts such as co-evolution and memetics. This philosophy argues that current society is 'hardwired' for project management; that an emotional fix can be associated with project management behaviour; and that the tools and processes of project management have evolved to their current state, for reasons other than a proven evidence-base for project success.

As a final example, Rolfe (2011) challenges the discipline's research foundations by drawing on Rorty and Segal and continental philosophical thinking. He proposes that projects are better understood as an existential response to a crisis in an organisation, rather than the use of principles to deliver pre-agreed objectives (Rolfe 2011). Rolfe (2011) discusses projects are being a response to disruption in organisations and the futility of trying to control projects and he argues for the importance of the concrete rather than normative universalised thinking. He argues that the dominant foundations are from Descartes, Kant and Locke and would be better served by Heidegger, Dewey and Wittgenstein (Rolfe 2011).

The work in the following chapters responds to and builds on this literature that is challenging the philosophical foundations of the discipline to enable a disclosing of the 'lived experience'. It is the work of Rolfe (2011) which this work is most closely aligned due to its continental philosophical foundations. However, there is broad alignment with others such as Cicmil and Hodgson (2006b, 2006a) in their drive to move beyond an instrumentation focus and to capture narratives. Chapter 3 further extends the use of Heideggerian concepts in project work through a detailed theoretical study. Chapter 5 builds an argument for the nature of research disclosed by the currents of thinking in continental work more broadly. Additionally, chapter 6 draws strongly on Continental philosopher Merleau-Ponty which has not received coverage in the extant project literature. Chapters 7 and 8 demonstrate the use of these foundations to provide alternative approaches (or tools) for managing projects.

2.3 Alternative project management research methods

Aligned with the challenging of the discipline's theoretical and philosophical foundations and the proposition of alternative viewpoints, the discipline requires alternative (non-positivist) research methods. Since the Rethinking Network, there has been an increase in the discourse on new research methods for the discipline. As introduced in section 1.2.1, research philosophy and subsequent research methods will affect the nature of knowledge disclosed. Cicmil (2006) highlights the importance of quality research methods when adopting a critical interpretivist perspective. She highlights how careful selection of aligned research methods can provide an 'involved-in-the-world' perspective.

Case study narratives have been recognised as being valuable in disclosing the 'lived experience' (Marshall & Bresnen 2013; Nugapitiya, Boydell & Healy 2015). For example, Marshall and Bresnen (2013) undertook a historical case study analysis of the Brunel's Thames Tunnel build. Specifically, Marshall and Bresnen (2013) reflected on a variety of narratives from differing viewpoints on the build to disclose the plurality of the experience. Nugapitiya, Boydell and Healy (2015) argue for the value of auto-ethnography in the context of case studies as a way of giving voice to project practitioners. They highlight that this aligns with phenomenology (a continental philosophy concept) and interpretivism. They conceptualise this method as being a combination of autobiography and ethnography.

There has also been suggestion of drawing on psychology techniques/methods to disclose knowledge in the project discipline. For example, Whitty (2010a) draws on line drawings (previously used in psychology), which have been used to access the emotional psyche to disclose the 'lived experience' of project work. Rolfe and Segal (2011, pp. 50-1) use the psycho-therapeutic concept of "focussing" to provide an "embodiment of our lived experience as it is felt by people experiencing it". This is also a strongly phenomenological method which draws on the experiences of the body of a "felt sense". They argue such research methods assist in overcoming the over-emphasis on generalisations and abstracted theory. It is in the exploration of such research methods that this thesis provides a contribution. Specifically, chapter 4

discusses the use of musical improvisation to access the 'lived experience' of project managing.

Action research, activity theory, and actor-network theory (ANT) have also been proposed as being useful for bridging the theory-practice divide in project management (Er, Pollack & Sankaran 2013; Sankaran & Dick 2015). Er, Pollack and Sankaran (2013) address all three of these methods. ANT is grounded in social-constructivism and is useful in disclosing the way actors (including non-humans participants) interact (Er, Pollack & Sankaran 2013). Whilst having a pedagogical foundation, activity theory assists in examining human practices, particularly the process of work. Action research is a cyclical process, where a situation is assessed and a need for a change identified. An intervention is then made and the effect of the intervention assessed (Sankaran & Dick 2015). This cycle can then continue. There is growing use of action research within the discipline (Algeo 2014; Bourne & Walker 2008; Er, Pollack & Sankaran 2013). This research method is a very practical form of research where changes to project practice can be made and the efficacy of the change or intervention assessed. A further application of this research method is used in trialling the project-space model in chapter 8.

2.4 The 'lived experience' disclosed

In concluding this literature review, examples of extant empirical 'lived experience' research are provided. These are studies that actually present information about what was actually experienced in a project by the participants. It is also within this domain that this thesis provides a contribution (specifically chapters 4 and 8). Firstly, there are accounts in the literature that draw on practitioner-reflection. For example, O'Leary and Williams (2013) adopt an autoethnographic approach (a "practitioner's tale") to reflect on the social interactions and political aspects of a case study over a period of 18 months. The researcher was a participant-observer in this study and was able to disclose the conflict and tension of project work and that alignment-seeking was a core project management task. Similarly, Smith (2006) draws on a personal version of a project in a financial services organisation. His reflections find that we could argue either that project management practice fails, or rather that there are so many factors affecting a project that project work is continually requiring re-

interpretation. These insider's views disclose the messiness and challenges of project work.

Ethnography, in which the researcher is an observer only, has been proven to provide interesting insights for the discipline. For example, (Sergi 2012) studied an IT project from beginning to end; using the techniques of observation, interviews (n=22) and document analysis. Their ethnographic approach highlighted the many dilemmas experienced in practice. It resulted in a questioning of 'what is' 'best practice'. And it also demonstrated the complex balancing required in project work. Sampaio, Marinho and Moura (2014) used ethnography to examine project actuality in small software organisations in Brazil. They also used document reviews, interviews, and informal conversations. Their study found the use of agile principles and the minimal adoption of traditional project management practices.

Interviews have also been used in a variety of studies to access project actuality. Lindgren and Packendorff (2006) used interviews (five per project) with two case study projects and a 'critical' lens to explore projects as prisons. Their interviews disclosed how projects can actually result in those involved becoming obedient victims to the work. Such perspectives are not the findings of the dominant literature. Narrative (or story-based) interviews were used by Leong and Tan (2013) to study the 'lived experience' of mentoring in information systems project management. The study disclosed instances in which aspects of project management mentoring was most utilised.

The 'lived experience' of projects in healthcare are brought into focus in Suhonen & Paasivaara's (2015) study. This study examined Finnish healthcare projects from 2008-2011 through asking project managers to provide essays of their experience (n=11) and interviews with both project managers and other project team members (n=14). Their focus was to identify the challenges in this environment. In their findings, concepts such as organised chaos, power struggles, and the risk of burnout are featured. It is also recognised that co-operation is a key mechanism that enables the feelings of chaos to be dealt with (Suhonen & Paasivaara 2015). Savelsbergh (2016) reveal the 'lived experience' of project managing learning or skill development in their descriptive study. They interviewed 31 project managers using a timeline of a project manager's career and important events in this timeline as a

trigger for the discussion. This study highlighted that most learning was “accidental” and “on-the-job.”

2.5 Summary of literature review

In this review of literature that grounds this thesis, it is evident that there has been a growing interest in research that discloses the ‘lived experience’ since the Rethinking Project Management Network. However, as has been identified by Svejvig and Andersen (2015) there remains an opportunity to contribute to this domain. Specifically, to add further to the discourse on alternative philosophical foundations, new research methods, and empirical accounts of the ‘lived experience’. Additionally, as highlighted by Svejvig and Andersen (2015) there is also an opportunity to offer alternative tools and processes that reflect and support project actuality.

3 A Heideggerian paradigm for project management

3.1 Preamble

This chapter primarily includes the paper 'A Heideggerian paradigm for project management: breaking free of the disciplinary matrix and its Cartesian ontology' published in the International Journal of Project Management in 2015. The chapter highlights how the application of an alternative interpretative lens can affect our understanding of key concepts associated with project management.

The chapter begins by introducing the need for alternative perspectives to explore projects, and the calls for such perspectives to be explored. Then, through a detailed exploration of the Heideggerian concepts in *Being and Time*, and the application of these concepts to projects, it is shown how a non-Cartesian ontology transforms how we can define terms such as projects, project management, and project managing. For example, rather than projects being defined by their finite timespan (a Cartesian lens), through a Heideggerian lens, we can understand projects as being about the restoration of brokenness and a lack of inherent capability to do so. In summary, it highlights how critical our choice of interpretative lens, our research methodology, and our philosophical perspectives are in affecting our understanding of the phenomena. It reinforces the necessity to consider alternative lenses, and to go beyond the Cartesian lens, if we are to build a holistic understanding of projects. The work in this chapter is an important theoretical foundation for further chapters.

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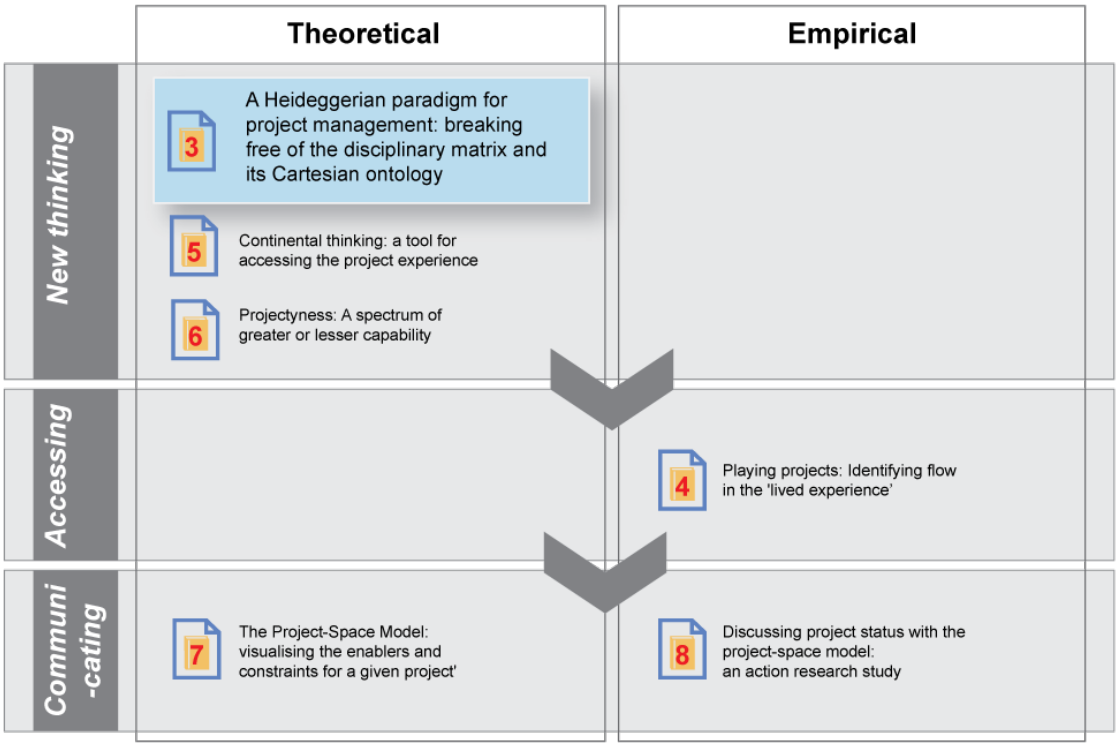

Figure 3.1: Chapter 3 positioning

A Heideggerian paradigm for project management: breaking free of the disciplinary matrix and its Cartesian ontology

3.2 Abstract

The purpose of this paper is to identify the new insights that emerge if key concepts in Heidegger's magnum opus *Being and Time* are applied to the phenomena of projects and their management. A theoretical approach is adopted with an introduction being provided to key *Being and Time* concepts, followed by the application of these concepts to the phenomena of projects and their management. A particular focus is on the relevance of Heidegger's ontology in underpinning the exploration of the 'lived experience' of project management and the disclosing of the actuality of project phenomena. It is found that key concepts in Heidegger's *Being and Time* (such as temporality, modes of being, being-in-the-world, dealing and the they) provide insights into various aspects of project management. The significance of such findings is demonstrated through a reconceptualisation of projects; and differentiation between, and reconceptualisation of, project management versus project managing.

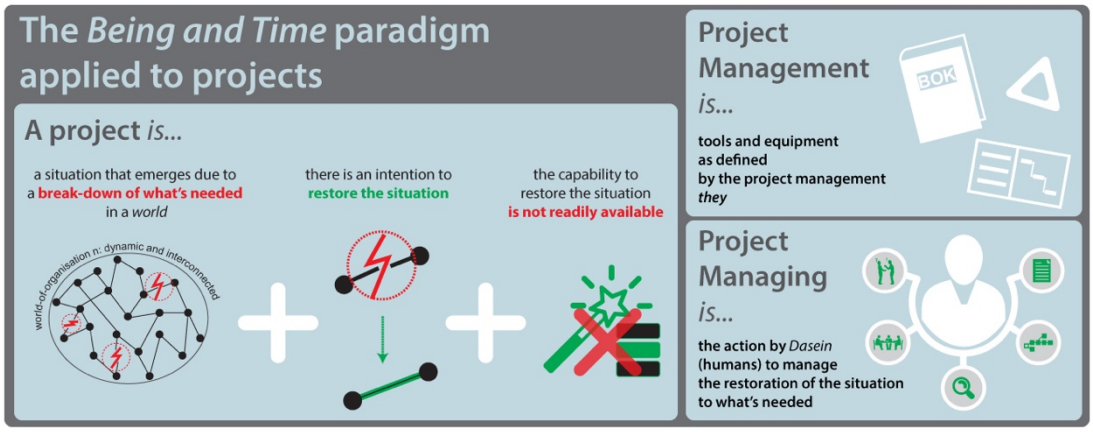

Figure 3.2: Graphical abstract: Heideggerian paradigm…

3.3 Introduction

Heidegger's *Being and Time* provides an alternative paradigm for considering the phenomena of projects. Traditionally, project research and practice have been underpinned by a Cartesian paradigm. Bredillet (2010) provides a detailed discussion of the theoretical perspectives, ontologies and epistemologies of the nine project management schools; identifying that four of these schools are underpinned solely by positivism and the remaining five have positivists components. The necessity to explore the use of a paradigm that breaks fully from this positivist perspective has been instigated by the 'lived experience' of project management discourse. This paper explores the application of Heidegger's *Being and Time* as an alternative ontology that can underpin a shift to a non-positivist paradigm for exploring projects and this aligns with the 'live experience' discourse.

This paper provides a brief overview of the literature related to this exploration. Key concepts of *Being and Time* are introduced and applied to the phenomena of project management. The discussion draws together a selection of insights from the theoretical exploration to demonstrate the significance of adopting such a paradigm. For example, we disclose the experiential differences between operational versus project work, and project management as compared to project managing. Because of space limitations this paper cannot provide a comprehensive identification of all insights that can emerge from a Heideggerian perspective, but it is a beginning. A detailed comparison of the outcomes of the Heideggerian insights to current perspectives or project management schools is also outside the scope of this conceptual investigation, and no doubt could be a paper topic in itself.

3.4 Literature Overview

3.4.1 Disappointment in delivery yet 'growth' in the discipline

We need not delve far into the project management literature, or indeed mainstream media, to see the ongoing dissatisfaction with projects and project management research (Bloch, Blumberg & Laartz 2012; Cicmil & Hodgson 2006a; Geraldi,

Maylor & Williams 2011; KPMG 2013; McHugh & Hogan 2011; PM Solutions Research 2011; Thomas 2006; Winter, Smith, Morris, et al. 2006; Zwikael & Bar-Yoseph 2004). Despite this, there continues to be a commitment by organisations to pursuing project management; ongoing growth in the number of project management methods/models/tools available; and in the uptake of certifications and memberships offered by the project management associations (Project Management Institute 2014b; Wells 2012). This situation begs the question, 'if projects are not delivering, why is project management as a discipline continuing to grow?'

3.4.2 Project Management schools and theoretical perspectives

As per Bredillet (2004), project management has evolved from a positivist paradigm which continues to dominate traditional tools, techniques and methods. Bredillet (2004, pp. 1-2) highlights that this foundation may be leading to the problems that have been noted in practice and is a "barrier to effective understanding and communication of the true nature of project management". Bredillet (2010) also provides a detailed discussion of the nine 'schools of project management', outlining their respective ontological, epistemological and theoretical perspectives. Smyth and Morris (2007) sampled the literature and found that over 66% of articles had a dominant positivist research epistemology. The literature was also examined by Pollack (2007) in terms of the soft versus hard paradigms. It was found that project management is predominately grounded in the hard paradigm associated with positivism. However, there is a growth in the adoption of a 'soft paradigm' in the literature that is associated with an interpretivist epistemology.

3.4.3 Move to 'lived experience'/being/becoming

The Rethinking Project Management network (Winter, Smith, Morris, et al. 2006) was a milestone in redirecting our thinking about projects and their management. This has been followed by a growing commentary on the need to capture the 'lived experience' of project management (Cicmil & Hodgson 2006b; Cicmil et al. 2006; Hodgson & Cicmil 2006; Lineham & Kavanagh 2006; Smyth & Morris 2007). Such discussions include concepts such as project management as "becoming" rather than "being" (Chia 2013; Lineham & Kavanagh 2006) and adopting new research methods

that embrace the relevance of context (Blomquist et al. 2010; Cicmil & Hodgson 2006a; Drouin, Muller & Sankaran 2013, Sec. 2; Smyth & Morris 2007).

The being/becoming discussion is of particular relevance to this paper as it recognises the ontological shift that is required to understand the 'lived experience' of project management. 'Being' ontology focuses on objects, things and states in an objectified and discrete manner. The 'becoming' ontology is interested in activity, process and dynamics (Lineham & Kavanagh 2006). The 'becoming' approach is in stark contrast to traditional project management ontology which is largely positivist and aligned with traditional, objectified scientific paradigms (Bredillet 2010; Cicmil & Hodgson 2006a; Lineham & Kavanagh 2006; O'Leary & Williams 2013; Packendorff 1995; Smyth & Morris 2007).

With the exception of this move towards a 'becoming' ontology, there is minimal discussion in project management regarding the ontology underpinning project management research and practice. Exceptions include a study by Smyth and Morris (2007) and Ahlemann et al. (2013) on the paradigms (and lack-thereof) underpinning project management research; and Morris' (2013) and Gauthier and Ika's (2012) discussions on ontologies in project management, including: realist perspectives, to post-modern and hyper-modern (i.e. becoming rather than being).

The drive towards understanding the 'lived experience' has been most evident in discussion and application of alternative research methods (Nocker 2006; O'Leary & Williams 2013; Wells 2012). We would highlight that these alternative epistemologies and research methods can only provide truly new insights (and demonstrate research methodology integrity (Cicmil 2006; Drisko 1997; Gauthier & Ika 2012; Saunders, Lewis & Thornhill 2009)) if there is a strong ontological foundation that aligns the research objectives, its epistemology, and research method.

3.4.4 Heidegger in the Project Management literature

Heidegger's Being and Time (1962) offers an ontological alternative to Cartesian subject-object dualism that, since Descartes, has not only underpinned the majority of positivist research (Laverty 2008; Orlikowski 2009), but has also dominated Western thinking at-large (Grof 1983; Seigel 2005). The potential application of Heidegger's

thinking has already been raised in the project management literature. For example, Sewchurran (2008) highlighted an alignment between projects as objects versus 'lived experiences' and Heidegger's comparison of theoretical attitude and signification, and makes a case for an alternative approach to the education of project practitioners. Sewchurran's (2008b) thesis highlighted that whilst there is a drive towards empirical work that explores the 'lived experience' of project management there is a need for an ontological shift to support this epistemological/methodological shift. Subsequently, Sewchurran draws on Heidegger and others to create a regional ontology to underpin debates in, and to improve information systems project management coherence (Sewchurran, Smith & Roode 2010).

Bredillet, Hatcher and Tywoniak (2013) draw on Heidegger from a praxis or projects-as-practice perspective. Muller, Sankaran and Drouin (2013) recognise Heidegger in terms of his influence on 'the practice turn'. In Cicmil et al. (2006) Heidegger's concept of *Dasein* is specifically referenced to highlight the concept of an involved-in-the-world-manager.

Such discussions have focused on particular components of Heidegger's work or have drawn on this philosophical approach as part of broader discourse. Consequently, there remains an opportunity to devote attention to a broad range of Heidegger's concepts and consider what specific insights they may provide to the phenomena of projects and their management at the level of fundamental ontology. Indeed, and as raised by Söderlund (2004), surely understanding what *is* project management and what is it to *be* a project manager is foundational to understanding the 'lived experience' of projects and their management.

3.4.5 Heidegger in related disciplines

Being and Time has received attention in allied disciplines that have also traditionally been underpinned by dualism and positivist research methods. For example, Introna (1997) explores information and power drawing on Heidegger's ontology. Sewchurran (2008) and O'Donovan and Roode (2002) also draw on Heidegger when discussing the ontology and emergence of the information systems discipline; and a model for conceptualising the emergence of discipline based on Heidegger's thinking is proposed. Heidegger has also been drawn upon in the discussion of business

strategy, particularly in terms of emergent strategy and the strategy-as-practice shift (Chia & Holt 2006; Tsoukas 2010).

In summary, there is an interest in discussion of ontology that supports exploration of the 'lived experience' of project management; and this has included preliminary references to the potential insights that can be derived by applying Heidegger's thinking to project management. However, these existing discussions are considered to be in their infancy.

3.5 Research Question

This paper is seeking to contribute to the literature on the ontology of a 'lived experience' approach to projects. Specifically, what new insights emerge if key concepts in Being and Time are applied to the phenomena of projects and their management?

3.6 Research Method

To follow is a theoretical exploration relating key concepts in Heidegger's *Being and Time* to the phenomena of projects. A comprehensive discussion and critique of the nuances of Heidegger's concepts and terminology in *Being and Time* is beyond the scope of the article. Rather, key concepts, such as *modes of being*, *temporality*, and *being-in-the-world* are used as a framework, a paradigmatic lens, to explore differently the various aspects of project management. The concepts have been selected for their ability to demonstrate the significant insights that can emerge from this ontology. Within each section of the exploration, an introduction to the Heideggerian concept is provided followed by an application of the concept to the project phenomena. The insights are summarised in Table 3.1.

3.7 A Theoretical Exploration

3.7.1 *Being and Time*: Key concepts applied to projects

It is important to understand what we mean by exploring the 'lived experience' of the project manager. We can explore the 'lived experience' by asking such questions as

- To the individual, what *is* project management?
- How is *being* a project manager different from *being* anything else?

We have highlighted the words *is* (having existence or be), and *being* (the suffix-ing denoting an action or result of having existence) because what we mean by them is particularly important in this 'lived experience' enquiry. Throughout the remainder of this paper, the Heideggerian terms have also been italicised.

Before proceeding into the detail of the theoretical exploration, we provide an example of how these terms might be encountered and contextualised by means of a small fictional scenario grounded on plausible lived experiences.

> **Simon's colleague:**
>
> Simon, I hear your project is behind schedule and over budget. What's the problem?
>
> **Simon:**
>
> Well this particular project and all that's involved in it (*the-world-of the project*) is a complex interconnection of subcontractors, our people (*Dasein*), tools, and equipment (*equipmental totality*).
>
> I'm using (*ready-to-hand*) various tools and techniques to (*in-order-to*) help us achieve our ultimate aim (*for-the-sake-of-which*). But to be honest I didn't ask to be the project manager on this project. I just found myself (*thrownness*) being the project manager one day. I really do give a damn (*care*) how things turn out, but my efforts (*coping*) are constrained by past event in terms of how much I can do now and what future options are available (*projection*).
>
> I want to do the right thing as a project manager and for this situation (*authenticity*), but, I find myself constantly fighting against the done thing… what *they* say I should be doing to resolve the problems. I ask other project managers (*the they*) at our chapter meetings and refer to the textbooks (the *discourse of the they*) for advice, but they stand on the outside, detached, and look in as if we were some scientific experiment that can be deconstructed and considered as parts (*a universe).*

> The recommendations they give me are really just *idle talk* that responds to general situations rather than to my unique, concrete experience. They don't know what it's like inside this world; it's not all about talk, it's tacit knowledge and action, and how equipment and people work together that really affect the project's status. I've got stuff impacting me right-here (*nearness*), right-now (*the now or present*), and other stuff that is more distance but still on my radar (*spatiality*). All they can see is this stuff in a decontextualised (*present-at-hand*) manner. I'm in the world-of this project, and I'd like to drag the truth (*primordial discourse*) about what's really going on out into the light (*clearing*). But if I expect to retain my standing as a professional project manager I'll have to behave (*be unauthentic*) and conform to their advice (*fallingness: fall away from ourselves*); spending my time on Gantt charts and work breakdown structures (*signs*) that aren't actually helping me solve the issues. I am not confident enough (*anxiety*) to take a stand and respond to the concrete situation.
>
> So until the company starts looking at my situation as a complex nexus of equipment (*ready-to-hand*) and people (*Dasein*); and whose future possibilities are affected by their past (*facticity*) and the fact that they are already infused in-the-world-of the project (*temporality*), I've got no chance of making schedule.

3.7.1.1 Modes of Being

Being and Time identifies three primary *modes of being*: *Dasein*, *ready-to-hand*, and *present-at-hand* (Blattner 2006; Wheeler 2014). *Dasein* is a type of being that can take a stand on its self, it can seek to inquire about its own being (Cerbone 2008). *Dasein* is also characterised by its ability to *care* or 'give a damn'; it can have an attitude towards things (Kaelin 1988). *Dasein* have *for-the-sake-of-which's* that are fundamental to their being but not an end goal. It is important to note that it is not any anatomical/biological difference that sees Heidegger assigning humans as *Dasein*, but rather key characteristics such as giving a damn (caring) and taking a stand on itself that differentiates it from other *modes of being* (Greaves 2010). For example, neither things nor objects can 'give a damn' or inquire about the nature of their being.

Heidegger's classic example of things *being ready-to-hand* is a hammer (Heidegger 1962). The *ready-to-hand mode of being* includes objects that are useful to *Dasein* (Blattner 2006). Traditionally, the *ready-to-hand* mode includes *Dasein's* equipment that enables *Dasein* to achieve its *for-the-sake-of-which* (Dreyfus 1991). A computer

is perhaps a more accessible example of *ready-to-hand*. If we are asked to explain what a computer *is*, we are likely to indicate what it can do for us, and how it connects to other pieces of equipment. We might say that a device is *being* a computer because it enables us to communicate via email, or access the Internet. We might say that a computer is heavy and a tablet is light, but such statements are only possible because we are acknowledging that the items are tightly coupled into the nexus of a greater whole related to that equipment. A tablet can only be lighter than a computer because we know what a computer is.

Within the *ready-to-hand mode of being*, it is necessary to distinguish into three further concepts: *ready-to-hand* equipment that has become *transparent*, *ready-to-hand* equipment that we notice but is fulfilling its role, and *ready-to-hand* equipment that is not fulfilling its role, it is broken or non-functional (Dreyfus 1991). According to Heidegger, much of the *ready-to-hand* equipment that we encounter in our daily lives we do not even notice (Blattner 2006). For example, we walk through a doorway as a means of moving from one room to another, but we would normally not be conscious of the doorway as a device that enabled this action. Essentially, the doorway is *transparent* to us in the majority of our day-to-day life. However, there are situations in which whilst an object is still equipment it moves from being *transparent* into awareness.

Firstly, let us explore a piece of equipment that is not broken, but with which we do not have an intrinsic easefulness with the equipment; we are aware of the equipment. For example, we might be approaching a hotel door, but instead of being a door that we are accustomed to transitioning through several times a day, it is a revolving door. We know that this is equipment for moving from outside to inside the hotel (the device is *being* a door), but we are not as familiar with this type of door as that with which we normally interact. As such, we will likely need to be more focused in our use of the door than normal. It is not that it is broken; we are just not yet sufficiently familiar with its use, and our interaction with it is not yet *transparent*.

We can also have *ready-to-hand* equipment that is broken; it has become *unready-to-hand* (Dreyfus 1991; Greaves 2010). A piece of equipment reveals itself to us as *unready-to-hand* when it is not operating as expected; it is not enabling us to proceed in our activity as we would normally do so (Blattner 2006). This may be when a door

handle 'sticks' and the device that was *being* a door reveals itself to us by not opening. In such cases, the equipment (the door through the door handle) is *unready-to-hand*. It is not working as expected to enable us to carry out a particular task and the revealed equipment necessitates our attention.

Present-at-hand is the final *mode of being* and is characterised by omitting any purpose that the object may have for *Dasein* or in its environment (Brandom 2005). It is the *mode of being* when objects are decontextualised, and we adopt the traditional scientific, Cartesian, and reductionist approach, exploring the object's characteristics without reference to its environment or purpose (Cerbone 2008; Greaves 2010; Heidegger 1962). In our computer example, if we distilled a computer to titanium and copper and plastic and measured its weight at 2kg, we are exploring the object in terms of its *present-at-hand* mode. Studying the computer as titanium, copper and plastic, and not in terms of its whole or the purpose which it serves amongst other equipment, and for *Dasein* actually tells us less about the object in terms of its place in human existence than a *ready-to-hand* perspective.

The types of *ready-to-hand* mode provide insights in project management. For example, perhaps much of what project managers *(Dasein)* do is actually *transparent* to them. What they do is so familiar that it is not mentioned when they are discussing the phenomena of projects. It is more likely that those things that take more effort, are more challenging (i.e. not transparently *ready-to-hand*), are not working (i.e. *unready-to-hand*), or have a closer alignment to a *Dasein's ultimate-for-the-sake-of-which* will dominate conversation. We need to be aware of our tendency to focus our inquiry on equipment that we are consciously aware of in project management, rather than that which we take for granted (or is so *transparent)* that it is not mentioned.

3.7.1.2 Being-in-the-World

Being-in-the-World is a cornerstone concept in *Being and Time*, and acts as a synthesising notion for many of the other concepts that will be discussed. It highlights the distinction between Heidegger's ontology and Cartesian subject-object dualism (refer Figure 3.3). *Being-in-the-World* states that *Dasein* (the *mode of being* that is associated with human beings), is not separate from its environment, rather humans are infused within their world (Blattner 2006; Schatzki 2005). *Dasein* does not project

meaning onto objects, rather through its interaction with objects meaning is generated. Similarly, *Dasein's being* is understood through the objects with which it interacts (Dreyfus 1991).

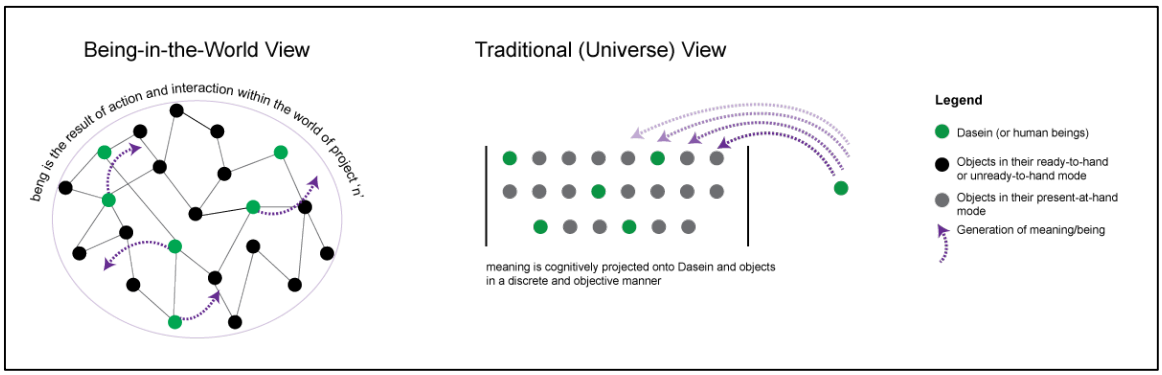

Figure 3.3: Heideggerian versus Cartesian thought

Heideggerian thought considers that Dasein are amidst their world/s that are a network of other Dasein and objects. The being of these Dasein and objects are a result of the interactions amongst this network.

The Cartesian, dualism perspective is that human beings are separate from discrete objects in the universe. The meaning of these things is created through a cognitive assignment by the human being.

From a project perspective, it highlights that if we divide the project management world into perceived components (i.e. people, from artefacts, and from processes) we are actually decreasing our understanding of the project management phenomenon. To increase our understanding of the 'lived experience' we need to recognise the inextricable coupling, and recursive feedback relationship between *Dasein* and equipment (and amongst all equipment in the project management world), and seek to reveal rather than ignore the criticality of this relationship and interrelatedness. The project manager (*Dasein)* cannot therefore *be* a project manager without *Being-in-the-World* of the project work. And it is the project work that reveals the project manager's existence, and reveals to the project manager the meaning of their role. The project work will necessarily be different in every case, and therefore what it means to *be* the project manager is different too. Through adoption of the *Being and Time* ontology that *Dasein* is infused with their *world*, we are more likely to reveal the phenomena of the project and what it means to manage it.

3.7.1.3 Care and Temporality

Care and *temporality* are synonymous with the *being* of *Dasein* (Heidegger 1962; Kaelin 1988). For Heidegger, *care* is *Dasein's*: *being-already-in-the-world*, *being-amidst-entities*, and *being-ahead-of-itself* (anticipating the future) (Dreyfus 1991; Kaelin 1988). This three-fold being of *Dasein* is the basis from which it can make a decision about what matters to it (what it *cares* about), and therefore the action that it takes.

Temporality is tightly coupled with *care* (Blattner 2005b). *Care* is what is important to *Dasein,* and *temporality* (the conceptualisation of time) enables *Dasein* to embark on its *in-order-to*s in support of what *Dasein cares* about. *Dasein's being* (according to their perception) occurs *in-time*. Heidegger's concept of *temporality* has some relationship to the traditional term 'time', however it is a unifying concept that suggests that past, present and future are unified in Dasein (Blattner 2005a). That is, our past, present, and future inform one another (refer Figure 3.4). For example, what *Dasein* can possibly do, is influenced not only by what we want to do, but what we have done and our current situation (Cerbone 2008; Wheeler 2014). Heidegger uses the term *thrownness* (refer Figure 3.5) to describe our past context, from which we cannot break out of, and which is the foundation for our pursuing future possibilities (Haugeland 2013). *Projecting* is Dasein's movement towards its possibilities (refer Figure 3.5) in the future, and *falling* links to our absorption in the present, being amidst other entities, and being influenced by the *they* (refer Section 3.7.1.6) (Cerbone 2008; Kaelin 1988).

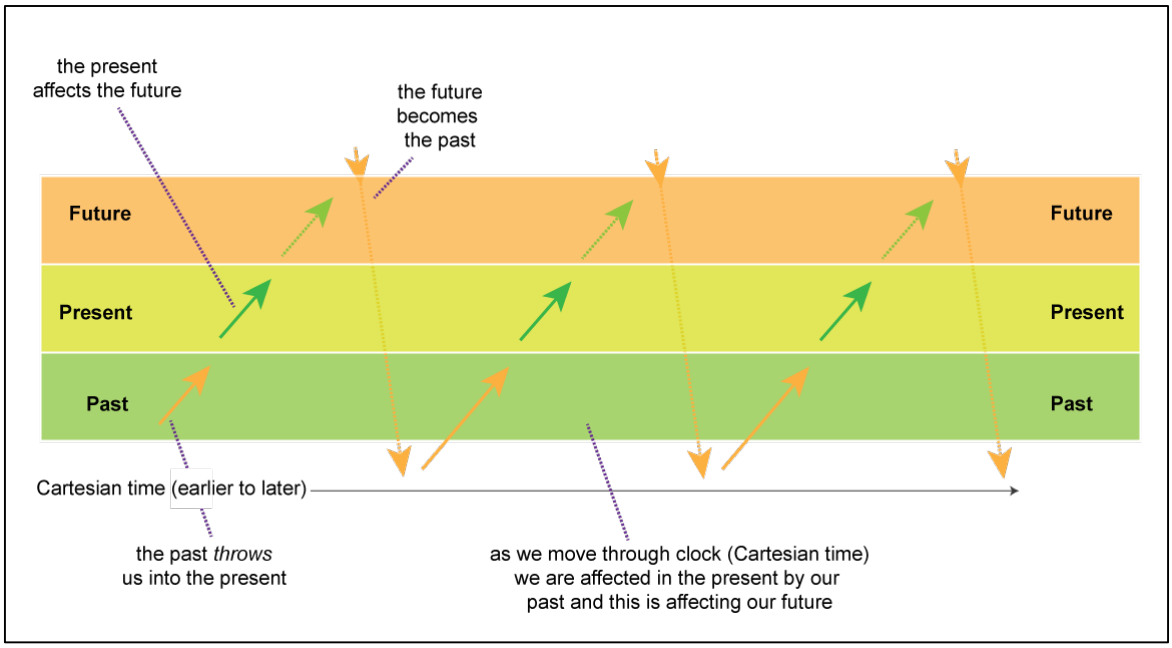

Figure 3.4: Temporality

As we move through Cartesian (clock) time, we are affected by the past (thrownness) and our present is impacting (projecting) into our future. As we move through Cartesian time, the 'future' also becomes part of our past and the cycle continues.

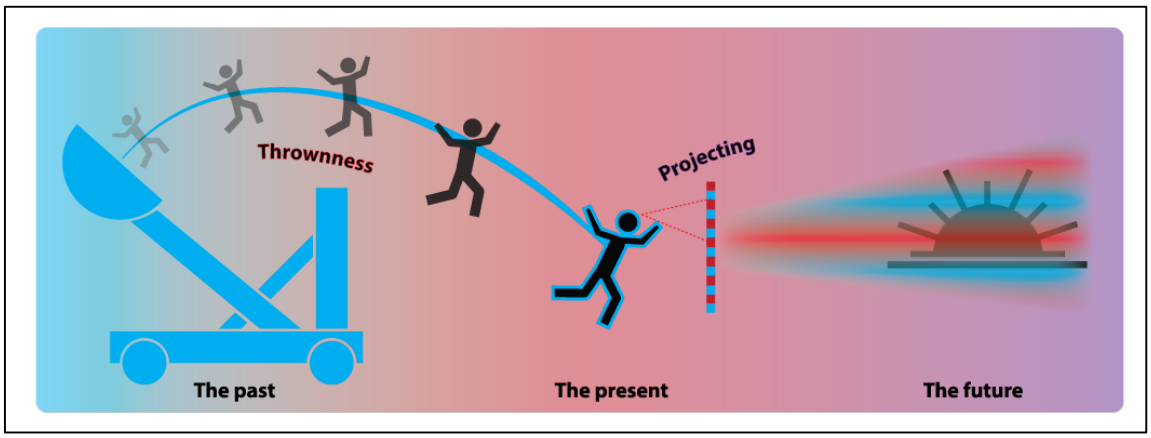

Figure 3.5: Thrownness and projection

Thrownness is Heidegger's term for Dasein having no choice over its past in the present. For example, Dasein do not choose to be born. They are 'landed' in a particular context (Earth). It is the past, coupled with the current (present) situation that will affect Dasein's possibilities for future action. The current and past will affect what Dasein sees in the future. This pressing into future possibilities is projection.

Given Heidegger's argument that *care* and *temporality* is the fundamental structure of *Dasein*, we cannot ignore that those people involved in projects will have attitudes towards that in which they have been involved (past), that which they are currently involved (present), and that to which they are heading towards (future). Whilst most practitioners and the 'lived experience' school would argue that is abundantly obvious, in this *care* structure Heidegger gives us an ontological foundation for arguing against the notion that those involved in projects are rational, objective beings that assign (in a Kantian way) meaning onto the project world. Rather, Heidegger's ontology appears to have greater alignment with the actual phenomena of the project, which is a complicated *world* of varying opinion, perspectives and attitudes resulting from many *Dasein's* past experience, present, and future possibilities that are constrained by the past and present. Therefore there is little rationality and objectiveness about projects.

Furthermore, *temporality* is useful in examining the definition of a project as an activity with a defined start and end (Project Management Institute 2013). If we draw on Heidegger's concept of a unified *temporality* we are able to ontologically ground the binding influence of the past and future on the present. Such an ontological foundation enables us to recognise the suggestion of a project start and a project finish as highly artificial (all be it useful at times). Again, this is not necessarily a new concept (refer (Engwall 2003)). However, in *Being and Time* we can find an ontological foundation that grounds such a perspective. Projects, through the people (*Dasein*, including project managers) that are immersed in them, are therefore inextricably coupled together. Decisions on one project can affect decisions on another project even if there is a gap of many years between projects. For example, a project may have been undertaken several years ago to acquire blocks of land for future expansion of a business. The land selected then will influence design choices for project constructing a new factory today. In another example, a project manager for whom an earlier project they were managing was found to be lacking in governance rigour is likely to have a particular influential attitude towards governance in future projects that will affect how that project is managed. It is as if the gap in time is not there.

3.7.1.4 The world/s, and the universe

In *Being and Time*, Heidegger makes the distinction between the *world* and the *universe* (Blattner 2006). Simply, for Heidegger, the *world* is aligned with the mode of *ready-at-hand* and the *universe* aligned to the scientific, rationalistic *present-at-hand* mode. It is within the *world*, that we have Heidegger's cycle of *in-order-to*s and *for-the-sake of which* (Dreyfus 1991; Haugeland 2013). Heidegger claims that we use equipment *in-order-to* do something *for-the-sake-of-which*. For example, a carpenter uses a hammer *in-order-to* drive in nails, *in-order-to* secure pieces of timber together, *in-order-to* make houses, *for-the-sake-of-which* to earn money to support a family, *for-the-ultimate-for-the-sake-of-which* to *be* a parent. The world is the place in which our *referential (equipmental) totality* exists. In other words, a hammer (and describing what it *is*) only makes sense in a *world* where there are nails. And nails only make sense in a *world* where there are timber houses.

Comparatively, Heidegger's conception of *universe* is the totality of the decontextualised 'stuff'. It is not our environment in which our everyday terms of reference exist (i.e. our *in-order-tos* and *for-the-sake-of-which*). The *universe* could be considered as our environment in its most objective/detached manner; a world without *Dasein* and the nexus of interrelationships between objects; the traditional scientific perspective (Rouse 2005; Wheeler 2014). For example, atoms and electrons are 'stuff' in the universe. However, it is only when they are in certain structures (i.e. a hammer) that they manifest in our *world* (as distinct from our *universe*).

The distinction between the *world* as our meaningful contextualised environment and the *universe* as decontextualised 'stuff' is relevant in our understanding of the *world*-of the project. If project management research is adopting an approach based on Cartesian subject-object ontology, it is reducing the components of the environment to 'stuff'- context neutral, isolated objects- the *universe*. However, if project management research is looking to disclose the actual phenomena of project management, then this is best revealed through an exploration of the *world*-of the project.

Consequently, we need to acknowledge the *world*-of the project (and beyond - i.e. to the *world*-of work etc.) as being the environment in which our *in-order-to*s and *for-*

the-sake-of which play out. The *world*-of the project is the project team and stakeholders' place of *being*, a place of acting, not a place onto which thoughts are projected in a detached or objective manner. For example, the project manager (*Dasein*) draws a Gantt chart *in-order-to* illustrate tasks and events against time, *in-order-to* organise and coordinate labour and resources, *in-order-to* make a prototype product, *for-the-sake-of-which* to earn money to support a family, *for-the-ultimate-for-the-sake-of-which* to *be* a parent. Alternatively, the project manager draws a Gantt chart *in-order-to* signal project progress to senior management, *in-order-to* manage the expectations of senior management, *in-order-to*, and so on. The *being* of the first Gantt chart is different to that of the second. Both can exist in the same *world*-of the project, but the structure of their *equipmental totality* is different. And so, therefore, is their meaning. The findings of Whitty (2010a) would suggest that the latter is evident in practice.

A distinction can also be drawn between the *world*-of the project, and the *world*-of project management (refer Figure 3.6). For example, a project manager (*Dasein*) may be involved in both worlds, but a team member who has no exposure to the management equipment of the project or the norms of the project management *they* may only associate himself as part of the *world*-of the (given) project. This is pertinent, as it raises the question of whether project management research is exploring the-*world*-of the project (there being as many of these as there are projects), or the-*world*-of a certain type of project (e.g. construction or Australian) or the-*world*-of project management. There will be commonality between these worlds but there will also be variations in their *equipmental totality*.

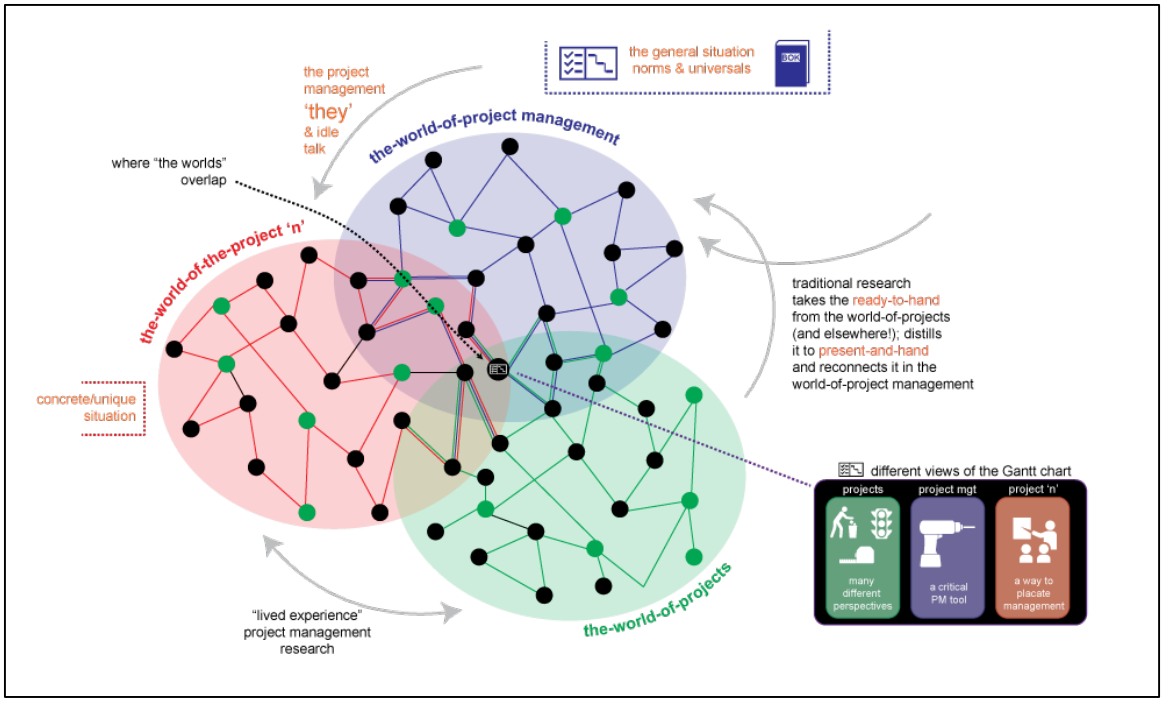

Figure 3.6: The relationship of the *worlds-of*

Three Heideggerian worlds have been differentiated in this article. This figure shows how they are each different, yet they have points of overlap. It also highlights the way that the worlds influence one-another and key characteristics of the world-of project management versus the world-of project n.

The sub-diagram - different views of the Gantt chart - captures the concept that whilst equipment may be a common node across all worlds that the equipment's significance will be as varied as the number of worlds in which it is part.

3.7.1.5 Dealing

Dealing is Heidegger's term for how we go about living in the *world* (Blattner 2006; Haugeland 2013). *Dealing* (sometimes referred to as *coping*) reiterates Heidegger's emphasis on action and immersion in the *world* rather than the cognitive projection of meaning by a subject (human being) onto the *world* (Dreyfus 1991). It is important to recognise that some of our *dealing* becomes *transparent* to us (Dreyfus 1991). For example, an experienced driver does not have to consciously think how to change the gears in their car. The driver has tacit knowledge that underpins their capability to drive (and therefore *cope* in the *world*-of traffic and driving).

This insight has already been discussed in the project management literature and in education/pedagogical discourse (Bredillet 2005; Cicmil 2006; Flyvbjerg 2001; Sewchurran & Scott 2009; Sewchurran, Smith & Roode 2010). Specifically, as Dreyfus (1992) has argued in his criticism of artificial intelligence, much of our

ability to *cope* in the *world* cannot be distilled to formal, separate rules. Rather, much of our know-how is complex, and inter-related and is tacitly embodied in action rather than cognition (Polyani 1966). We would suggest that Dreyfus' criticism of artificial intelligence aligns with the existing criticism of the project management community's attempts to codify its practice in the bodies of knowledge and various methodologies (Hodgson & Cicmil 2006; Whitty 2013). That is, management of projects cannot be reduced to a standard set of rules or procedures to be followed, because a large portion of the interactions by project participants and stakeholders (with their *Dasein mode of being*) are tacit, contextual and *transparent* (Blomquist et al. 2010; Cicmil et al. 2006; Koskinen, Pihlanto & Vanharanta 2003). The rules emerge dynamically out of the totality of the changing situation. This necessitates that we take a broader perspective to what is the management of projects, and appreciate that the traditional notion of project management is likely failing to capture much of the tacit *dealing* that project teams and project managers experience.

3.7.1.6 DasMan/The they

Heidegger coins the terms the *they* (*DasMan* in German) to describe the source of the norms or behaviours to which *Dasein* generally conforms (Cerbone 2008; Dreyfus 1991; Haugeland 2013). The *they* is the source of the 'done thing' or 'the right way' of doing something (Greaves 2010; Haugeland 2013). In Western culture it is the *they* that infers that *one* sits at a table and chairs and *one* eats with a knife and fork. Yet in Japanese culture the *they* suggest that *one* sits on the floor with a lower table and *one* eats with chopsticks.

The *they* is also characterised by its ability to l*evel* behaviour, attitudes etc. to create an average (Blattner 2006; Dreyfus 1991; Schatzki 2005). According to Heidegger (1962), the *they* drives unique or new ideas or concepts to be distilled to a point where they fit within averageness. It is because of this process of *levelling* that unique, new or different ideas struggle to get traction and thrive.

The project management community needs to be vigilant to the *they* and its *levelling* capabilities if it is to progress project management research and practice. The project management *they* is evident in the professional associations, their certifications, the bodies of knowledge (the current disciplinary matrix underpinning project

management), methodology manuals, and in the unwritten codes related to dress, comportment and language (Whitty 2011c; Whitty & Schulz 2006). It is suggested that if a project manager (*Dasein*) wants to be seen as doing the right thing (and therefore being classified as a competent project manager) they will do what is dictated by the project management *they*. Furthermore, if a truly new or unique idea is identified within research or practice, the *they* will be unable to be synthesise it because it does not fit within the current norm. The idea would need to be hooked into the existing frame of reference of the *they*.

It is critical to emphasise that this is not arguing that the *they* should (or could) be abolished. The norms and behaviours of the *they* provide the framework or disciplinary matrix against which existing research approaches and practice can be challenged, and provide some form of reference point for discipline discourse. However, we must recognise the dictates of the *they* for what they are: *levelled*, average, and general. In the project context, which is by definition about uniqueness, difference and abnormality (Association for Project Management 2006; Cleland 2004; Project Management Institute 2013; Turner 2007) there is a danger that the *they* can bring blind conformance. Again, this is not argued as a new notion, but rather Heidegger provides ontological credence to this insight.

3.7.1.7 Inauthenticity, authenticity, anxiety and fear

In *Being and Time*, Heidegger discusses the concepts of *authenticity* versus *inauthenticity*. *Inauthenticity* is aligned with Heidegger's temporal trait of *fallenness*, which refers to a being lost in the 'done thing' as prescribed by the *they* (Carman 2005; Greaves 2010). Conformance with the *they* relieves us of the burden of making choices for ourselves; a result of that fundamental characteristic of *Dasein* - which is that being that can take a stand on itself, make choices and choose to follow a particular path (Kaelin 1988). When we are *inauthentic* we generally respond in a general or standard-way to a situation, rather than to the actual or concrete situation which is actually being experienced at a given point (Dreyfus 2000).

In comparison, *Dasein* (including project managers) may choose to adopt a more *authentic* approach to the situation. Such *authenticity* requires that *Dasein* rise above what Heidegger describes as an ontological *anxiety*, and adopt a *resoluteness* in facing

up to the choices it has as a *Dasein* (Blattner 2006; Cerbone 2008). *Dasein* who have not *fallen* into blind conformity with the *they* and adopt an *authentic* approach will respond to the concrete or actual situation being encountered (Dreyfus 2000). Similarities could be drawn here to the discourse on improvisation by project managers to 'get things done'; a need to move away from plans in certain situations (Leybourne 2006; Leybourne & Sadler-Smith 2006).

The significant uptake of project management certification, use of project management terminology, and growing membership of professional bodies are evidence of a growing conformance by practitioners to the project management *they*. At this point we will refrain from classifying this as a definitively bad thing, as arguably this conformance has a role in legitimising the profession and assisting project practitioners to demonstrate their belonging to this profession, and therefore remaining employed/employable (Whitty 2010a, 2011b). It is here that Heidegger's position of how a *Dasein* avoids ontological *anxiety* (facing themselves) can be realised in project management.

Returning to *inauthenticity*, we can however foresee problems if there is blind or universal conformity with the disciplinary matrix of the *they*. If the *Dasein* involved in project management are focused on conformance with the dictates and norms of the *they,* it is likely that they will often be responding to the general rather than the concrete situation they are encountering. It has been argued that project management needs to be tailored and contextualised to the uniqueness of each situation (Cicmil et al. 2006; Thomas & Mullaly 2008; Turner, Ledwith & Kelly 2012). However, it is suggested that the project management *they* still dictates parameters within which such tailoring is permitted. We wonder how many project managers (*Dasein*) who were asked by senior management 'where is the Gantt chart?', would reply 'we're not doing one for this project'. This is not to suggest, that in fact, project managers actually use Gantt charts to manage their projects, but rather that the usage of such artefacts and processes (in some cases), is a compliance to the norms of the *they* to legitimise the project and demonstrate the capabilities of the project manager, rather than to enable project delivery (Whitty 2010a). One cannot help but then ask, what 'project management work' is done because it fits with the norms of the project management *they,* rather than the approach actually required for a given project. That

is, *Dasein* has *fallen* into responding to the general situation of project management (potentially, for good reason such as *in-order-to* maintain employability), rather than responding *authentically* – taking a stand – and leveraging the tools needed for that unique situation. It would be feasible to distinguish between 'project management overhead' that actually enables delivery and the 'project management overhead' that is about appearances or conformance. This would substantiate the claim that modern project management is more about appearance than productivity, and that project managers are hostage to their environment.

In summary, those *Dasein* involved in projects can operate *authentically* or *inauthentically* (and indeed somewhere in between). There is likely justifiable reason for a *Dasein* to adopt *inauthenticity* in this aspect of their life. However, it is suggested that this does not necessarily result in the best project management approach for a given project.

3.7.2 Summary of the Theoretical Exploration

Table 3.1 provides a summary of the insights derived from this initial theoretical exploration of project management through the paradigmatic lens of *Being and Time* concepts. The consequences, impact and relation of these findings to the existing literature will be the foundation for our discussion.

Table 3.1: Project management through the paradigmatic lens of Being and Time

Being and Time Theme/Concept	Insight/relevance to Project Management
Modes of being	Dasein: draws our attention to the humans involved in a project as they are able to have attitudes (care) towards one another and the project equipment, and they have individual *in-order-to*s and *for-the-sake-of-which*s that will influence their coping with the project world. Ready-to-hand: draws our attention to the fact that the devices (physical, social, cognitive) that truly facilitate project work are often transparent to our everyday experience. We are unaware of them and largely not studying them. Unready-to-hand: enables us to identify equipment that is failing to fulfil its in-order-to role. It can signal the importance of equipment and the need for equipment to be repaired or replaced. Present-at-hand: This describes the dominant reductionist research approach where we decrease our ability to understand the project management phenomena by decoupling equipment from its being.

Being and Time Theme/Concept	Insight/relevance to Project Management
Being-in-the-World	The project and what it means to manage it is an infusion of people and equipment. Project people find meaning and terms of existence through their referential associations. There is a recursive relationship between all elements of the project.
Care and Temporality	Through the attitudes of the people that are involved in them, projects are inextricably coupled together as though time doesn't exist. Decisions tomorrow are obliged to be driven by the attitudes of the past and present.
The World and the Universe	The world-of a (given) project, the world-of projects and the world-of project management are different but related concepts. These worlds are complex, highly connected networks of equipment, Dasein, *in-order-to*s and *for-the-sake-of-which*s. Traditionalist research (a universe-perspective) of any of these worlds decreases our ability to understand the phenomena of projects by omitting the interconnectedness that informs the being and existence of the components.
Dealing	The being (meaning) of those involved in projects is embodied in action rather than cognition. It is through action (dealing) that meaning is revealed. Cognitive knowledge distilled as standard sets of definitions, and rules of procedures in a body of knowledge book omits a significant amount of what is required to actually deal (find meaning) with the project phenomena.
The they	The project management they with their norms and artefacts are arguably a necessary but constraining force in project management. The they restricts innovation and dictates expected behaviours that may not align with what is actually required in a given situation.
Inauthenticity, authenticity, anxiety and fear	Inauthentically we blindly fall into the way of the they and respond in generalist platonic ways. Authentically we take a stand and overcome our anxiety and respond appropriately to the unique situation. These concepts also enlighten us to the motivations for behaviours or use of artefacts in project management

3.8 Discussion

3.8.1 An ontological foundation to underpin the 'lived experience' research approach

Being and Time provides the ontological paradigm to break free of Cartesian dualism subject-object thinking and its disciplinary matrix (the bodies of knowledge and prescriptive methods). Projects are not just simple systems processing inputs into outputs, but rather a complex network of equipment, interconnected roles, motivations, behaviours and the omnipresence of each participant's past and future at every given point.

The definitions of projects and project management is fairly standardised within the current disciplinary matrix (bodies of knowledge and prescriptive method). However, *Being and Time* discloses the phenomena of both these concepts and highlights that there is a need to reconceptualise these terms and to differentiate between project management (the current disciplinary matrix) and project managing. We propose that 'project management' is distinct from 'project managing'.

3.8.2 What is a project?

In section 3.7.1.4, we explored the concept of *worlds* as networks of complex, interconnected equipment and *Dasein*. If we abstract this to a broader level we capture a network of equipment and *Dasein* that is the *world*-of organisation **n**. As per sections 3.7.1.1 and 3.7.1.4, such a *world* will have *Dasein* that are *dealing* with their *world* using *ready-to-hand* equipment *in-order-to* do something, for their *sake-of-which*. Organisations are groups of *Dasein* with their individual ultimate *for-the-sake-of-which*. However, given they are working at a common organisation there is a common node in their *in-order-to*/*for-the-sake-of-which* cycle: that is, working at organisation **n**. Assumedly, this organisation has a set of equipment (including tools, norms – the *equipmental totality* of organisation **n**) that enables it to achieve its objectives and remain in operation.

At some point, a component of organisation **n**'s *equipmental totality* may cease (or is predicted to cease) to enable the organisation to meet its objectives. That is the *in-order-to* cycle for the organisation, given its current *equipmental totality* breaks down somewhere. This breakdown may be due to failure of equipment or a change in the organisation's activities or objectives (i.e. the current *equipment totality* cannot deliver the new activity or objective). In such circumstances, *Dasein* within the organisation identify that an element of its *equipmental totality* has become *unready-to-hand*.

Projects arise from this this *unready-to-hand* state of affairs. Projects are situations identified by *Dasein* as needing to be restored to *ready-to-hand* and *Dasein* is unable to easefully restore this situation within their current *dealing* and/or *equipmental totality*. The 'scale' of the project is the degree to which this breakdown (*unready-to-handness*) is beyond the collective *dealing* or *equipmental totality* of the *Dasein*.

It is noted that an organisation may decide that they do not wish to remediate the *unready-to-hand* situation, as it is not sufficiently impacting upon the organisation (this would be similar to a business case not being established as valid and therefore no action being taken). In such circumstances, the state of affairs is not a 'project', as a decision has been made not to remediate the issue. The organisation accepts a new type of *ready-to-hand*, and therefore no 'project' exists.

Dasein is infused in an operational situation when the *equipmental totality* of the organisation is tuned to meet the organisational objectives. In operational circumstances, the organisation (as a whole) is moving easefully with all the equipment contributing to the objectives as expected; it is akin to the equipment being *ready-to-hand*.

To explore the application of this alternative conceptualisation of a project, we return to Simon's narrative:

> Simon works for a business that has outgrown its premises and has requested the building of a new factory. This premises was a component of the company's *equipmental totality* and it is no longer large enough to manufacture the quantities demanded by the market (it is now *unready-to-hand*). *Dasein* within the organisation have *taken a stand* to remediate this case of *unready-to-hand* and have commissioned the building of a new premises (i.e. *in-order-to* meet the growing demand for their product). They have limited experience in *dealing* with such a construction project. That is, it is a 'project' because it has emerged from a situation that has an *unready-to-hand* component and *dealing* with the situation is beyond the current capability of the organisation.
>
> However, for the subcontractor laying the slab for this new building, whether this construction is a 'project' is contextual. For example, if the subcontractor has the *ready-to-hand equipmental totality* (equipment, networks, contacts etc.) and ability to intuitively *deal* with laying the slab of the new factory it would probably not be classified as a 'project' - it would be 'operational' work- a standard job. It is noted that this does not preclude the work being 'project managed' (refer Section 3.8.3) or Simon's company categorising the construction as a 'project'. Comparatively, if this were a special type of slab requiring a non-standard slab laying *equipmental totality*, the subcontractor may also call the activity a 'project'.

In sum, a 'project' *is* the situation that emerges when *Dasein* is required to deal with *unready-to-hand* equipment in their *equipmental totality* and does not have the capability to do so. The existing literature captures projects as having a defined start and end, being unique, involving risk etcetera (Office of Government Commerce 2009; Project Management Institute 2013). It is suggested that these may well be characteristic of projects, but these are not ontologically what a project *is.* According to Heidegger to understand *being* it is necessary to understand the totality within which the situation or equipment emerges. As such, the definition proposed here is more appropriate at capturing the *being* of a project than the traditional definitions that are suggested as frequently observed characteristics. These traditional characteristics (the current definition) of projects could also apply to operational work. For example, a computer system running a weekly payroll will be using unique data each week, and there will be a finite start and finish to the process, and there is an element of risk- the pay may not be disbursed to the employees. But this is not a 'project' because the organisation has the *equipmental totality* (including a computer system) which is *ready-to-hand* and with which the organisation's *Dasein* is adept at *dealing*.

3.8.3 What *is* project management

Through this *Being and Time* paradigmatic lens, 'project management' is a piece of equipment 'selected' to deal with a situation. We reiterate, that from this point forward we argue that 'project management' is distinct from the action of 'project managing'. It is noted that 'selected' has been emphasised in this definition as an organisation in a situation that could be labelled as a 'project', may choose not to use the 'project management' equipment (current disciplinary matrix) to respond to the situation. They may choose to 'manage the project' with some other piece of equipment (i.e. not the 'project management' equipment as designed and dictated by the *they*). Instead they may choose to use existing schedule tools or a series of 'to-do' lists, the activities may be managed through existing operational hierarchies rather than establishing alternative governance mechanisms and roles.

Given that 'project management' is a type of equipment, it has Heidegger's equipmental *mode of being*. It becomes possible for 'project management' to be *ready-to-hand* or *unready-to-hand* (or *present-to-hand*) in a given situation. It is

interesting that the *mode of being* of project management (as equipment) could concurrently be different for the many *Dasein* involved in the same project. That is, some stakeholders may certainly be aware of the 'project management' equipment in operation, but not necessarily that it is broken (i.e. it is just *ready-to-hand* but not in a *transparent* sense). Others may believe that the 'project management' equipment is failing. That is to say that it is not successfully resolving the *unready-to-hand equipmental totality* of the organisation. This then discloses the potential difference in the 'project' being resolved successfully and 'project management' equipment *being* the tool that enables the 'project' to be resolved.

In sum, 'project management' *is* equipment; the disciplinary matrix (a set of processes, artefacts etc.) underpinned by Cartesian thinking, and propagated by the *they,* through which an organisation is able to *deal* with a situation. Whilst it can be applied to 'projects', this does not preclude it from being used in other settings. According to the Project Management Institute (2013, sec. 1.3), project management is:

> "the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Project management is accomplished through the appropriate application and integration of the 47 logically grouped project management processes, which are categorized into five Process Groups."

We would argue that this definition does not capture the *being* of 'project management' nor 'project managing'. The PMBOK definition argues that it is an application of particular skills (i.e. aligned to project managing). The definition indicates that it is achieved by using the knowledge areas and processes defined in this particular body of knowledge. This focuses the problem: these two concepts are phenomenologically distinct, and are actually separable. There is equipment ('project management') and there is doing ('project managing'). 'Project management' may be used in activities that are not 'projects'; and people may be 'project managing' a 'project', yet not be using the project management body of knowledge as the equipment, or the 'project management' equipment is used in combination with other equipment (techniques/processes).

3.8.4 What *is* project managing?

'Project managing' can now be conceptualised on the foundation of a Heideggerian paradigm. 'Project managing' *is* the action of a *Dasein* who is managing the restoration of the *unready-to-hand* situation (the 'project') to *ready-to-hand*. This *Dasein* may use 'project management' (i.e. the current disciplinary matrix) *in-order-to* manage the restoration of the situation. This is assumedly the disciplines current assumption given that 'project management' and 'project managing' are not generally distinguished from one another. However, there are at least three alternatives that must be recognised. For example, the *Dasein* may be 'project managing' the 'project', but they are not using the current disciplinary matrix ('project management') to restore the *equipmental totality* (i.e. they are using other equipment – artefacts and processes).

To explore this alternative conceptualisation of 'project management' and 'project managing', we return to Simon's narrative:

> Simon is using 'project management' to *deal* with the situation of managing the restoring of his company's *equipmental totality* to *ready-to-hand*. He isn't finding 'project management' (with its Gantt charts and work breakdown structures dictated by the project management *they*) as particularly seamless (*transparently ready-to-hand*) on this 'project'. In fact, he finds that the Gantt chart is not actually suited to this 'project' (it is *unready-to-hand*). To *deal* with getting this 'project' back on track (actually 'project managing') he really needs to be at the site rather than trying to update the Gantt each afternoon. He feels like he is spending more time wrestling with this piece of *unready-to-hand* equipment rather than actually 'project managing'. Simon's frustration (*anxiety*) is increased as he recalls how his colleague uses a Gantt chart to manage the production line… it's like a third arm for her (*transparently ready-to-hand*) (i.e. using 'project management' tools to manage non-projects).
>
> The concreting sub-contractor (for the new factory), is not using 'project management' to manage the laying of the slab. They have their own *ready-to-hand* IT system and job sheets that work seamlessly for these type of routine jobs. However, the installation contractor is not accustomed to *dealing* with this type of factory construction, so they are 'project managing' the situation and are using 'project management' as their equipment. This installation firm is satisfied with how 'project

management' is enabling them to *deal* with the project ('project managing').

3.9 Conclusion

This study has confirmed that Heidegger's *Being and Time* can provide new insights into the phenomena of projects and their management. To reiterate, this paper has neither provided a comprehensive analysis or critique of Heidegger's *Being and Time*, nor, detailed every possible insight that his perspectives can provide. However, it is argued that this exploration has provided sufficient evidence that concepts from Heidegger's *Being and Time* do provide an alternative paradigm through which the management of projects can be considered, and through which, new insights are revealed (refer Table 3.1 for a summary).

These insights can be aggregated into significant outcomes such as proposing Heidegger's *Being and Time* as the ontological base on which to undertake 'lived experience' research. It also enables us to reconceptualise and distinguish between fundamental terms such as project; and project management and project managing. For example, Heidegger's ontology allows us to define 'projects' as part of an *equipmental totality*; a more contextualised perspective that captures the *being* of projects; not just their generally applicable characteristics. The differentiation of 'project management' and 'project managing', discloses that 'project management' may be used not only for project managing but also for other purposes. This distinction also provides the ontological foundation for exploring the nuances in the phenomena of projects. For example, why do we use Gantt charts, is there equipment (beyond 'project management') that support 'project managing', and are there circumstances in which 'project management' actually hinders 'project managing'. It also ontologically opens the literature to considering what differentiates 'project managing' from other types of managing, and 'projects' from non-project work.

Heidegger's *Being and Time* has been established as contributing at a theoretical/ontological level to the advancement of research into the 'lived experience' of projects. It is a key to unshackle the research and practitioner communities from the chains of Cartesian dualism and the bodies of knowledge and prescriptive methods. Heidegger's paradigm recognises the complex and infused

nature of *Being-in-a-World* (including the *world*-of a project). It is a lens that provides greater promise of reconciliation between practitioner experience or phenomena and research than our current paradigms.

4 Playing projects

4.1 Preamble

This chapter primarily includes my paper ‘Playing projects: Identifying flow in the 'lived experience’ published in the International Journal of Project Management. The chapter highlights the suitability of alternative arts-based research methods to access the ‘lived experience’ of project work, and the nature of the ‘lived experience’ reported by those participating in the study.

The key contribution of this chapter is in disclosing the study participants’ ‘lived experience’ of project managing. It provides rich descriptions of the participants’ personal emotional experience of managing a project. The analysis also identifies similarities in their experiences: specifically, the “up and down” emotions and the experience of challenge associated with project work. Through the use of Csikszentmihalyi's flow theory as a theoretical framework, it is then derived that project work is an experience where the participant’s capability is stressed to varying degrees. This provides empirical evidence for the theoretical proposition regarding projects being experiences that make great demands on the inherent capability in chapter 3. This chapter is an important empirical contribution in the thesis by providing rich narratives of the ‘lived experience’ of project work. It is also a demonstration of a new research method for the discipline that can assist in disclosing the experience of project work.

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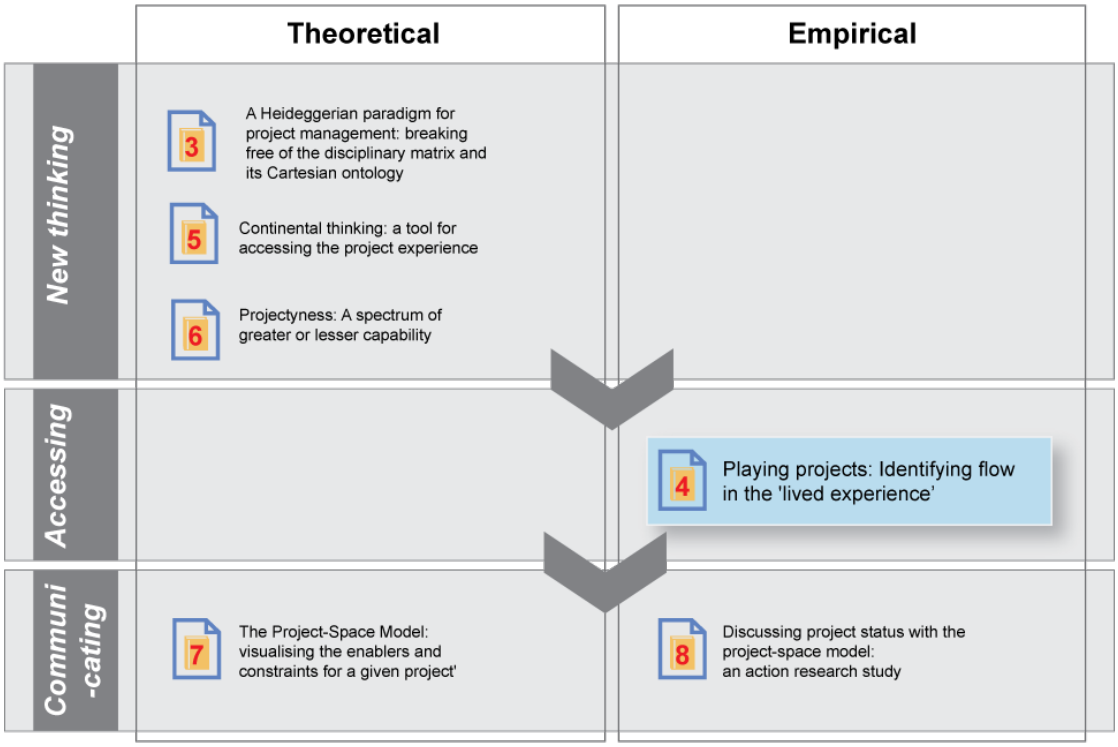

Figure 4.1: Chapter 4 positioning

4.2 Abstract

The purpose of this paper is to contribute to the 'lived experience' of projects discourse. The research study uses an arts-based research method (musical improvisation on a xylophone and/or glockenspiel) to access the participant's perception of their experience of managing a project. Participants are then asked to explain their improvisation and therefore their experience. Key findings were that participants described their 'lived experience' of project managing as having 'ups and downs', including challenges and issues, and as experiencing variations in emotions over the project lifecycle. Csikszentmihalyi's flow theory is used to show that these 'lived experience' findings support a Heideggerian paradigm and personal perspective of what a project *is*. Projectness is not a characteristic of the activity itself. A project is a personal phenomenon defined in terms of the relationship between the individual or organisation and activity. It is dependent on capability versus the challenge presented by the activity.

Figure 4.2: Graphical abstract: Playing projects...

4.3 Introduction

This research study aims to contribute to the 'lived experience' of projects literature, highlighting how this perspective can bring new insights to fundamental project concepts. The motivation for the research is to contribute to the diversification of our understanding of projects beyond the knowledge captured by positivist scientific research. This impetus is driven by the suggestion that the often positivist and Cartesian foundations that underpin much existing traditional project management research and practice are not sufficient to improve project outcomes. It is posited that through enriching our understanding of the phenomena of projects, which includes an understanding of the personal 'lived experience', we will further our knowledge of projects-in-practice. It is from this understanding of the 'lived experience' that we may derive new insights that improve project outcomes.

The 'lived experience' approach to project research is focused on capturing what actually happens in projects (Cicmil et al. 2006). This 'lived experience' stream of inquiry sees project management as social conduct, and that there is a need to understand what project managers actually do in concrete situations, the social processes, thinking in action and the actual experience of practitioners in situ (Cicmil et al. 2006).

In order to capture a 'lived experience' perspective, this study leverages an arts-based inquiry research method. The selected method echoes Whitty's (2010a) artefacts and emotions study that required project managers to characterise the concept of a project in the form of a line drawing and provide a subsequent explanation of their representation. This study draws on musical improvisation as a device to access the 'lived experience' rather than drawing. The improvisation is followed by a semi-structured discussion between researcher and participant regarding the meaning behind the improvised sounds played. In the analysis, priority and weight are given to the discussion rather than the actual improvisation. The musical instrument is simply a methodological device for creating a musical improvisation that enables a discourse to take place that discloses a personal perspective of managing a project. It facilitates an exploration of the perceived 'lived experience' of managing a project.

The paper firstly provides an outline of the research problem. An overview of the literature is then provided from which the research question is derived and into which a contribution is made. A description and justification of the selected research approach and the findings of the study follow this. The discussion considers the implications for the findings, and particularly draws on the concept of flow theory to highlight how the personal 'lived experience' (such as that described by the participants in this study) can challenge fundamental discipline concepts such as 'what is a project?'. Limitations and constraints of the research are provided, and recommendations for further research are noted.

4.4 Research problem

There is ongoing discourse in the project management literature regarding the challenges of project delivery and the prevalence of project failure (Geraldi, Maylor & Williams 2011; McHugh & Hogan 2011; Thomas 2006; Winter, Smith, Morris, et al. 2006; Zwikael & Bar-Yoseph 2004). Project management has evolved from a positivist foundation and this foundation continues to underpin the project management tools and techniques that are in prevalent use today (Bredillet 2004). Bredillet (2004) argues that these positivist underpinnings may be contributing to the challenges experienced in project delivery.

As such, there have been calls to adopt alternative perspectives when researching and conceptualising the phenomena of projects. This includes the call for a 'lived experience' perspective of projects (Cicmil & Hodgson 2006b; Cicmil et al. 2006; Hodgson & Cicmil 2006; Lineham & Kavanagh 2006; Smyth & Morris 2007). A similar, more recent call is to utilise a Heideggerian paradigm (which has a focus of 'being-in', a contextualised, personal experience) to provide the ontological underpinning for project research and practice (van der Hoorn & Whitty 2015e). Literature capturing the 'lived experience' of projects is increasing; however there is still relatively little literature that takes a particularly personal, contextualised view of project work. This research study will contribute to this area of the 'lived experience' literature.

4.5 Literature review

The following literature review is divided into three sections. Firstly, the extant discourse on project management delivery failure and disappointment is provided. This includes the proposition that the current dominant paradigm underpinning much project research and practice is problematic. The call to consider alternative paradigms to underpin the discipline and lenses through which to explore projects are then discussed. Finally, previous studies that have explored the particularly personal aspects of the 'lived experience' of managing a project are reviewed.

4.5.1 Dissatisfaction with project management

There has been significant discourse in the project literature, that despite the growth of formalised project management methodologies, projects continue to fail to meet expectations (Geraldi, Maylor & Williams 2011; McHugh & Hogan 2011; Thomas 2006; Winter, Smith, Morris, et al. 2006; Zwikael & Bar-Yoseph 2004). For example, Geraldi, Maylor and Williams (2011) highlight that whilst organisations and individuals are seeking to improve project performance, such improvements are not being realised; and this is despite many organisations adopting 'best practice' project management methods. Zwikail and Bar-Yoseph (2004) posit that there is still significant disappointment regarding the realities of project delivery, suggesting this is possibly due to a strong focus on technical management components. We would suggest that this highlights the positivist foundations of much practice.

There is also a plethora of reports on projects continuing to fail to meet management expectation and/or to deliver within time and on budget. Quantitatively, it is widely accepted that 80 – 90% of ICT investments fail to meet their objectives (Standards Australia 2006). PM Solutions Research (2011) found that of the 163 organisations in their sample, 37% of their projects were 'at risk' or had already failed. A McKinsey & Company Report (Bloch, Blumberg & Laartz 2012) suggests that in the current climate, for projects to deliver $15 million in benefits, you would need to spend $59 million. A 2013 report by KPMG (focused on New Zealand), found that failure rates of projects actually increased since their 2010 survey. Another IT-focused survey reported that only 37% of projects were completed on time, budget and scope (PlanIT 2013).

Extant commentary suggests that much of the prevalent project research and 'best practice' methods are underpinned by positivism (Bredillet 2004; Pollack 2007; Smyth & Morris 2007). Positivism is of the natural sciences tradition. It is an ontological approach that positions the researcher externally to the phenomena being researched; objectivity and detachment are valued; universals are sought; and often the phenomena being observed is divided into discrete components for examination (Saunders, Lewis & Thornhill 2009). Bredillet (2004, pp. 1-2) argues that it may be this positivist (or hard paradigm) grounding that may be leading to the problems experienced in project delivery and is a "barrier to effective understanding and communication of the true nature of project management". Cicmil and Hodgson (2006b) also recognise that there may be problems with the positivist foundations of much project research.

4.5.2 Calls to consider projects from new perspectives

Having discussed the 'under delivery' of project management and the likelihood that this is contributed to by the positivist ontology underpinning much existing research and project management tools, it is pertinent to consider the calls to revise the lenses through which the discipline is examined.

For example, Cicmil et al. (2006) propose the need for research of the 'lived experience' of projects (as introduced in section 4.3). Their proposition is based on the outcomes of the Rethinking Project Management Network which called for a stronger focus on project management practice in research. Cicmil et al. (2006) provide a discussion of the ontological, epistemological and methodological assumptions that would underpin such a perspective. Hodgson and Cicmil (2006) propose a danger in establishing a blind acceptance of universal techniques and therefore published a book on considering project managing through alternative perspectives, including discussions challenging the status quo (based in its positivist ontology).

A further example, is that a key theme that emerged during the UK's Association of Project Management's Courageous Conversation event in 2012: "We really need to talk about knowledge", was the necessity to consider knowledge and perspectives outside the currently accepted body of knowledge.

The commentary, *Novel approaches to organizational project management research* (Drouin, Muller & Sankaran 2013), provides a similar perspective; challenging the bodies of knowledge and the current approaches to project research, and proposing alternative research perspectives and tools. For example, Leigh (2013) proposes the use of simulations (such as war games, role play etc.) to capture the uncertainty, complexity and turbulence of organisational life. *Novel approaches to organizational project management research* also highlights the potential benefits of considering the models and frameworks of other disciplines, such as the behavioural sciences and strategic management (Doloi 2013; Killen et al. 2013). This commentary highlights the acknowledgement of the value in considering diversified perspectives of the phenomena of projects.

There is also growing discussion on the importance of practice-based research for project management. For example, Blomquist et al. (2010) highlight issues with the 'traditional' and 'process' styles of project research and propose a 'project-as-practice' approach to research. Blomquist et al. (2010) do not dismiss the value of the more prominent research styles, but suggest that there is value in expanding research perspectives/methodologies. This concept is built upon by Hällgren and Soderholm (2011). They suggest a need to adopt approaches that consider the actual behaviours of practitioners in context (praxis), rather than focusing on the formal project management formal tools, techniques and methods (Hällgren & Soderholm 2011).

van der Hoorn and Whitty (2015e) have also contributed to the discussion on calls for new perspectives in project inquiry. They posit a Heideggerian paradigm as the ontological foundation to explore the 'lived experience' of projects. Key Heideggerian concepts discussed include being-in-the-world and modes-of-being. Juxtaposed to a positivist, Cartesian perspective, Heidegger proposes the concept of being-in-the-world. This concept sees human beings (*Dasein*) as being shaped by and shaping their environment and highlights the risks associated with a reductionist approach (Heidegger 1962). Also, the (mode-of-being) concept that no object is inherently 'fit' or 'unfit', but that it is context that will determine its suitability, highlights the criticality of context when examining projects (van der Hoorn & Whitty 2015e).

4.5.3 The personal 'lived experience' of projects

Empirical studies of the personal experience remain rare. An exception is Whitty's (2010a, 2011c) exploration of project managers' responses to, and relationships with project artefacts. As part of this study, participants were asked to characterise their experience of managing a project in the form of a line drawing. Following this, the participants provided the researcher with an explanation of the representation. Participant comments when explaining their drawings included:

> "It's like playing the board game, snakes 'n' ladders. On good days you land on a square and shoot up a ladder. On bad days you might get bitten and slide down a snakes (Whitty 2010a, p. 28)".

Others explained wavy lines that they drew, indicating "there's an adrenaline rush when things are going right… and then there's that sick feeling knowing there's a big fall coming (Whitty 2010a, p. 28)." Another participant commented "managing a project is like playing Russian roulette with work (Whitty 2010a, p. 28)." The article highlights that it is highly plausible that "[p]roject managers obtain an emotional affect from aspects of the PM experience" (Whitty 2010a, p. 36). His research also included comments by project managers on their perspectives, feelings regarding project artefacts (such as the iron triangle and Gantt chart).

Cerny (2007) does not provide original empirical research regarding the experience of project management. However, she does highlight the criticality of including emotions in our exploration of the managing of projects. This reiterates the criticality of understanding the personal perspectives of the project phenomena. Specifically, Cerny (2007) proposes the management of emotions as a success factor in projects, and that project teams require emotional competencies. Cerny (2007) adopts a sociological perspective of managing projects. She argues that emotions are more intense in projects than in permanent organisations due to the temporary nature of projects, their complexity, risk, uniqueness and dynamics. Cerny (2007) also states that those managing projects need to analyse expected emotions and establish strategy and action to respond accordingly.

Aitken and Crawford (2007) undertook a quantitative study to explore project managers' responses to stressful situations within their projects. In their surveying of

71 participants they found that project managers have a tendency to consider stressful situations as controllable (or as requiring more information). Furthermore, those project managers use Active and Planning coping strategies to respond to stressful situations.

Finally, Leigh (2013) recognises the value-laden, pluralistic nature of projects and that whilst technical issues dominate the current research activity, that 'non-technical' issues also require attention. In response, she proposes the use of simulation ("an abstraction of reality for a purpose" (Leigh 2013, p. 200)) as a useful tool in project management research. She posits that such methods (including role playing, and war games) are ideal methods for supporting research in contexts that are unclear or emergent.

In summary, it has been established that there is a requirement to consider alternative perspectives when researching the phenomena of projects, and there is a sustained call for this to occur. Finally, work that has already been undertaken in the personal or 'lived experience' aspects of project managers has been briefly reviewed. No music-based elicitation has been identified as having been used in project research for this purposes and this capturing of 'lived experience' descriptions in the literature is considered to be in its infancy. As such the opportunity to add further empirical exploration to this area, and to leverage a new research method, is evident.

4.6 Research question

The literature review has highlighted that there is an opportunity to contribute to the capturing of descriptions of the 'lived experience' of projects. Such research can build upon and provide validation to the small body of existing 'lived experience' research. It is suggested that the value of the contribution can be increased through using a new research method to validate existing findings gathered through alternative methods (the research method is described in section 4.7.1). 'Lived experience' research is in its infancy. Subsequently, when considering the implications of the elicited descriptions it is relevant to focus on fundamental concepts such as 'what is a project?' The research question for this study is:

> What can descriptions of the 'lived experience' of project work say about 'what is a project?'.

4.7 Methodology

This study is focused on capturing descriptions of the 'lived experience' of managing projects. With these descriptions the question 'what is a project?' can be considered. The research study is underpinned by an interpretivist philosophy. This philosophical approach to the research is deemed suitable as rather than identifying universal theorem or truths (where a positivist approach may be best), the unique experience of the participating individuals is of interest in this type of study. As such, the research methods suited to the study are qualitative. The qualitative methods traditionally used when adopting an interpretivist research paradigm include semi-structured and structured interviews (Saunders, Lewis & Thornhill 2009). In addition to such interviewing techniques, arts-based inquiry methods are emerging as a qualitative research method or device (Bagnoli 2009; Brearley & Darso 2008; Rolling 2010). Additionally, it is highlighted that this study is positioned as exploratory research. The relative infancy of research in this area makes it unlikely that this study could provide explanatory (causal) outcomes. Only descriptions of the 'lived experience' are being sought. And these descriptions have an intrinsic value which could move the knowledge area forward.

This research project is focused on revealing project participants' 'lived experience' of managing a project. This necessitates a research method that avoids the research participants providing generic, instructed, or indoctrinated responses that are based on a theory of what projects *should be* like or taught definitions. We are looking for a more personal, concrete description of the perceived experience. Arts-based research methods (introduced above) can be used to elicit information from research participants that is beyond verbal and cliché responses (Allett 2010; Bagnoli 2009; Crilly, Blackwell & Clarkson 2006; Leavy 2008). Rolling (2010, p. 110) posits that arts-based research is "[c]apable of yielding outcomes taking research in directions that sciences cannot go." Bearley and Darso (2008, p. 3) state:

> "There are some experiences in organizational life that are so intense and multilayered that traditional forms of densely referenced academic text cannot adequately evoke their texture and complexity. Artful

> approaches complement existing qualitative research methods by inviting us to develop insights that would otherwise be inaccessible, because these approaches encourage us to see more clearly and feel more deeply as well as to express ourselves in multiple and diverse ways.".

Examples of the new insights that can be derived from arts-based research methods (i.e. drawing a concept) are evident in Whitty's (2010a, 2011c) study, which has already been discussed. Mitchell et. al. (2011), highlights that from as early as 1935, psychologists utilised drawing (and a subsequent discussion about the illustration) to facilitate rich exploration on personal views and perception.

The use of music is a relatively emerging and underexploited elicitation method in social research (Allett 2010; Rolling 2010). However, the following are two examples of music being utilised as an elicitation method. The first is Clennon's (2012) experiment which involved a group of participants collectively using their voices musically to respond to a question regarding their experience of a conference. Clennon commenced the session by workshopping various methods of noise creation through the instrument of voice. Once the group was comfortable using this instrument (the voice), Clennon asked one of the participants to conduct the group (who would use the broader group's voices as instruments) to respond to the research question.

Another study utilising music for elicitation was undertaken by Daykin (2004). In this research, Daykin asked participants to bring to their interview a piece of music that was meaningful to them in the context of the research theme. This music was then used to prompt discussion between the researcher and participant.

A key benefit of music as an elicitation method is its suitability for describing themes where flow, dynamism and gestalts are relevant (Allett 2010; Bresler 2008). Similarly, Clennon (2012) highlights that musical elicitation is beneficial for extracting tacit knowledge as it can be used as a metaphor for experiences that are normally intrinsic. Time, change, complexity and integration of parts to the whole are common themes in project management discourse (Project Management Institute 2013 Shenhar & Dvir 2007; Skyttner 2001). Bauer and Gaskwell (2000) would summate these benefits through indicating that the musical medium can be a

reflection of our social world. Despite these benefits, Daykin (2004) cautions of the challenges in interpretation of musical output. It is problematic to assume that music has a set meaning; the meaning of a musical piece can vary from person to person. However, it is suggested that this limitation can be overcome by complementing arts-based elicitation with a discussion or explanation; i.e. use mixed methods in data collection to ensure that the actual meaning of the music for the participant is accurately understood (Mitchell et al. 2011). In this way, the use of music is largely a device for accessing new information that may not be accessible through a standard interview process.

There is established commentary on how musical variables can be manipulated to express emotion (Bresin & Friberg 2011; Gabrielsson & Lindstrom 2011; Mohn, Argstatter & Wilker 2011). For example, whilst there is not definitive agreement on the precise ordering of relative importance, the following musical variables are considered to be key determinants of a musician's expression of emotion: tempo, mode, articulation, pitch level, loudness, rhythm patterns, phrasing, timbre, attack level and interval content (Bresin & Friberg 2011; Eerola et al. 2013; Gabrielsson & Lindstrom 2011). Figure 4.3 has been adapted from Juslin (2001) and shows the characteristics of music that are associated with five key emotions. The diagram is based on the findings of several experiments exploring the means by which musicians express specific emotions and by which listeners recognise emotion. The figure is also interesting in its classification of positive and negative valence and high and low activity in relation to emotions.

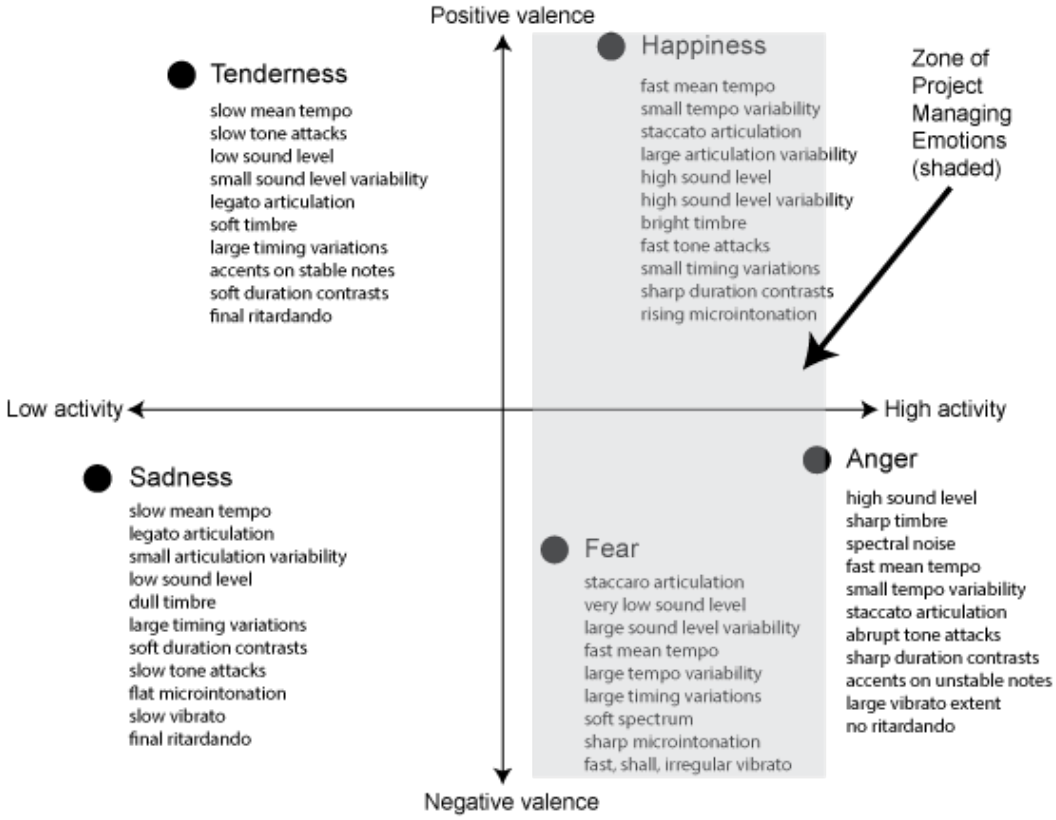

Figure 4.3: Musical characteristics and their relationship to the experience of project managing

Adapted from: Juslin (2001, p. 315)

In summary, Leavy (2008, p. 110) claims "[m]usic-based methods can help researchers access, illuminate, describe and explain that which is often rendered invisible by traditional research practices." Given, the call for new research paradigms and methods in project management research (Cicmil et al. 2006; Drouin, Muller & Sankaran 2013), music-based elicitation is deemed suitable as a method of enquiry for furthering the exploration of the 'lived experience' of projects.

4.7.1 Research method

The research method for the study can be summarised as a semi-structured interview in which an arts-based elicitation activity is used as a device to access a 'lived experience' description of managing a project. Specifically, the participant is asked to improvise (play) the experience of managing a particular project on a xylophone

and/or glockenspiel, and then to explain to the researcher the meaning of their improvisation. This is their description of their 'lived experience'.

The semi-structured interview process (which is audio recorded) includes a short opening discussion, in which the participant is assured that the improvisation is not focused on their musical ability but rather their personal experience of the particular project. They are also asked at this point whether they have any prior musical experience. The participant is then given an opportunity to explore the possible sounds that could be made on the xylophone and glockenspiel. This includes 'open' experimentation, a request to play three different emotions (happiness, scariness and sadness) and to express an experience such as playing 'a day at the beach'. The participant is not asked to explain their improvisations of these 'warm-up' activities, and the only commentary by the researcher is assurance that there is no right or wrong and that their improvisations were great.

Following the 'warm-up' activities, the participant is asked to bring a particular project to mind. The only requirement is that they can clearly remember the project. The participant is then asked to play on the xylophone and/or glockenspiel their experience of managing the project. There is no direction regarding the length of the piece. A second audio recording device records the participant's improvisation of managing the project. Having played their project managing experience, the semi-structured discussion continues. Firstly, the participant has replayed (from the second audio recorder) their improvisation and is asked to explain the meaning of their piece. The researcher takes the position of an interested observer, passing no judgement on the comments made, neither challenging nor affirming their experience. In closing, the participant is asked what type of project they were playing (e.g. construction, IT etc.), how long they had been working in project management, whether their improvisation is typical of most projects they have been involved with (why/why not), and their age bracket; their gender was also noted.

In this study the research participants were drawn from a group of postgraduate project management students. Participation was voluntary. The only requirement was that they had experience in project managing. The study received ethical clearance from the sponsoring institution. The participants were made aware of the opportunity

through email and an in-class announcement of the opportunity. No incentives were offered for participation.

The research study was undertaken in three different rooms, but in each setting, the xylophone and glockenspiel were set-up on tables with two different types of mallets made available for use across the instruments (refer Figure 4.4). It is noted that the glockenspiel had a chromatic scale (i.e. included sharp and flat notes); broadening the expression base for participants. The participants stood whilst playing. During the discussions prior to, and after the improvisation, the participant and researcher sat adjacent to the instruments. The discussion components of the audio recording were transcribed to enable analysis.

Figure 4.4: Set-up of xylophone and glockenspiel

4.7.1.1 Methods of analysis

The transcripts from the audio recordings were loaded into NVivo for analysis. Common themes in the participants' explanations regarding their improvisation were

tagged. An inductive approach was adopted; specifically, tagging any comments that could be related to the 'lived experience' of project management; no particular themes were pre-supposed.

The improvisations (on the instruments) of managing projects were also analysed through audio software: Sonic Visualiser and Audacity. This included digitised analysis of the wave-form (loudness/amplitude across time), mode pattern (major and minors) of each improvisation and their spectrograms. Spectrograms are based on a Fourier representation, converting an audio signal into a visualised form, with time shown along the x-axis and frequency along the y-axis. The prominence (loudness/amplitude) of any given frequencies at a given time is indicated through the intensity of colour (Costa et al. 2011). Spectrograms have been established as valuable tools in understanding and analysing music and enabling classification (Costa et al. 2011; Thibeault 2011).

4.8 Findings

The findings of this study will be discussed in three sections: participant / demographic / statistical information; findings derived from the transcripts; and findings from the improvisation analysis. This is followed by a summary of the most important findings from the analysis.

4.8.1 Participant demographic/statistical information

Fifteen participants were engaged in the research study. Of these participants, 12 were male and three were female. The participants' ages ranged from 18 – 24 through to 45 – 54. Of note, there was significant diversity across the type of projects managed by the participants (including IT, retail, construction, defence and policy). There was also a strong diversity in project managing experience; from 2 years to 15+ years. Four participants reported instrumental capability (although only two of these were percussionists/drummers). The length of improvisations varied from 12 to 76 seconds, the mean length being 39 seconds.

4.8.2 Transcripts: explanations of the improvisations by the participants

Eight of the participants indicated that they had played a full project/traditional project lifecycle in their improvisation. Ten of the participants spoke of the beginning of the project; overall participant's reported positive feelings or a 'building-up' at this stage of the project:

> "Yep, that's the start of the project, generally pretty good, getting warmed up, it's a new project, you're happy…generally, good emotions"

> "At the start it was great, you know, I was excited, happy to be involved and whatever, and was up really high."

Nine of the participants spoke of the middle of the project. Their references were centred on the period being a speeding up, experiencing ups and downs, managing challenges and resolving issues:

> "Once you do get started all the challenges that are put in front of you, and trying to deal with them."

> "And then you have highs and lows throughout it. You have good when you start make productivity [sic], it's pretty good and then you definitely always have some serious challenges"

Eight of the participants spoke of management influence, issues or conflict. For example:

> "…he [referring to a manager] is only just concerned about the money side of things, the cost, so he wasn't really concerned about timeframes, but, he told me at the start it was more about the timeframe."

> "So when that thing happened, we wanted support, but we couldn't get it."

The greatest consistency in commentary across the participants was in reference to the emotional experience of managing a project. For example, fourteen of the participants spoke of difficulties or challenging emotions as being part of their project managing

experience; challenges, issues, conflicting opinions, messiness, frustration, stress and pressure.

> "it was very very hectic… very intense… very manic…"

> "it was so demanding, the workload… And then we hit a lot of financial challenges… so hard… so yeah, that's where it gets really hard as well…"

> "everything just clashes together, starting to get eighteen things happening at once."

> "… then things just fall out of the sky, and they need to be dealt with… so while they might be a bit scary…"

Eleven of the participants commented on positive emotions as part of their experience of managing the project; happiness, good, pleased, up pretty high, satisfied, enriching, enjoyed:

> "I ended on at a high note.... like a separate high note, so... so 'bang', I'm happy now..."

> "…sometimes you feel happy, and sometimes, professionally, you feel satisfied with your job."

> "…personally, and professionally that was enriching for me."

Interestingly, nine of the participants, commented specifically on an up and down cycle in their experience, words such as "bitter and sweet", "mixed emotions" and "rollercoaster" were used.

> "It has bitter sides as well as some sweet sides. Ups and downs."

> "So, it was a lot of ups and downs…"

> "Yeah, it was a stop, start, stop, start of feeling successful and feeling unsuccessful."

Six of the participants referred to their experience drawing on game or play-related terms, for example: "goes off track", "running on the spot, and not getting very far",

"for a thrill" and "the goal was that it wouldn't be…". A third of participants linked their experience with learning, for example:

> "Yeah, I think as far as my professional development, I learnt a lot through it…"

> "It was educative, I mean, it was challenging and you learn a lot."

> "…a lot of learning, you're still getting a lot wrong…"

Figure 4.5 provides a tree map indicating a series of themes identified in the participant's discussions of their improvisations. The number against each theme indicates the number of participants that made a comment that has been classified as relating to the theme. The size of the area allocated to the theme is relative to the number of participant's associating with the theme. An example of a participant's comment against each theme is provided to create clarity in the theme name.

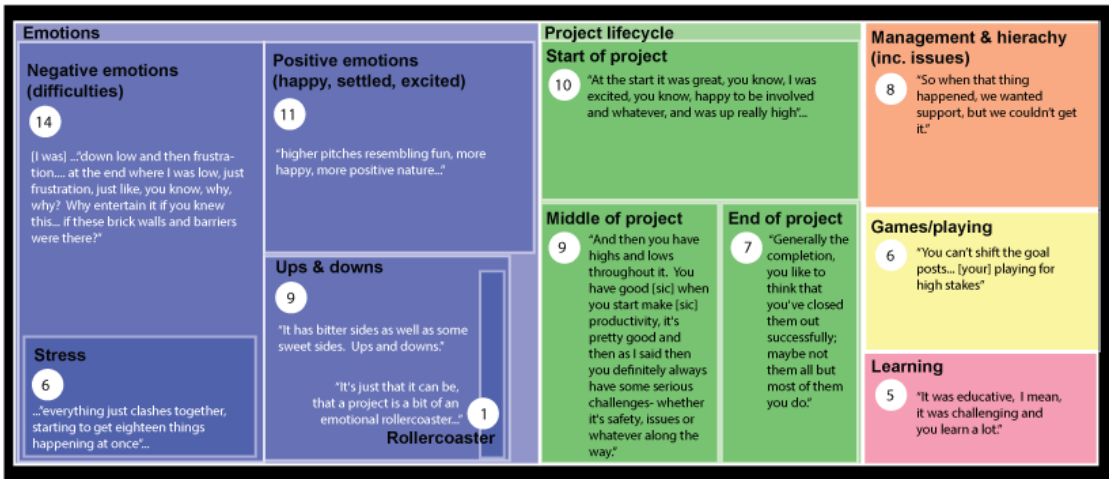

Figure 4.5: Tree map showing number of participants (n = 15) who identified with a theme

4.8.3 Participants' improvisations of the experience of project managing

As suggested above, the improvisations themselves cannot be weighted as heavily in their validity as the explanations provided by the participants of their xylophone/glockenspiel playing. Ultimately, the improvisations are simply a device to encourage participants to speak in a less indoctrinated or detached manner. Additionally, primacy is given to the discussions as it is recognised that non-

musicians are less likely to be able to accurately articulate emotion through an improvisation (Juslin 2001). However, the following was found when analysing the improvisations through Sonic Visualiser and Audacity. The spectrograms of thirteen of the fifteen participant's improvisations showed changing frequency (higher and lower notes) and varying amplitude/loudness throughout the piece. When the length of the tracks was digitially standardised, there was no correlation between the nature of these ups and downs across the improvisations (refer Figure 4.6). Three of the participants did perform a glissando (a rapid progression across several keys). It is again highlighted that any analysis of the actual musical improvisations is considered secondary to the narratives. The musical improvisation is simply a device that may result in alternative/new discussion of their experience of managing projects by the participants.

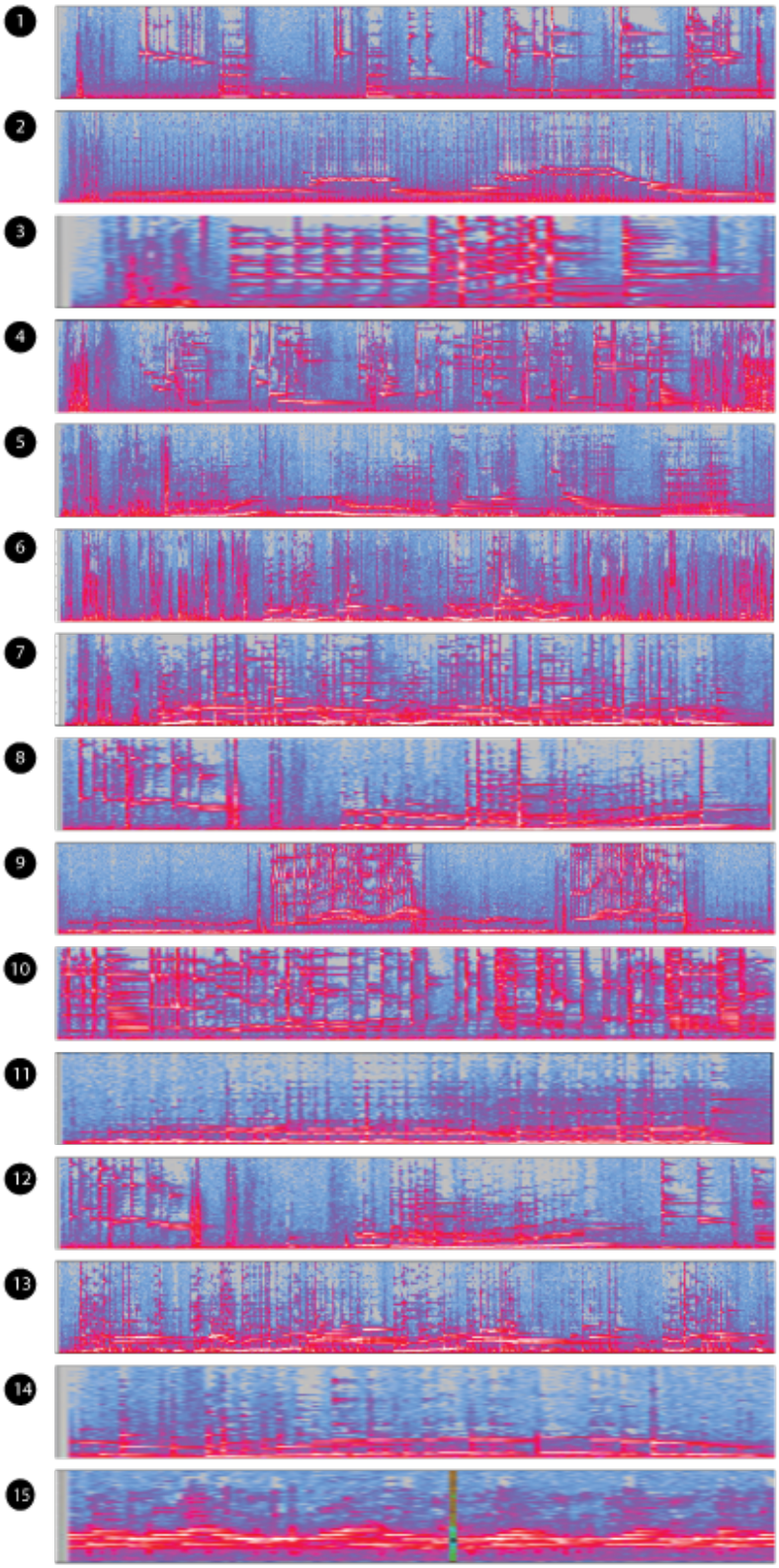

Figure 4.6: Spectrograms of participants' improvisations

4.8.4 Summary of findings

The most consistent findings of the study (and it is recognised that this is a sample of fifteen participants and this limitation is discussed further in section 4.9.4) is that 93% of participants included in their description of the 'lived experience' negative emotions or challenges, difficulties, frustration etcetera and 73% reported positive emotion. Additionally, 60% of participants spoke directly of ups and downs and 86% of the musical improvisations reflected this sentiment when viewed as spectrograms (i.e. they have a wave/cyclical pattern).

It is highlighted that there was minimal, and where it was present, inconsistent reference to the use of project management tools or techniques, or the day-to-day tasks associated with managing projects in the participants' explanations. Rather, participants' predominately described their experience in terms of an emotional imprint (refer Section 4.8.2) that they had or were experiencing. This can possibly be attributed to the effectiveness of the musical elicitation method (as suggested by the literature) to encourage participants to consider their experience from a non-traditional, non-linguistic, personal perspective. It enabled the participants to access their 'lived experience' of managing a project.

4.9 Discussion

The findings are now considered with reference to the research question. Limitations of this research study are noted and the implications for further research are also provided.

4.9.1 The personal 'lived experience' of project managing

It is clear from section 4.8.2, that this study has enabled us to access some descriptions of the 'lived experience' of managing a project. Unlike much extant project management research that focuses on more positivist, detached perspectives of the project phenomena, this study has captured more personal perceptions of the experience.

Study participants spoke of this personal perspective in terms of the challenging nature of work. They also described up and down emotional states, and periods of

greater and lesser challenges. Generally, they reported a feeling of satisfaction at project completion; a sense of achievement. They spoke of project work causing stress and pressure and of the demanding, manic nature of project environments. Some participants described this type of work as having a strong learning element, which they found enjoyable and spoke of the experience using game or sport terminology. Before considering the implications of these descriptions of the 'lived experience' of project managing we will briefly contrast these findings to the discussions provided by Whitty (2010a, 2011c) and Cerny (2007).

4.9.2 Comparison to the extant literature regarding projects and emotions

The outcomes of this study align with the findings of Whitty's (2010a, 2011c) empirical research and Cerny's (2007) commentary. For example, Whitty's (2010a) work also identified the concept of project manager's experiencing a rollercoaster or up and down type occurrence when managing a project. Specifically, his participants actually drew a rollercoaster and the board game snakes 'n' ladders when illustrating the managing of projects. Whitty (2010) also highlights that projects are reported by practitioners as having both challenges and difficulties, but there was also a positive emotion associated with the experience: "even the really bad ones. I get a buzz out of it, and I keep going back for more" (Whitty 2010a, p. 29). He terms this as a "duality" (Whitty 2010a), and this duality was certainly evident in the improvisations and explanations of the participants in this study.

In Cerny's (2007, p. 349) paper, she quotes Eskerod, Blichfeldt and Toft (2004):

> "…project work may be very exhausting due to high time pressures; many parallel tasks; ambiguity and uncertainty; many parties with conflicting interest [sic] to deal with; and a lot more, even though many people at the same time find project work very stimulating and exciting as it gives the person in question opportunities to put many different competencies into use and to grow personally."

In this study one participant directly quoted the enrichment and growth that can result from projects: "So, personally, and professionally that [the experience of the project] was enriching for me". Similarly, a participant commented on being "flat out"

(exhausted), and another commented "I'll just feel bad or I'm a bit stressed at times". Cerny (2007) also notes the close relationship between projects and change, and this was a strong theme in one participant's improvisation and explanation; "so projects generally involve change". Cerny (2007) draws on elements of the 'accepted' project lifecycle as sources of emotion. Again, this research study found that many of the participants did reference their emotions/ experience in relation to these phases (refer Section 4.8.2).

In summary, there is an alignment between this previous work exploring the 'lived experience' of projects and the findings of this study. It suggests that these descriptions of the more personal experience of managing projects *may* be representative of the broader experience of project managers. Obviously, this would require far more extensive exploration before such a statement could be definitively claimed. However, for the purposes of considering the implications of these findings, we will tentatively assume that this is somewhat representative of the 'lived experience' of managing a project.

4.9.3 Implications for research and practice

Findings such as those in this study provide us with a richer understanding of the phenomena of projects. This enhancement of our understanding is useful in supporting a reassessment of the phenomena of projects. The potential for using these 'lived experience' descriptions to reassess facets of our understanding is many. For the purposes of this study, we will focus on the implications of this study's findings on the foundational concept of 'what is a project?'. This is simply an example of what may be identified when assessing the implications of these descriptions. It is argued that in selecting this foundational concept for examination, a basis is being provided for further inquiry and discussion. Csikszentmihalyi's (1975) concept of a state of flow will be used in examining how the study's findings can inform our understanding of 'what is a project?'.

4.9.3.1 Flow theory

Csikszentmihalyi's (1975) concept of a state of flow that can be experienced by people when certain conditions are met is useful in assisting us in understanding the

implications of our findings. Whitty (2010a) prompts us to consider the link between project managing and flow theory and it is suggested that this study lends support to this suggestion. The flow theory concept was founded by Csikszentmihalyi (1975, p. 36) and was defined by him as "the holistic experience that people feel when they act with total involvement." The experience of flow is associated with feelings of absorption, exhilaration and enjoyment (Csikszentmihalyi 1990; Csikszentmihalyi 1992). Eight components are considered to be necessary for an individual to experience flow (Chen 2007):

1. Challenging activity requiring skill
2. A merging of action and awareness
3. Clear goals
4. Direct, immediate feedback
5. Concentration on the task at hand
6. A sense of control
7. A loss of self-consciousness
8. Altered sense of time

In simplistic terms, persons are 'in flow' if they are challenged within their ability. If the challenge is greater than their ability, anxiety will result. If the challenge is not sufficient for their ability, boredom will eventuate (Chen 2007; Csikszentmihalyi 2006; Weeson & Boniwell 2007). Weeson and Boniwell (2007) state that flow is equally applicable to its founding area of play, as it is to work. This experience of flow in computer games, and subsequent design implications, has been discussed in the literature (Chen 2007; Johnson & Wiles 2003). The challenge level of the game needs to be at the right level to sustain interest and enjoyment; neither too hard nor too easy. Figure 4.7 illustrates this balance between ability and challenge for an individual to experience a state of flow with reference to the experience of project managing. Simplistically, being in flow is a function of a certain ratio of capability to the challenge of the activity being undertaken.

Figure 4.7: The project managing flow zone: a balance between challenge and ability

Adapted from: Chen (2007, p. 32)

We would argue that the 'lived experience' of project managing reported by the study participants aligns with operating in the 'flow zone'. For example, aligned with component 1 of the flow experience, many of the participants reported the experience of project managing as a challenging activity requiring them to apply their skills. They balance this with a reporting of positive emotion (i.e. satisfaction, success etc.). This suggests that the emotional experience of project managers may be similar to that of game-play and experiencing flow. They are balancing on the edge of over challenged (and anxiety) and boredom; they are participating in a challenging activity requiring skill. It could perhaps be drawn that when project managers are managing their projects they are operating on the edge of their inherent capability (which includes the resources available to them) and this results in a positivity associated with operating 'in flow'.

The presence of the other components required for flow could be explored in future studies however, anecdotal evidence would suggest that many project environments could be considered as having many of the components required for flow. For

example, it is posited that a key component of most work associated with the term project has some form of goal or objective (component 3 for flow – clear goals - to be experienced). Component 4 – direct, immediate feedback - is also considered to be prevalent in many project environments. This can either be in formal processes such as tracking performance against baselines, or more informal in terms of ad hoc stakeholder feedback. Project managers are also likely to perceive that they have some sense of control, ability to influence the situation, or at least that they are expected to attempt this control. This would align with component 6 – a sense of control. In summary, whilst we have not been able to definitively defend that work that we call project work can invoke a sense of flow. We have illustrated the likelihood that this is a plausible notion.

Also of relevance to this application of flow theory to the study is the participants' association of their experience to games or sport and learning. Interestingly, six of the participants actually used game or sport language to describe their 'lived experience' of managing a project. We would suggest that this adds credence to the concept that there is a perceived game or 'challenge to succeed' element in the experience of project managing. Additionally, a third of participants identified a learning component in their experience of project managing. Similarities again could be drawn between this experience and the experience of progressing through the levels of a computer game. The participant's capability is being progressively built so they are able to pursue greater and greater challenges (or in this case, more and more challenging projects).

It has been confirmed through this study that the project managers participating in the study experience this sense of being challenged within their ability (component 1). If we then draw on flow theory, we can infer that this sense of an 'achievable challenge' is a sign to a balanced function of 'pushing capability' versus the challenging work activity. This identification of project work as being a function of activity versus capability is a foundation for reconceptualising our understanding of 'what is a project?'.

4.9.3.2 Reconceptualising 'what is a project?'

In the literature review reference was made to the use of a Heideggerian paradigm (van der Hoorn & Whitty 2015e) to underpin exploration of the 'lived experience' of projects. Within their discussion of the implications of the adoption of a Heideggerian paradigm they propose an alternative conceptualisation of 'what is a project?'. The proposal is that a project is the situation that arises when there is a disruption (or dissatisfaction) within a current set of conditions, and an attempt is being made to resolve this situation, but there is not an inherent capability to resolve the situation. Clearly, part of their definition is that what *is* a project is based on an individual's or an oganisation's capability (or lack thereof) to undertake an activity. What is a project is not definable in terms of a specific activity; it is in the relationship that a person or group of people has (in terms of capability) to an activity. This concept of capability versus activity has similarities with the function of flow (a relationship between capability versus flow) proposed by Csikszentmihalyi (1975).

We would argue that the findings of this research study validate an element of van der Hoorn and Whitty's (2015e) reconceptualisation of 'what is a project?'. Specifically, the project managers in the study (and in similar research of the 'lived experience' of project managing) experience certain emotions and challenges that align with operating in 'flow'. The experience of 'flow' per Csikszentmihalyi (1975) is a function of capability in terms of the activity being undertaken. However, the 'flow' occurs because of the relationship of the person to the activity. Not just because of the activity. An activity that causes flow for one person may create boredom or angst for another. Similarly, 'what is a project?' is not in the activity itself. 'What is a project' is in the relationship between the individual or organisation and the activity. Specifically, for an activity to be perceived as a project, completion of the activity must be at the edge of one's (the individual or organisations) inherent capability. For many of the project managers in this study, operating at this edge of capability was satisfying.

4.9.4 Limitations and constraints

This research study is not proposed to provide a population-valid perspective of descriptions of the 'lived experience' of managing projects. In fact, given the nature

of the question it is not expected that findings will ever be able to be deemed universally-applicable. However, a larger sample population would increase the general validity of the findings and therefore potentially support the posited implications. Further, the validity of our understanding of the 'lived experience' of project managing is also likely to be revealed through the ongoing use of alternative research methods (including those offered by the arts-based methods).

A further limitation can be grounded in the conception of the memory-experience gap. Kahneman (2007) and Kahneman and Riis (2005) argue that the 'experienced' and the 'remembered' are two different measures that will have different results. For this study, it highlights that the findings cannot be assumed to reflect the 'living' experience (i.e. the experience in the moment). However, they can be categorised as the 'lived' experience (i.e. a recollection of the past; a memory). This is not necessarily considered problematic, but it is raised to highlight the perspective of the explanations provided by participants of their experience, which is that they are the remembered experience not the in-the-moment experience.

4.9.5 Implications for future research

There is an opportunity for further exploration of the components required for the experience of flow in the project environment. Specifically, the gathering of empirical data to examine the presence of components two through eight within the project environment. Additionally, the experience of flow in understanding the people who are attracted to project work and how they can be supported and developed could be explored.

There is also opportunity to further explore the implications of the reconceptualisation of 'what is a project?'. Specifically, what are the implications for 'best practice', tools and techniques if we conceptualise that 'what is a project?' is inextricably linked to a person or organisation's capability and it is not in the activity itself.

4.10 Conclusion

This paper has added to the discourse regarding the personal 'lived experience' of project managing. It has also been established that the music-based research method is

effective in eliciting results that provide a 'lived experience' perspective to the phenomena of projects. It has been particularly effective in revealing the emotions experienced by those managing projects. The participants in this study described their experience of managing a project as challenging, having ups and downs, a sense of satisfaction at completion, involving learning, and having periods of stress and pressure. There is dynamism in our emotions when we are experiencing activities that we label as project work.

It has been proposed that if this described experience is considered through the lens of flow theory, then we can begin to see a conceptualisation of projects aligned with that of the Heideggerian paradigm of projects. That is, project managers report a sense of satisfying challenging that is characteristic of operating 'in flow'. Csikszentmihalyi (1975) describes flow as being a function of activity being undertaken versus the capability of the participant. This capability variable is key to van der Hoorn and Whitty's (2015e) Heideggerian proposal that 'what is a project?' is dependent on an individual's or organisation's ability to undertake the activity.

5 Continental thinking in project managing

5.1 Preamble

This chapter principally includes my article 'Continental thinking: a tool for accessing the project experience' published in the International Journal of Managing Projects in Business in 2016. This article was a contribution to the Journal's special issue on '10 years of rethinking project management'. The purpose of this chapter is to provide a summative grouping for the theoretical inquiry of this thesis. It brings together the work of philosophers such as Heidegger, Merleau-Ponty and Sartre which are proposed as valuable philosophical foundations in disclosing the 'lived experience' of project work. Continental philosophy is associated with 'currents of thinking' such as existentialism, subjectivity and the primacy of personal experience. The paper argues that the interpretive lenses provided through the application of such Continental philosophical concepts can provide researchers and practitioners with access to the 'lived experience' of project work, which is less accessible through traditional analytical or positivist lenses.

The chapter provides a strong theoretical contribution to the discipline by way of a research agenda that can ensure that momentum in research relevant to practice is cultivated. The chapter also provides a grounding for the more detailed discussion of 'projectyness' in chapter 6.

Article Published	**Fulltext Download (per Emerald)** (as at 9 June 2017)	**Scopus Citations** (as at 9 June 2017)	**Other comments**
Q4 2016	137	2	Special Issue: Reflections of 10 years of rethinking project management – legacy and future

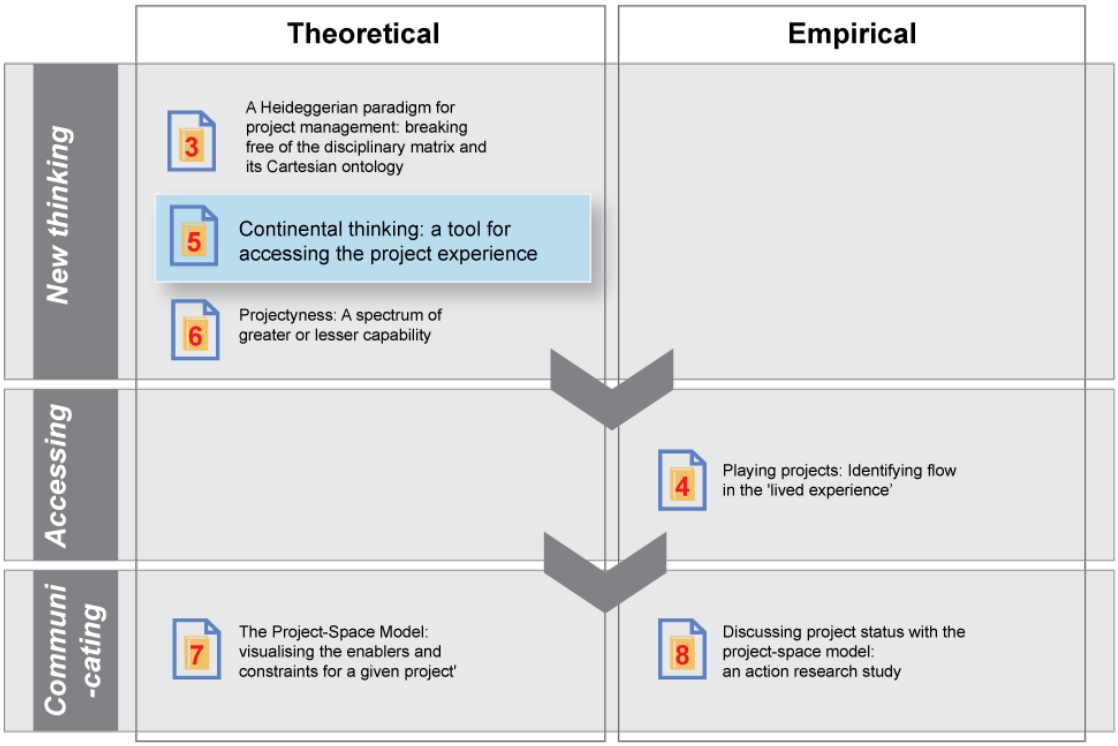

Figure 5.1: Chapter 5 positioning

5.2 Abstract

Purpose:	To outline a research agenda for the phenomena of projects grounded in Continental philosophy concepts as an alternative to the dominant Analytical thinking.
Design/ methodology/ approach:	A theoretical exploration of Continental concepts in generic terms; discussion of the examples of discourse on various philosophical lenses in different disciplines; discussion of extant examples in the project literature of Continental themes; conceptualisation and discussion of the Continental research agenda.
Findings:	The integrated Continental research agenda proposes three key themes: experience, projectyness and being. This interpretive lens is important for providing an alternative worldview to the dominant Analytical viewpoint.
Originality/value:	The article provides an integrated Continental framework (drawing on a variety of Continental themes) for our conceptualisation of, and inquiry into the experience of project work. It highlights how our worldview impacts our interpretation of phenomena.

5.3 Introduction

This paper proposes a research agenda for the phenomena of project work grounded in Continental philosophical perspectives. We argue that a Continental philosophy world-view contrasts significantly with the currently dominant Analytical philosophy viewpoint and can have a significant impact on our interpretation of our observations. Whilst there is no agreed definition of Continental philosophy in the extant (philosophy or project) literature (Buckle 2004; Engel 1999; West 2010), a Continental philosophical approach can be differentiated from an Analytical philosophical approach by a grouping of thoughts that share a family resemblance including: existentialism, subjectivism, contextualisation, aesthetics and anti-scientism (Critchley 2001; West 2010).

Various discourses have associated the classically dominant project research and project management best practice guides with Cartesian, functionalist, analytical or positivist paradigms (Bredillet 2004, 2010; Bredillet 2013; Cicmil & Hodgson 2006a;

Rolfe 2011; Thomas & Mengel 2008). And certainly there is evidence of dissatisfaction with project delivery and project management research (Bloch, Blumberg & Laartz 2012; Bredillet 2013; Cicmil & Hodgson 2006a; Geraldi, Maylor & Williams 2011; KPMG 2013; McHugh & Hogan 2011; PM Solutions Research 2011; Thomas 2006; Winter, Smith, Morris, et al. 2006; Zwikael & Bar-Yoseph 2004). It is the combination of these factors that has resulted in a call for new perspectives on projects such as the agenda set by the Rethinking Project Management network (Winter, Smith, Morris, et al. 2006), exploration of project actuality as per Cicmil et al. (2006), and calls for new methodologies and methods for project research (for example, refer monograph edited by Drouin, Muller and Sankaran (2013)).

We posit that the currents of thought associated with Continental philosophical thought can provide an integrated alternative lens through which to consider project phenomena. We argue that it builds on the call for a strongly practice-grounded perspective (Cicmil et al. 2006; Winter & Smith 2006). And it provides researchers with an interpretive lens that gives primacy to project participants' unique, subjective perception of experience: both logical and emotional without the need for such findings to be universalised. Because the Continental perspective is grounded in the perceptions of the individual/s it draws a focus to contextualised experiences in concrete situations rather than on the objective and traditional project management topics such as instrumentation (Gantt charts etc.) and success factors. The importance of this practice focus and contextualisation is already established in the project and broader organisational/social science literature (Bredillet 2013, 2015; Flyvbjerg 2006b).

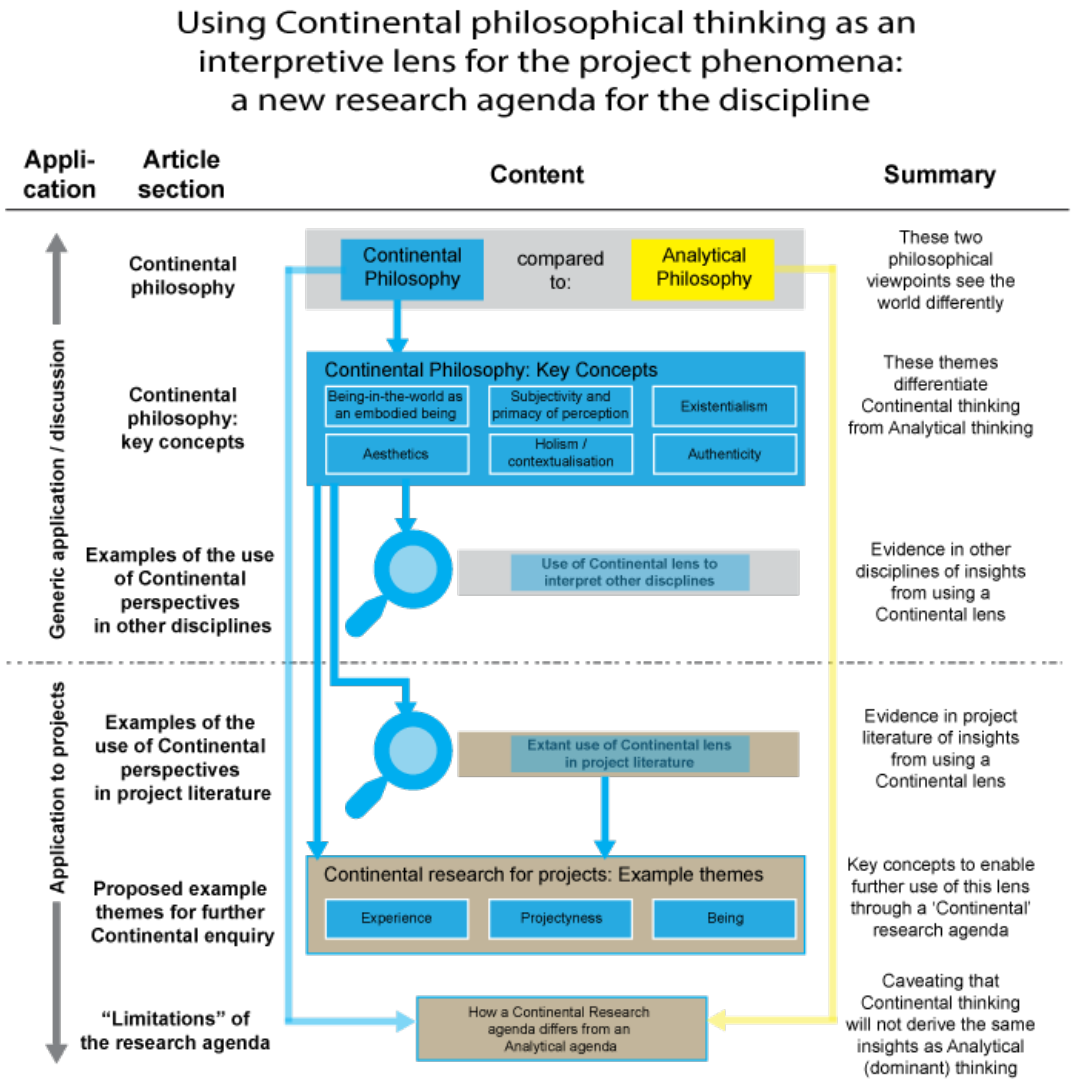

Figure 5.2: Structure of argument

Figure 5.2 outlines the structure of our argument that Continental philosophical thinking is a valuable lens for interpreting project management, and can be the grounding for a research agenda for the discipline. To orientate the reader, we commence by discussing Continental philosophy (in contrast to Analytical philosophy) in broad generic terms (section 5.4). We hope this equips the reader with an understanding of the nature of the interpretive lens we are discussing and how it is distinct from dominant analytical concepts. We then discuss examples of specific concepts that are associated with Continental philosophy such as subjectivity, embodiment, existentialism and aesthetics, still in generic terms (section 5.4.3). Later

in our discussion, these concepts are synthesised in the context of project managing to propose example themes for a Continental research agenda for the discipline.

We then begin building our argument through discussion of literature from other disciplines that have already recognised the Continental versus Analytical interpretive lens and how this recognition results in diversity of discipline insights (section 5.5). We strengthen our proposition for the Continental viewpoint by providing examples of extant project literature that has (to varying degrees) incorporated such Continental themes and have derived non-traditional insights (section 5.6). We then draw on the generic Continental themes introduced in section 5.4.3 and propose an example of an integrated project research agenda underpinned with Continental currents of thought (section 5.7). We propose that such themes will guide further inquiry that will derive new insights aligned with a Continental interpretation of the project phenomena. We close the discussion by highlighting the "limitations" of a Continental lens in exploring the phenomena (what we cannot expect the agenda to provide) but arguing that it is these differences to Analytical thought that make it a critical agenda for furthering the discipline.

5.4 Continental philosophy

There is no agreed definition of continental philosophy in extant literature (Buckle 2004; Engel 1999; West 2010). Rather there is significant discourse on the features that distinguish Continental Philosophy from Analytical Philosophy and the philosophers who are associated with each approach. This paper is not attempting to resolve this lack of consensus on a Continental definition, as this is best left to pure philosophy. Our aim is to propose an agenda of research that adopts a broadly Continental lens to interpret the experience of project work. Specifically, if we draw on the thinking of those who are associated with this approach what research perspectives do we access? To enable this discussion, we will begin by exploring some of the history (and misnomers) of Continental philosophy, identify those philosophers who have been associated with the tradition and then provide a discussion of selected concepts associated with the Continental approach.

The start of the division between Continental and Analytical thinking is traced to Kant in the late 18th century (Critchley 2001). This split is associated with the primacy

given to Kant's *Critique of Pure Reason* and transcendental idealism versus primacy to *Critique of Judgement* and subsequently German Idealism (Critchley 2001). It is noted that since this time, and until recently, the West has largely ignored the philosophical work arising in Continental Europe (West 2010). It is therefore not surprising that the mainstream project management discourse (arguable also of a Western philosophical tradition) has found itself focusing on an Analytical rather than a Continental approach. Cicmil and Hodgson (2006a, p. 111) suggest that the general view presented in project management textbooks and presented by the professional project management associations are normative; "[g]overned by the tradition of the 'natural sciences'"; and having assumptions of "rationality, universality, objectivity and value-free decision-making". Thomas and Mengel (2008) also propose that the Project Management Body of Knowledge has an analytical base. Bredillet (2004) discusses the limitations of the positivist foundations of the discipline, and that it is grounded in the "hegemonic rationalist paradigm anchored in the Enlightenment and Natural Sciences tradition" (Bredillet 2013, p. 56). Rolfe (2011, p. 59) also argues the discipline's tendency to apply "a reductive and limited range of quasi-scientific techniques to problems that continually defy such reduction".

5.4.1 Continental philosophers

Identifying philosophers who have been aligned with the Continental or Analytical philosophical traditions can be a useful starting point in understanding the differences between the approaches. Table 5.1 draws on the extant literature's classification of prominent philosophers as aligned with the Continental versus Analytical philosophical traditions (Brogaard & Leiter 2014; Critchley 2001; Levy 2003; Pasch 1959; West 2010). It is from the work of such Continental philosophers that we draw the key concepts to underpin a Continental research agenda. Hegel is generally attributed as the first Continental philosopher (West 2010), he has been followed by numerous others who self-associate or have been associated by others with Continental philosophy.

Table 5.1: Continental and analytical philosophers

Philosophers of the continental tradition	Philosophers of the analytical tradition
• Hegel • Marx • Kierkegaard • Nietzsche • Husserl • Heidegger • Arendt • Sartre • Beauvoir • Foucault • Merleau-Ponty	• Russell • Moore • Frege • Quine • Davidson

Developed from: (Brogaard & Leiter 2014; Critchley 2001; Levy 2003; Pasch 1959; West 2010)

5.4.2 Conceptualising Continental philosophy

Our conception of Continental philosophy is drawn from the discussions of Pasch (1959); Engel (1999); Critchley (2001) and West (2010). Firstly, the origins of the Continental-Analytical divide (the divide) can be contextualised in its emergence in the late 18th century. Continental philosophy can be seen as a response to the Enlightenment's emphasis on science and its associated rationalism (West 2010). Analytical philosophy is commonly associated with the spirit of the physical sciences and mathematical foundations; a perspective aligned with the Enlightenment period (Levy 2003; West 2010). Continental philosophy is more commonly associated with moral, existential and aesthetic inquiry and matters of the flesh and is even classified as being of an anti-scientism approach (Critchley 2001; West 2010).

A more nuanced explanation of this distinction is provided by Levy (2003). In his discussion of the divide, he associates Analytical philosophy with being similar to "normal science" in terms of Kuhn's paradigm discourse. As such, it has a focus on problems rather than methodology and narrows the field of possible problems (and solutions) to within the agreed paradigm of the discipline. We would argue that this is also reflected in the dominant project literature which has until recently been largely exploring from a particular perspective (i.e. a positivist, analytical, "natural sciences" paradigm) (Bredillet 2004; Bredillet 2013; Cicmil & Hodgson 2006a; Rolfe 2011). Such an Analytical approach enables faster discoveries, depth in inquiry and even solutions to particular problems, but it does so relying on the pre-agreed fundamental foundations of the given paradigm (Levy 2003). This is in contrast to Continental philosophy which Levy (2003) aligns with Kuhn's pre-paradigm science. It often

requires a building of foundations (as it is operating outside a paradigm) for the subject of the particular discourse. The outcomes of Continental philosophy are largely "general syntheses" and greater novelty in discovery.

Also grounded in the scientific distinction, but developed differently are discussions by Critchley (2001) and West (2010) of knowledge and wisdom in terms of the divide. According to West (2010, p. 5) Continental philosophers "share the concern of traditional philosophers with wisdom rather than mere knowledge." This is grounded in the observation that Continental philosophers are interested in the modes of experience and common sense (West 2010). Critchley (2001) provides further insight highlighting that where philosophy is underpinned by a pure science approach the emphasis is on knowledge and there is a neglecting of wisdom. Critchley (2001, p. 11) states Continental Philosophy "seems to be truer to the drama of life, to the stuff of human hopes and fears and the many little woes and weals…" We highlight here a linkage to the argument for a praxeological approach to project management (Bredillet 2013). Such a mode of inquiry gives primacy to subjectivity and "Knowing-as-Practicing" (Bredillet 2013). The praxeological approach is grounded in the Aristotelian concept of phronesis (practical wisdom grounded in activity) that has received coverage in the literature for its ability to provide relevant, new insights (for example: (Bredillet 2013; Bredillet 2014; Bredillet 2015; Cicmil 2006; Flyvbjerg 2006b; Goncalves & Figueiredo 2008)).

The concept of contextualisation can also be linked to the scientific distinction and provides its own insights. The Analytical approach is associated with terms such as "radical reconstruction, logical atomism, reductionism… logical positivism, logical empiricism and scientific empiricism… (Pasch 1959, p. 815)". This is in contrast to Continental philosophy that is strongly associated with contextualisation. Critchley (2001, pp. 46-7) refers to John Stuart Mill's concept that "the great danger in all things philosophical is not so much of embracing falsehood for the truth, as of mistaking part of the truth for the whole." He continues by discussing the limitations of the assumption that Continental philosophy is more closely associated with proper names/nouns than problems. Specifically, that the Continental approach has a more contextual approach which demands a different treatment and therefore may appear more indirect. The importance of using research methods that enable a contextualised

understanding of phenomena (for example, through case study methods) has already been noted in the literature. (Flyvbjerg 2006a). Critchley (2001) highlights that Continental philosophy recognises the radical finitude of the human subject and therefore all experience is contingent and highly contextual. Again, this can be contrasted to Analytical philosophy's more pure science approach (reductionism and removal of context).

In an extension of this concept Critchley (1997, 2001) suggests that critique, praxis and emancipation are at the core of Continental philosophy. It is in praxis (practice/the lived life of a human being) that there can be a criticism of current conditions and a desire for some alternative; an emancipation (Critchley 1997). In this way, the Continental tradition can be associated with crisis. Critchley (2001) summarises that much of Continental Philosophy is concerned with critique of some social practices and a call towards freedom (emancipation) from that current situation.

The concept of family resemblance is also useful in conceptualising Continental philosophy. The concept of family resemblance can be traced to Wittgenstein, and Rosch and Mervis (1975). Rosch and Mervis (1975, p. 575) describe family resemblance as each item having "at least one, and probably several elements in common with one or more items, but no, or few, elements are common to all items." It is particularly helpful in our conceptualisation of the Continental approach as it is recognises that there will be diversity in the currents of thought included in Continental philosophy. There is a likeness in the thinking but not necessarily a single unifying characteristic (West 2010). Critchley (2001, p. 60) draws on this concept in his association of Continental Philosophy with "ancestral clusters".

A misnomer that deserves correcting is any assumption that the Continental versus Analytical divide is associated with geography. We highlight, along with Levy (2003) and Critchley (2001) that our conception of Continental versus Analytical philosophical thinking is certainly not linked to the geographical locations of the associated philosophers. Levy (2003) (amongst others) highlights the considerable misnomer of such a classification.

In summary, for the purposes of this discussion, we posit that Continental philosophy can be considered to be currents of thinking which share a family resemblance. This

family resemblance favours contextualised, phenomenological inquiry as opposed to the more traditional, logical and atomistic scientific approach. It also frequently has underpinnings of crisis in some current situation and a call for awakening and emancipation. These currents of Continental thinking have been seen in the works of the philosophers shown in Table 5.1. We will now explore in greater depth selected Continental philosophy concepts that will highlight the insights that this alternative interpretive lens can provide for exploring project work.

5.4.3 Key concepts

In this section, we will discuss generic Continental concepts that could underpin a Continental research agenda for project work. These concepts and a brief summary of each are provided in Table 5.2. These concepts are drawn from the works of prominent philosophers of the Continental tradition. Providing a comprehensive discussion of each philosopher's work is beyond the scope of this discussion (and can certainly be found in the extent literature). However, these themes have been selected based on their ability to provide interpretive lenses to underpin research into project work. We do not discount that there is potential for there to be further Continental lenses that could inform inquiry, but what is presented here are examples to highlight the essence of the Continental approach. These generic Continental concepts are then combined to provide examples of specific themes in an applied context that can underpin a Continental research agenda of project work (refer section 5.7).

Table 5.2: Selected Continental Philosophy concepts

Continental Philosophy Concept	Summary/Description of Lens	Analytical Lens
Being-in-the-world as an embodied being	Human beings have a body (corporeality) and are immersed in experience. We do not stand on the outside of experience and look in.	Objective, detached perspective of a phenomena
Subjectivity and the primacy of personal experience and perception	Our knowing is through our personal (sensory and cognitive) perceptions and therefore is subjective.	An objective/single/right "truth" can be derived about a phenomena
Existentialism	There is no divine being or thing that can ground what is universally right or wrong or determines our essence and therefore we have the responsibility and freedom to shape our own being.	Often a perspective that there is a guiding rule or person to inform behavior in a situation; a right or ideal way

Continental Philosophy Concept	Summary/Description of Lens	Analytical Lens
Aesthetics	Experiences/stimuli that affect us through the senses (our corporeality).	Primacy is given to a rational, cognitive perspective; mind-body dualism
Holism/ Contextualisation	The importance of recognising the whole as different to the sum of the parts (and the limitations of atomistic/reductionist enquiry) and the criticality of context in understanding any phenomena.	A reductionist approach to inquiry
Authenticity	That we can choose to respond to the actual situation facing us (authenticity), or to comply with the norms of the 'they' that may not be what is actually required (inauthenticity).	The right behavior can be known through compliance with rule sets or ideals

5.4.3.1 Being-in-the-world as an embodied being

Heidegger (1962) introduces the concept of modes of being. One of these modes of being is Dasein which can be aligned to human beings (Greaves 2010). According to Heidegger, Dasein can care or have an attitude towards things: they can 'give a damn' (Kaelin 1988). It is this characteristic that distinguishes Dasein from buildings, a cup or other such equipment, rather than how science may differentiate based on biological characteristics. A related and fundamental concept is that Dasein are not separate from their world, they are infused and have a reciprocal relationship with the environment (which includes other Dasein and equipment) in which they are being (Blattner 2006; Schatzki 2005).

This contrasts to traditional scientific approaches (underpinned by Analytical philosophical lenses) that examine an 'object' in a decontextualised manner. We may examine a leaf in terms of its texture or size or colour, without reference to how it affects or is affected by the ecosystem which it is part of. The Heideggerian being-in-the-world concept is an example of how a Continental perspective places an emphasis on contextualisation of the human experience. We can only discuss and understand Dasein with reference to the world in which they are being. It is the world that enables Dasein to *be*. It is also in the concept of being-in-the-world that the common crisis theme (praxis-critique-emancipation) in Continental philosophy is possible. In praxis

(Dasein in their world), there can be a problem (critique) to which Dasein need to break free/resolve.

Merleau-Ponty has the perspective that human beings (Dasein) are embodied in their given world/s; they have a body which is fundamental to their experience (Merleau-Ponty 1962). This is in contrast to the Descarte's conception of mind-body dualism (an arguably Analytical conception), where the mind and body are distinct parts (2015). Merleau-Ponty further argues that neither the intellectual nor empirical approaches (of his time) were sufficient for understanding the world (Macann 1993; Matthews 2009). As the mind and body are referentially coupled, a purely rational (mind-only) based approach is futile; we cannot exclude our corporeality from our exploration and understanding of phenomena. In summary, the contextualised and praxis / critique / emancipation focus of Continental philosophy can be seen in thinking such as Heidegger's being-in-the-world and Merleau-Ponty's argument that within this world we are embodied. This is a distinct contrast to an objective and detached perspective that aligns with an Analytical lens (Dowe 2010).

5.4.3.2 Subjectivity the primacy of personal experience and perception

Following from the concept of humans as being-in-the-world as an embodied subject is the dominance of the subjective ontological perspective in Continental thought. Merleau-Ponty's (1962) primacy of perception argument is a strong example of subjectivism in the Continental tradition. According to Merleau-Ponty, our mind-body perceives. It is through our senses that we can experience the world and this will be our unique personal experience (Merleau-Ponty 2004). Merleau-Ponty explains this concept through the metaphor of honeyness. An experience such as the sweetness of honey is due to a relationship between Dasein and the object (the honey). The sweetness is not in the honey itself; it only has sweetness when Dasein taste it (and it may not have sweetness if we have just eaten something significantly sweeter). Matthews (2009) uses the example of difference in the perception of the size of a jumbo jet depending on whether you are standing close to it on the tarmac (it appears large), or whether you are in the sky, looking down at it on the tarmac (it appears small).

Merleau-Ponty elaborates on this concept when discussing the art of Cezanne (Merleau-Ponty 2004). He proposes that Cezanne's work remains faithful to a particular person's perception or experience of the environment. It is a view from somewhere – a particular person's perspective or experience. Generally, classical art would present a more analytical view, a view "from everywhere", but therefore from actually nowhere. This view "from everywhere" is not actually how any one person experiences the painted subject or landscape. The classical painter's actual visual perception of the experience is overridden. The classical artist's personal experience of the subject or landscape is removed from the work; it is a sanitised or universal view.

We also highlight phenomenology as a key concept in the Continental tradition. Husserl is now credited with the fatherhood of phenomenology (Trombley 2011). Phenomenology rejects scientific realism and argues that knowledge is infused in the living of our everyday life (Schwandt 2007). Phenomenology is concerned with how things manifest to us (Cerbone 2006). It supports an epistemological perspective that is based on everyday experience and our subjective perception of such. Clearly, this is in contrast to traditional scientism (objectivism) and its generalisation of phenomena in "lab-based" studies (Holden & Lynch 2004).

5.4.3.3 Existentialism

Existentialism is a concept strongly associated with Continental philosophy (Critchley 2001; Protevi 2005). Continental philosophers Kierkegaard, Nietzsche and Sartre are specifically recognised for their existential thinking (Burnham & Papandreopoulos 2011; Trombley 2011; West 2010). A key concept in existential thinking is that existence precedes essence (Sartre 2007). This has the implication of positing that whilst we are thrown (born) into the world we have choices (through our actions) as to what we become (our essence) (Sartre 2007). Coupled with this concept is the notion of human beings having freedom, our lives are not predetermined. We make choices (within certain parameters). This freedom of choice is associated with a further existential concept that we cannot rely on guiding universals, or definitive meaning, or a god to guide us to the right choice (Burnham & Papandreopoulos 2011). It is not pre-planned (by a god or another force) that I will become a pilot or a

teacher or a parent, it is through my choices that I shape my being (essence) into these various roles.

As there is no one-right-way to live our lives (or make a particular decision), the result is likely to be anxiety or angst (Sartre 2007). There are no universal morals or rules for behavior; we are free (forced) to choose. Sartre (2007, p. 29) emphasises the responsibility associated with this freedom:

> "That is what I mean when I say that man is condemned to be free: condemned, because he did not create himself, yet nonetheless free, because *once cast into the world, he is responsible for everything he does*... Neither do existentialists believe that man can find refuge in some given sign that will guide him on earth…" (Italics added)

Existentialism is subsequently linked to the concepts of authenticity and inauthenticity introduced further in this discussion. The question of what should *I* do in any given situation? What is the right thing in *my* unique and concrete situation? Again, we see the subjectivist underpinnings of Continental Philosophy through a related concept.

5.4.3.4 Aesthetics

As introduced previously in section 5.4, Continental philosophy's deviation from a purely scientific approach distinguishes it from Analytical philosophy. In fact, a variety of Continental works have linkages to, or grounding in the arts and literature (Bowie 2003; Levy 2003; Taylor & Hansen 2005). For example, Merleau-Ponty's *World of Perception* (2004) includes a chapter on 'Art and the World of Perception', Heidegger's work includes *Origins of the Work of Art* (1993), existentialists such as Nietzsche and Sartre, are recognised for having made original and significant contributions to aesthetic thinking (Deranty 2015). This should come as no surprise given our identification of embodiment as a key Continental concept. In its broadest definition, aesthetics are concerned with sensory perception (Bowie 2003); it is not as is often used in common usage associated solely with beauty. Levinson (2009, sec. 2.1) characterises aesthetics in the following terms:

> "having gestalt character; requiring taste for discernment; having an evaluative aspect; affording pleasure or displeasure in mere

> contemplation; being non-condition governed; being emergent on lower-level perceptual properties; requiring imagination for attribution; requiring metaphorical thought for attribution; being notably a focus of aesthetic experience; being notably present in works of art."

In a practical sense, and beyond the obvious scope of art, in an organisational or business setting examples of aesthetics include office or store atmospherics, gesture, and fashion/dress (Bazin 2013; King & Vickery 2013; Morrison et al. 2011).

Since Parmenides, an intellectual approach to knowledge acquisition became dominant over knowledge acquired through individual sensory experience (Bowie 2003). We would suggest this strongly echoes the fundamental differences between Continental and Analytical philosophy. An analytical viewpoint gives primacy to rationality and distinguishes between mind and body (Thompson, Locander & Pollio 1989); it is not aligned with the subjectivity that is inherent in aesthetic inquiry. The recognition of subjectivism and personal perception and experience is also coupled to the concept of aesthetics (Strati 1996; Taylor & Hansen 2005; Toadvine 2010). What is perceived as beautiful or grotesque is personal and related to our own sensory experiences and preferences (though there is most certainly some similarities across various groupings). And therefore there can be no definitively universal classification or ideal (an analytical concept) of something in aesthetic terms.

In alignment, with our conceptualisation of Continental thinking being of family resemblance in nature, we are not suggesting that there is a consistent approach to the thought/arguments associated with aesthetics in Continental philosophy. Rather, simply, that the topic is discussed by many of those associated with Continental thinking.

5.4.3.5 Holism/contextualisation

We can draw further on Heidegger's modes-of-being (introduced above) to explore the primacy of holism and contextualisation in Continental thought. In addition to Dasein (human beings), three further modes-of-being in Heidegger's works are ready-to-hand, unready-to-hand and present-at-hand (Heidegger 1962). Ready-to-hand and unready-to-hand are contextualised modes-of-being for equipment in Dasein's world. The present-at-hand mode-of-being is a decontextualised mode-of-being for

equipment (Brandom 2005). An item of equipment (for example, a hammer) can only be ready-to-hand (suitable for a particular activity) or unready-to-hand (not suited to a particular activity) given a particular context. A hammer is suitable (ready-to-hand) for piercing a nail into wood. A hammer is not suitable (it is unready-to-hand) for sawing a piece of timber. A hammer is neither suitable (ready-to-hand) nor unsuitable (unready-to-hand) without context, without being part of a broader environment (equipmental totality in Heidegger's terms).

In its present-at-hand mode-of-being, a hammer is described in terms of decontextualised characteristics such as its weight, its material, its shape. The present-at-hand mode-of-being is aligned with a pure science and objective perspective (Cerbone 2008; Greaves 2010; Heidegger 1962) – the analytical viewpoint. Heidegger argues that we actually reduce our understanding of equipment in examining it in a present-at-hand manner. We increase our understanding when we contextualise our exploration of equipment (i.e. (un)ready-to-hand) and embrace the subjective (contextual) nature of this mode-of-being.

5.4.3.6 Authenticity

Closely related to existentialism are the concepts of authenticity, inauthenticity and the 'they' (DasMan in German). As discussed previously, existentialism is associated with freedom and choice and subsequent angst. Heidegger also discussed the concept of angst (he uses the term anxiety), and this is particularly in relation to acting authentically or inauthentically, and the influence of DasMan on such decisions (Carman 2005; Greaves 2010). According to Heidegger, DasMan is the source of the behaviours and norms to which those in a given group will abide (Cerbone 2008; Dreyfus 1991; Haugeland 2013). The 'done thing' or 'the right way' is generated by DasMan (Greaves 2010; Haugeland 2013).

If human beings comply with DasMan (or any other source), when they do not believe it is actually the right choice/action for the moment, they are acting inauthentically (Carman 2005; Greaves 2010). Comparatively, an authentic action will reflect the Dasein's response to the situation as they see right. Heidegger, similar to Sartre identifies that acting authentically, making decisions based on one's own beliefs or instincts rather than a guiding hand or norm (from DasMan) will result in anxiety and

requires a resoluteness in taking up the choices which are presented to them (Blattner 2006; Cerbone 2008). An example of this concept would be in an authentic decision by a person whose friends drink beer (the DasMan in this case), but her decision to drink wine because this is her personal preference. The decision to fall into the norm of the group and drink beer would be inauthentic for her.

We argue that this concept of authenticity is also related to the praxis / critique / emancipation theme in much Continental discussion. In a situation in which we are acting inauthentically within a particular world (part of our life) we are faced with two types of choices. There are choices that rebel against this inauthenticity and move us towards authenticity: a choice to critique and emancipate from this situation. Or we can make choices that see us remain inauthentic.

5.5 Examples of the use of Continental perspective in other disciplines

Literature in other disciplines has already recognised how differences in worldviews (or lenses) can affect the exploration of phenomena within their domains. We note here some brief examples of this to build our argument for including a Continental interpretive lens in our exploration of projects. Hirschman (1986) discusses the debate within marketing in the 1980s regarding the nature of its "science". At that time, Continental lenses were rarely evident in marketing research; rather the discipline was strongly grounded in positivism. However, given the socially constructed nature of the phenomena, Hirschman (1986) proposes a humanistic mode of inquiry for the discipline, which we argue, aligns with our Continental proposition. She highlights the significant shift in method that such a philosophy requires. Thompson, Locander and Pollio (1989) also contribute to this discussion in marketing, highlighting how an existential-phenomenological lens is suited to understanding and interpreting consumer experience.

Within nursing, Crossan (2003) provides a discussion of the philosophies of positivism versus post-positivism and the strengths and weaknesses of these lenses. In education, Peim (2009) responds to the 'crisis' in this discipline's research methods by stating how our worldview affects our approach to research. He then introduces

Continental thinking, highlighting its "lines of thinking that are exceptionally productive" (Peim 2009, p. 237). Further Peim (2009, p. 237) states:

> "Their virtue, it seems to me, is in their potential for providing ways of rethinking the protocols of research design, method and theorizing that may enable fresh and diverse approaches to research that engage with fundamental dimensions of the research process. In some cases, they provide powerful ways of calling into question the whole enterprise of educational research in its dominant modalities and in the claims it makes for social and ethical significance".

Orlikowski and Baroudi (1991) discuss how a single set of philosophical assumptions (in our language a worldview or lens) restricts the development of Information Systems knowledge. They propose that a diversity in "schools of thought" (i.e. different meta theoretic assumptions), creates a "plurality of perspectives [that] allows the exploration of phenomena from diverse frames of reference" (Orlikowski & Baroudi 1991, p. 2). Specifically, Orlikowski and Baroudi (1991) called for balancing the dominant positivist research lens with critical and interpretivist lenses. Sewchurran (2008, p. 320) takes this concept further arguing for a need for an education approach for Information Systems Project practitioners that shifts from the "ideologies of prescribed best practice, or instrumental rationality" towards self-organising and reflexive practitioners. In summary, it has already been established in other disciplines the need for a plurality in worldview to expand our understanding of phenomena.

5.6 Examples of Continental perspectives in the project literature

We have explored in generic terms the nature of the currents of thoughts that can be conceptualised as Continental. Prior to considering how these can be formed as an agenda for Continental inquiry of project work, we will identify existing examples of Continental thinking in the project literature. These are examples of how the Continental lens can be used as an interpretive tool to access new insights in the discipline. As has been discussed, a Continental approach is more akin to a group of related themes or approaches (family resemblance) than a definitive set of characteristics. As such, the examples provided vary in the strength of their

Continental alignment. However, in identifying the literature we posit the aspects of the study or concept that have Continental alignment.

The discussion of projects as prisons by Lindgren and Packendorff (2006) is posited as having Continental underpinnings. The paper has a focus on the consequences of projects on people. This is a view not aligned with the mainstream explorations of project management. We suggest it is adopting the critique and emancipation essence that underpins much Continental thinking. The study is also contextualised through utilisation of a case study method and the communication of the findings gives focus to the study participants' narratives (rather than attempting to sanitise or standardise these quantitatively). The Foucauldian lens of the work further aligns the study to Continental thinking (refer Table 5.1). A purist analytical lens would not have provided access to such insights as it would fail to recognise context or the "being-in" experience of power.

The exploration by Sense and Badham (2008) of learning behaviour in a project team also has Continental facets. Firstly, it is a contextualised exploration adopting a case study and action research method. Whilst it does provide a model of learning at the conclusion of the paper it highlights this as the model of learning in the case study project rather than claiming universality (which would be the tendency of an analytical perspective). The authors also comment on the project team members' role as co-researchers. This is aligned with giving a primacy to the perception of those experiencing the phenomena rather than objective viewpoint typically aligned to an analytical perspective.

Whitty (2010a) discusses project artefacts from a perspective that varies from the status quo. Specifically, he relates artefacts to emotions. This study has Continental alignment as it captures the experience of project work as perceived by those involved in it and includes an emotional focus. His study also observes gesture (an aesthetic concept) and leverages arts-based methods (drawing) in an attempt to avoid the participants relying on taught labels or categories to describe their experience or relationship with the artefacts. In communicating the study findings, Whitty (2010a) preserves the narratives and drawings of the participants, rather than distilling these to more quantitative or rational data. This aligns with the Continental aim of contextualised knowledge according to the subjective perception of the participant.

The attention given to aesthetics and the use of an arts-based method also distinguishes it from more dominant, analytical perspectives.

The perceived experience of practitioners is also captured in a study by Hodgson, Paton and Cicmil (2011). This study presents the 'coal-face' tension faced by those navigating between technical specialist and project management roles. Similar to the other literature cited, the research method (focus groups) enabled contextualised discussion and allowed the themes to flex to the discussion of the participants. The primacy of the participants' perceptions was also retained in the publication of the study's findings through inclusion of quotes. There was not an analytical drive to quantify or universalise the experience. Facets of personal experience such as conflict and tension also dominate the study and align with the emotional aspects of Continental enquiry. Similarly, there is the capturing of self-identity discussion that aligns with existential currents of thinking.

Sense and Fernando (2011) explore projects in terms of the self-growth and the relational-connectedness of participants. This enquiry is considered Continental as it has a focus on the experience of individuals in a particular setting, and considers non-rational elements of experience. They state:

> "The project form, for all its considered and somewhat accepted rationality, is inherently entangled within and affected by a raft of complex non-rational and ill-defined personal and social issues and expectations e.g. participants career growth aspirations or peer-group recognition for skills and abilities (Sense & Fernando 2011, p. 506)."

However, we do highlight that this study is purely conceptual, and such enquiry, could be criticised from a Continental viewpoint for not actually coming from a specific praxis example, but rather being driven from a theoretical construct. However, this is not to detract from the value of instigating this line of inquiry, particularly the recognition of non-rational inquiry. Such areas of focus become accessible through the use of a Continental interpretive lens.

Discussion of the project manager as playing a role as in a theatrical performance also has some Continental alignment. Smith (2011) aims to discredit the conception of a single form of project manager (for example, as always rational and Gantt chart using). Such an aim is to be commended as it highlights the uniqueness of each

situation and project manager. However, this work still does retain some emphasis on categories (although clearly caveated) through its creation of project manager archetypes. Such distilling of experience into categories is arguably not reflective of a pure Continental approach. Even so, Smith (2011) develops the archetypes from stories told by practitioners in a contextualised manner (Continentally-aligned). This work also explores self-identity and therefore has ties to existential themes. For example, Smith (2011, p. 681) comments include:

> "Because project management is a highly structured and socialised profession I expect the available repertoire to be constrained. Our managers are not inventing (or authoring) a personal identity from scratch in a field of infinite possibilities. Rather they are shaping themselves using a limited set of moulds – those possibilities current in the world of projects and their management."

Lindebaum and Fielden (2011) discuss anger in terms of potential managerial value and we posit this line of inquiry as having Continental facets. Firstly, their study considers emotional (rather than purely rational) facets of the project experience; and does this in a way counter to the assumed knowledge (i.e. anger is a 'bad thing'). An analytical lens would likely assume some truth about the 'wrongness' of anger in managerial circumstances, and therefore this aspect of inquiry remains inaccessible. Secondly, they place a focus on the phenomena and the perception of the individuals with whom they undertake a semi-structured interview. They introduce their studying indicating: "there is a pressing need to conduct a study that privileges the views and the meaning that participants append to the phenomenon in question (Lindebaum & Fielden 2011, p. 442)". They also consider a broader conception of project tools than the existing literature, suggesting emotion as a type of management tool. The presentation of their study outcomes also has a strong focus on the narratives of the participants interviewed rather than trying to distil the findings into quantifiable comparisons or universals.

The use of an existential lens to explore project management is proposed by Whitty (2011a). As discussed in section 2, existentialism is a current of thinking included within Continental philosophy. Whitty (2011a) makes links between existentialism and evolution and provides a conceptual discussion of how they can inform our understanding of power in project management and the evolution of the profession.

Rolfe (2011) also draws on existentialism and the insights of Heidegger, using these lenses to suggest projects are a response to organisational crisis. Whilst, both these papers are of a theoretical nature, it does leverage Continental thinking as a tool to access the experience of project work.

Aubry (2013) outlines a program of research associated with Project Management Offices (PMOs). Her program of research includes work that is of greater and lesser nature in terms of Continental and Analytical alignment. However, phase two for example had a focus on the internal life of the PMO: it was looking for what was actually done and included tension and conflict. The research method included semi-structured interviews in a case study approach. This 'from within' focus has Continental alignment. Similarly, phase five of the research was an Action Research case study and included the participants as researchers. Again, a study that is of a Continental nature; it draws strongly from a contextualised practice experience. It is not trying to reduce the phenomena to decontextualised "atoms" as would be a more Analytical approach. Aubry (2013) also proposes different ways of viewing the PMO: presented as a matrix. The dimensions of the matrix are: thing or process; and narrative and variance. We propose that the Continental perspective is most closely aligned with the process and narrative lens. This is more akin to the focus on an immersed experience (subjectivity rather than objectivity) and capturing a contextualised description of the phenomena being explored.

Marshall and Bresnen (2013) present a Continental concept in contrasting the different narratives that can be written and understood for a given project. They present five different narratives (different viewpoints) of the Thames Tunnel project. Whilst, it may lack the strong, immediate praxis focus, it is highlighted here for its demonstration of the subjective nature of perception and therefore an inability to have one truth (a concept aligned with Analytical thinking). Marshall and Bresnen (2013, p. 692) state:

> "the process of constructing historical narratives from the material available throws the artificiality of their creation into sharp relief. They are an important reminder that the production and consumption of knowledge about projects are provisional, open-ended, revisable, and subject to negotiation rather than being comprised of naturalised categories and self-evident truths. The ever-present possibility of telling

> the story otherwise illuminates the active, although not necessarily conscious process of selection through which some ideas are heard while others are silenced, both in the practices of writing and reading.".

Review of the article quickly highlights the issues with an 'objective' (view from nowhere) approach that is the domain of Analytical interpretation. Rather the plasticity of meaning is emphasised.

A study by Shipton and Hughes (2013) of change management in the construction industry has Continental facets. The study had a strong praxis focus with the aim of capturing the phenomena of change management beyond the traditional instrumentation perspective. The study was a single ethnographic case study (including 200 hours of observation, 17 interviews and document study) where the researcher was immersed in the experience in a participant-observer role. Whilst the findings still have a significant rational tone, the outcomes did challenge the notion of change as a negative event in this project context.

A Continental approach is evident in a study by Lindgren, Packendorff and Sergi (2014) that considers emotional processes associated with project management discourse. Of note, the authors attempted to avoid the retelling of an "official story" by capturing the participants' experiences prior to the projects' closure. We would suggest that this priority on capturing the participants' personal perceived experience rather than the 'objective' official story is strongly Continental. The Continental alignment is also evident in the focus on emotions (both positive and negative), the concept of tension between adventure and control and personal cost. The focus on the negative aspects (which is again counter to dominant Analytical lens in the project literature) reflects the critique - emancipation themes that are dominant in Continental thinking.

van der Hoorn and Whitty (2015e) present a Heideggerian paradigm of project work that is strongly aligned with the Continental perspective. Their discussion is based on the Heidegger's *Being and Time* (1962) and applies concepts such as being-in-the-world, modes-of-being, authenticity and the 'they' to the phenomena of projects. It proposes a definition of projects that recognises the subjectivity of the experience and that whether something is a project or not is related to the individual:

> "Projects are situations identified by Dasein as needing to be restored to ready-to-hand and Dasein is unable to easefully restore this situation within their current dealing and/or equipmental totality. The 'scale' of the project is the degree to which this breakdown (unready-to-handness) is beyond the collective dealing or equipmental totality of the Dasein (van der Hoorn & Whitty 2015, sec. 6.2)."

They also argue (drawing on the concept of (un)ready-to-hand) that project management (the mainstream set of tools and techniques associated with the discipline) can be suited or not suited to a given situation. This discussion of a Heideggerian paradigm is strongly aligned to a Continental approach given the concepts upon which it is framed (i.e. Heideggerian). Similar to Sense and Fernando (2011) it is a conceptual argument rather than drawn from a concrete practice example, but it is argued as still contributing to a Continental perspective of project work.

A related discussion by van der Hoorn and Whitty (2015b) leverages the Heideggerian concept of signs to highlight how the dominant artefacts of project work do not reflect the "lived experience". This is also considered Continental thinking given its grounding in Heidegger's work and its consideration of project artefacts from a non-positivist and non-mainstream perspective. Whilst still conceptual, it brings attention to the difference between the proposed experience of project work and what may be assumed based on theory.

An 'in practice' and strongly Continental perspective is also provided in van der Hoorn and Whitty (2015d). This paper utilises an arts-based method and peer-based focus groups to reveal the messiness of the participants' project experiences. It is provided as an example of Continental inquiry as it is seeks the perceptions of those involved in the work and does not attempt to quantify this into universals, rather to indicate it is the perspective of those involved. The study adopted an arts-based research method which also aligns with a Continental approach as it attempts to access the experience of the work that is not affected by the dogma of the project management 'they' or learnt terminology.

A Sartrean lens is adopted by van der Hoorn and Whitty (2015a) to explore angst in project work. Whilst a conceptual approach, the paper draws strongly on themes such

as existentialism, angst, authenticity and thrownness (Continental themes) to highlight facets of the experience of project work that do not dominate mainstream literature and would not be accessible through a traditional analytical lens. Specifically, it discusses the angst (an emotional perspective) that may be experienced by those involved in project work and through the Sartrean lens, provides a possible explanation for this.

A music-based elicitation method was used by van der Hoorn (2015) to explore the experience of managing projects. This study is also of Continental alignment given the methods attempt to prevent repetition of traditional project management dogma and to access the personal perceptions of the experience. The open-nature of the discussion following the participants' improvisation of their experience also enabled the participants' experiences to drive the line of inquiry and subsequent findings. Unlike an analytical lens, the goal was not to deduct universal outcomes. An aesthetic facet was central to the research design as the participants used a percussion instrument (i.e. use of bodily movement) to represent their experience of managing a project.

In summary, these papers are examples of how a Continental philosophical lens can enable us to access diversity in our interpretations of the project phenomena that would remain inaccessible through a purely Analytical lens. They provide evidence of the type of alternative insights that can be derived through alternative research lenses, and therefore the potential for a research agenda grounded in Continental thinking. We are not proposing that there is no value in Analytically-based inquiry, but highlight that for insights such as those proposed by the Rethinking Project Management network that this interpretive lens will be fertile.

5.7 Proposed example themes for further Continental enquiry

Having now discussed some extant literature that has Continental alignment, we propose a set of integrated examples of themes or currents of inquiry that can provide a future research agenda for project work aligned with the Continental philosophical tradition. These synthensised themes are grounded in the key concepts introduced in

section 5.4 and are considered particularly relevant for the Continental inquiry of project work. We highlight that these are suggestions or examples of themes, and that further themes grounded in the Continental concepts provided in section 5.4 are possible. Figure 5.3 provides an illustration of how the currents combine to provide a holistic Continental perspective.

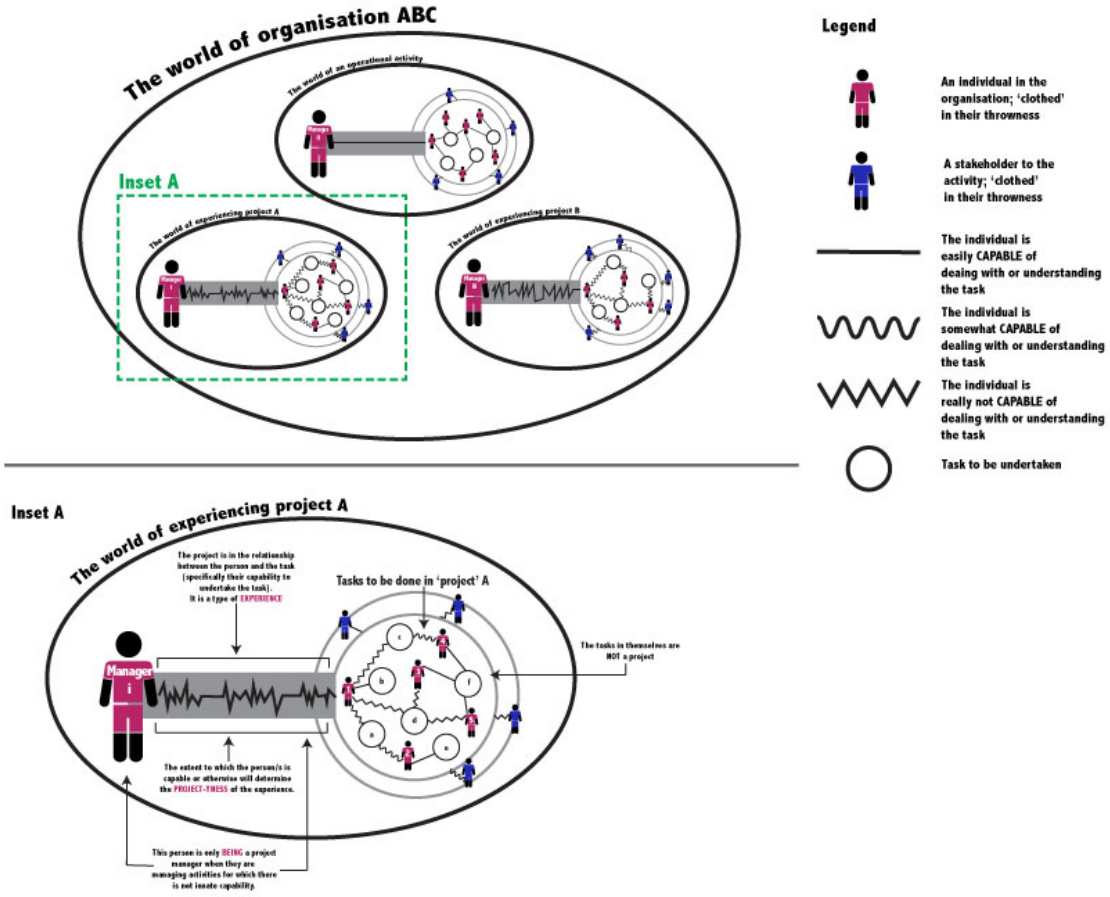

Figure 5.3: Example currents of Continental thinking about project work

5.7.1 Experience

Firstly, we note that a project is not actually in the group of activities. As provided by van der Hoorn and Whitty (2015e) what constitutes a project is the relationship between the project activities and person/s undertaking the activities. Specifically, it is related to an individual's (or a group of individuals') capability to undertake the

activities. If the work is beyond our innate capability we are more likely to experience it as project work. If the work is within our capability we are more likely to experience it as operational work. As such, it becomes evident that we cannot study a project as a thing. There is only the 'projectyness' (van der Hoorn & Whitty 2016b) (refer below) as experienced by the individual/s who has a particular degree (or lack) of capability to undertake the work. We highlight that capability is not only related to actually completing (doing) activities, but also can be applied to the ability to manage the activity and also to understanding the same. For example, stakeholders may not understand how a particular set of activities can be undertaken or unfold, or they may be very familiar and comfortable with the activities.

Whilst we strongly agree with the praxis focus of the "project actuality" (empirical reality) discourse provided by Cicmil et al. (2006), we propose a point of difference in terms of discussion of the "lived experience". Specifically, we understand that the framework proposed by Cicmil et al. (2006) still conceives of projects as a thing. Albeit a thing within which people interact and have a reciprocal relationship: "projects are complex social settings characterized by tensions between unpredictability, control and collaborative interaction among diverse participants on any project (Cicmil et al. 2006, p. 676)." We argue that a project is not in the thing (even if it is process/becoming-based) but rather that it is in a type of particular experience because the capability to manage, undertake or understand the activities to hand is lacking (to potentially varying degrees). We would suggest that tension and unpredictability and lack of control are concepts that are not inherent in an activity but rather are consequences of a particular person/s being required to manage, undertake or understand an activity (refer *projectyness* for further discussion).

Within Figure 5.3 we note that people involved with the same activity can differ in whether they perceive the activity to be projecty. In reality, those within an organisation have the power to label a particular piece of work a project. However, we argue this is simply a naming convention that does not address the actual nature of what a project is. For example, whilst a particular IT upgrade may be labelled as a project and managed according to PRINCE2, there may be individuals within that upgrade for whom their allocated activity is not beyond their capability. For the organisation of individuals as a collective however the particular configuration of

activities may be beyond their capability and therefore the experience is deemed a project and managed accordingly. As per Figure 5.3, there can be activities within an organisation that are beyond all individual's innate capability (project experience B), and similarly some that are within everyone's capability (operational activity): they are routine activities that the organisation is capable of undertaking (and for which there is managerial competence and stakeholder understanding of what is involved).

We highlight that the individual and the work are connected and immersed in a given world – being-in-the-world (most likely an organisation or a specific group of activities). As such, they cannot stand separate to the work and objectively identify truths about the work. Only a subjective perspective (perception) is possible.

5.7.2 Projectyness

Because we can be more or less capable of managing, undertaking or understanding activities (there is a spectrum of capability), aspects of the work can be more or less projecty (van der Hoorn & Whitty 2016b). The more capable an individual/s is, the less projecty the experience will be for the individual, and therefore the less chance that we will (arguably incorrectly) label the overall work as a project. Similarly, if there is a significant lack of capability, the experience is likely to be more projecty, and therefore, more likely that we will classify the work as a project. We clarify at this point our meaning of the term capability. Capability is not simply and individual's skill level. Our conception of capability is more akin to the SyLLK model of know-how for a particular activity provided by Duffield and Whitty (2015). In their model, know-how (capability) is dependent on several facets, including infrastructure, social structures, processes etc. That is, I may have the skill (read music and hit keys) to play the piano, but if I don't have an actual piano or keyboard (the physical equipment), or many of the key are missing, I don't have the capability to play in this situation.

Also, within the notion of capability, and its determination of what we experience as project work, is our thrownness (our past experiences in the now). Continental thinking highlights how our past is infused in our now (refer Haugeland (2013) for a discussion of thrownness). Specifically, our thrownness will determine our capability, our ability to deal with the activity at hand. If we have trained as an engineer (a past

experience for which we now have skills), developing plans for a bridge is likely within our capability. We have the means (mathematical and scientific skill) to deal with the activity. Comparatively, if I have trained as a teacher, and the activity is to build a house, I am unlikely to have the capability to build the house. However, if my father was a carpenter and this was a well-developed hobby, I may be able to deal with the process of laying bricks and mortar and building a home.

We highlight that the labelling of work as a project (obviously an incorrect statement in any case in our argument), does not necessarily mean the work *is* a project. There are a variety of reasons for the labelling of work as a project and the usage of the associated best practice guides in today's world (refer Whitty (2005)). As such, it is possible that managers in an organisation select the project label and method of managing the work even though it may not actually be outside the individual/s involved capability. We would argue that it is in such circumstances that those involved can perceive the project management activities (i.e. plans, schedules, risk management etc.) as unnecessary overhead. They perceive they have the capability to complete the activities and that this additional managerial burden is not actually required to achieve the activities as they have sufficient capability to deal with the activities-at-hand. For example, a concreting firm that lays foundations for building sites might use project terms or artefacts in their documentation, even though laying foundations is well within their capability. However, they use this language and artefacts from a relationship perspective because some individuals in the world of those activities (probably the client who may not have the capability to build a skyscraper) perceive of the work as a project.

In summary, the degree of how strongly an individual/s associate the *experience* of work as being project-like (projectyness) (or not) is a function of their capability, which is affected by their thrownness, and is tightly coupled with their ability to manage, undertake or understand the activity.

5.7.3 Being

The final example theme is that of being. As introduced in section 5.4, Heidegger proposes modes-of-being. That is, something is suitable or unsuitable for a given context. If we consider this from a different perspective, we can see that it is

highlighting that a thing is only that thing when it is performing (being) a particular function. A hammer is only a hammer when it is (or has the possibility to be) hammering, and is in a world that includes wood and nails and a need for these to be joined. In the context of our inquiry we could say a project manager is only being a project manager when he or she is dealing (being required to manage) an activity that is outside the inherent capability of one or more of those involved. A project manager is not being a project manager when he or she is hosting a dinner with friends on a Saturday night (and this is something they do on a regular basis – they have the capability). It is in a particular experience (doing) that something is being that thing (including a role/person).

Again, this is pertinent as it places an emphasis on the experience (the actual context/concrete doing) than on a label. A project manager is not someone who is given that label but someone who has the experience of dealing with work, where the participants do not have (either individually or collectively) the capability to perform the work. In some cases this may be an individual with the title 'project manager' in other cases they may have another title. A Continental perspective recognises that a thing is only a thing in a given context and subsequently emphasises holism, contextualisation and actual experience in inquiry over labels.

We emphasise that these themes are only examples, and they should not limit inquiry that is grounded in any of the concepts introduced in section 5.4. However, as illustrated in Figure 5.3 we posit that the themes we have provided are collectively an integrated agenda for Continental research of the project phenomena. For example, when we place the individual/s as the focus (through themes such as experience and projectyness) we can access themes such as aesthetics, emotion, and thrownness in a subjective, person-centric manner. When we consider *being,* we can move beyond labels to a discussion of the actual phenomena in practice. It does not matter how a person or thing is labelled, the focus is on its being or what it does in a context. For example, we can then see project artefacts for what they actually do, rather than what they are theorised to do/be. Projectyness highlights that work is not definitively a project or not a project, but that there is spectrum of possible experiences that can be more or less projecty to the person involved in the activity. It offers an agenda of inquiry that moves beyond categorisation of project types and sees each project

situation as unique in its own right and that within a single activity there can be those that perceive it to be a project experience and those who do not.

We highlight that the Continental approach is not going to provide black and white concrete answers. Its lines of inquiry will not find that a tool is universally good or bad for project work. It will not provide models of project work that are applicable in every case. It does not focus on statistically comparing or quantifying experience. It will not try and provide logical, tidy answers where they do not exist and it is not constrained to exploration of 'things' that fit within existing project-speak, but rather it will seek to holistically understand what falls within and affects the "lived experience" of project work.

5.7.4 "Limitations" of the research agenda

We have proposed an example of a set of integrated Continental currents of inquiry that begin to form a research agenda for the phenomena of project work. Research that follows such lines of inquiry (or the generic concepts outlined in section 5.4) will provide insights that are in contrast to the scientific, universalised 'knowledge' that results from more Analytical inquiry. And whilst we have argued that the Continental thinking offers a significantly different approach to our understanding and knowledge of the project experience, adopting such a perspective is not without its challenges given the current practice and research landscape. We have used the term "limitations" because these challenges may be seen as such if an Analytical lens were adopted.

Firstly, in giving primacy to individuals' experience or perception we challenge the traditional structures and roles of formal knowledge (literature) acquisition and sharing. In shifting from a preference for objective knowledge that is assumedly gathered through some 'rigorous' (we would argue limiting) scientific process to a more open approach that actively includes practitioners, the role of formal research (and those associated with it) changes. In a Continental approach, those actually experiencing the phenomena are best placed to contribute knowledge and the researcher's role is to preserve that experience rather than over-processing or standardising their contribution. We would suggest that the role of the traditional research academic becomes to assist those involved in the experience to access and

share their experiences in a non-processed nor sanitised manner and then simply to be an onward communicator of that experience (where it is not feasible for the practitioner to do this themselves). Such practitioner-academic researcher partnerships have already received attention in the literature (for example: Er, Pollack and Sankaran (2013); Shipton and Hughes (2013); Walker et al. (2008)). We would also argue that the Continental approach necessitates a change in the way that we value contributions. An academic researcher's perspective is no more valuable than that of a project manager or project sponsor. The only characteristic that can differentiate such perspectives is the nature of the grounding of the argument. That is, perceptions of various persons contributing to the literature needs to be recognised as such; they are perspectives of a given person/s in a particular context. In terms of practice, this means valuing the actual tools and techniques of practitioners (if they are perceived as working in a particular context) irrespective of whether they appear in the best practice guides or texts. It perhaps reiterates, as has been called for previously, an open-source body of knowledge (Whitty 2010b).

Secondly, avoiding universalising findings will be challenging for the discipline. Proposing universals or some commonality in experience (or methods of dealing etcetera) alleviates our anxiety because it gives us a (false) sense of something we can rely upon. This relates directly to our discussion of existentialism and the angst that arises if we make our own decisions (including approaches to dealing with work that we experience as projecty) without reference to the done thing. It requires courage (to potentially move against the norms) and an ability to actually see and respond to the unique, to adopt a Continental approach to dealing with project work. The 'they' with their universals and 'solutions' offer a degree of confidence (we would argue unfounded) that the Continental approach simply cannot provide. However, the Continental approach can actually lead to a knowledge foundation and mastery that we would argue can provide greater confidence. A Continental approach is grounded in context, and fosters an appreciation of, and understanding of the need for the capability to respond to the concrete situation. Such understanding and learning is perhaps aligned to what is formally termed action research and recognises praxis over universalised theory. However, we feel disinclined to definitively argue for a particular research method, rather recommending research approaches that are context-based and holistic.

Any academic researcher, will also appreciate the physical science push for a 'so what' at the end of a study. We posit that such 'so what' conclusions strongly direct the researcher to universalise their findings (even if it includes caveats or limitations), or link the research with some existing or proposed model. Such 'so what' statements will generally run counter to the Continental approach. Continental knowledge is context driven and situational. It requires an acceptance that we are not trying to derive universal theories or models which is at the core of so much of academic literature.

Finally, the 'so what' impetus aside, the current medium of formal knowledge capture (i.e. journal papers and books) is not optimal for capturing a Continental approach. As has hopefully become apparent, Continental thinking is attempting to capture experience in a raw, unsanitised manner. Generally, written work, by its nature is constrained (by the nomenclature of grammar and limitations of words) in what it can capture. We need only consider the comparisons that are made to how music or videos can capture an experience versus the written language to understand this. Traditional academic written methods are generally even more constraining: there is a need for a particular structure in writing and a formal writing style is the norm. We posit that a truly Continental approach would see those reflecting on a study as immersed in the case situation. It perhaps reiterates the growing importance of exploring alternative means of sharing experience and knowledge, and a need for communication methods that align with the research approach

5.8 Conclusion

These "limitations" aside, we believe that Continental thinking in project work is invaluable and therefore we must pursue this avenue despite the current status quo. In fact, it is these "limitations" (if an analytical critique is adopted) that will enable us to access perspectives that are a response to the call to 'rethink project management' (Winter, Smith, Morris, et al. 2006) and provide the new insights we seek. As Einstein stated "We cannot solve our problems with the same thinking we used when we created them".

We have argued the case for the importance and relevance of this Continental research agenda by firstly highlighting how Continental currents of thinking differ to

Analytical thinking, including discussing key Continental concepts. This has provided generic grounding for the difference in the interpretive lens or worldview offered by a Continental rather than an Analytical approach. For example, a Continental viewpoint favours: subjectivism (to objectivism), the primacy of personal (including the sensory) experience (rather than a detached perspective), holism/contextualisation (rather than atomism) and recognises the embodied nature of being-in-the-world (rather than mind-body dualism and giving primacy to the cognitive and rational). It also includes existential concepts, aesthetic themes and highlights the plasticity of meaning.

We then furthered our argument by demonstrating the nature of insights that are derived from this Continental lens in other disciplines and also extant project literature, which although may not be labelled "Continental", incorporates such concepts, and have derived new insights for the discipline. The generic Continental concepts have then been synthesised into an integrated set of themes (experience, projectyness and being) applicable for project research. The experience theme highlights that projects are a sensory experience that we are embedded in. The projectyness theme builds on this, highlighting the project experience is a feeling that results from our lack of capability to deal with the activity at hand. And the being theme recognises we are only *being* a project manager when we are dealing with or experiencing this projectyness. It is proposed that such themes are a suitable basis for further Continental inquiry in the discipline. We argue that pursuit of a research agenda grounded in Continental currents of thinking, the use of an alternative interpretive lens, will ensure the continued momentum of the rethinking project management agenda and the expansion of our understanding of the phenomena projects.

6 Projectyness: A spectrum of greater or lesser capability

6.1 Preamble

This chapter includes the article 'Projectyness: A spectrum of greater or lesser capability' published in 2016 in the International Journal of Project Management. The article provides a more detailed examination of the 'projectyness' concept introduced in chapter 5. This concept is central to the theoretical contribution of the thesis in its re-conceptualisation of 'what is a project'. There are also strong links to the empirical findings in chapter 4. Specifically, the challenging of the 'up and down' nature of project work.

In this chapter, it is argued that no activity *is* a project by its inherent nature or type. Rather what makes work 'projecty' is the relationship between the person/s undertaking the work and the work itself. In a relationship where there is a lack of capability to undertake the work, the work is experienced as being more 'projecty'. Where there is greater capability to undertake the work, the work is experienced as less 'projecty'. Furthermore, this capability is not simply about skills or training, but about the organisational ecosystem more broadly; and the constraints or hindrances this can inflict on those undertaking the work. Such a re-conceptualisation of 'what is a project' highlights the need for new tools and ways to communicate about project work. Tools are required that enable these barriers and enablers to capability to be discussed. One such tool - the project-space model - is discussed in chapters 7 and 8.

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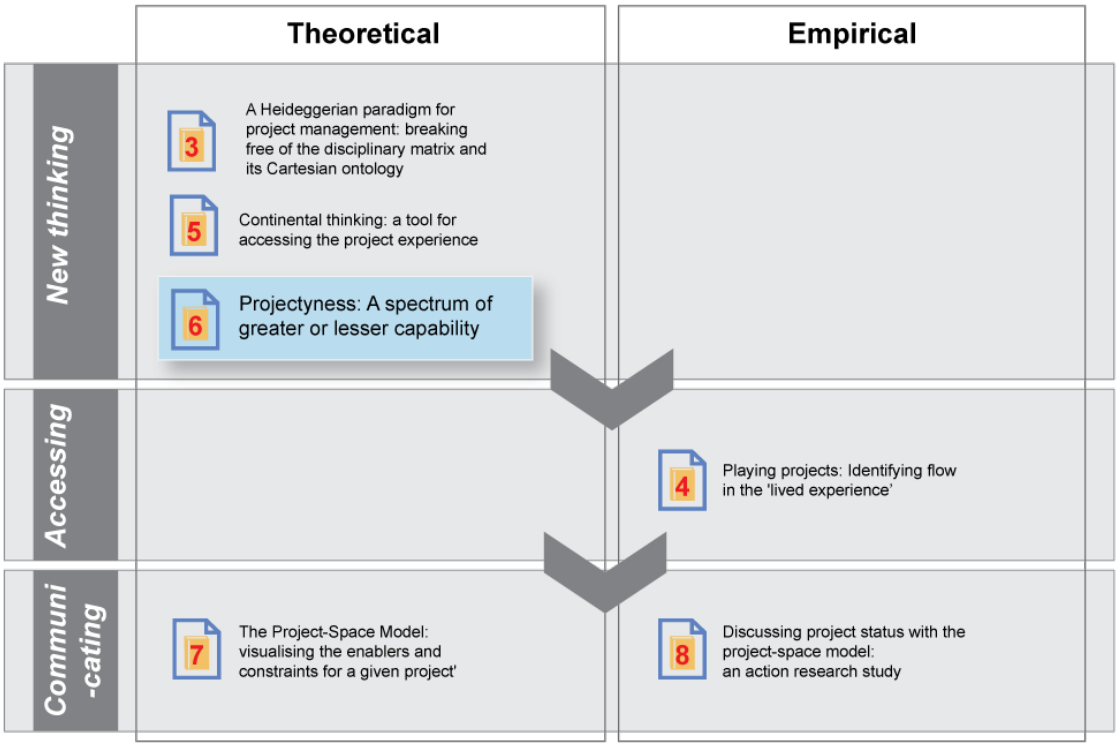

Figure 6.1: Chapter 6 positioning

6.2 Abstract

Grounded in continental philosophical perspectives, and in alignment with the calls to rethink project management, this article reconceptualises what is a project. This conceptual paper uses the theoretical concepts of Heidegger, Merleau-Ponty, and Dawkins as an interpretative lens to consider project work. The findings are that no activity is innately a project. A project is an experience that arises when there is a lack of inherent capability to undertake the activity. It is associated with a projecty experience: spikiness, roughness, and emotional ups and downs. Furthermore, it is found that there is no point of clear distinction between operational and project work: there is a projectyness spectrum. Based on these findings, we identify that project managing is about managing a lack of inherent capability and managing multiple people's experience (not a single detached activity). Furthermore, the point at which to adopt project management techniques is not definitive.

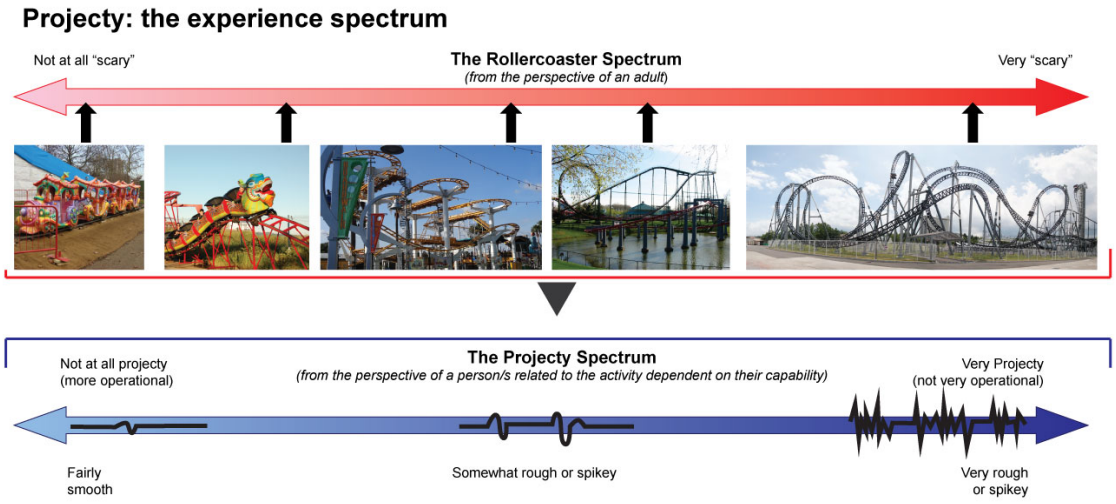

Figure 6.2: Graphical abstract: Projectyness

6.3 Introduction

In this conceptual paper, we propose that projects are an experience, rather than a thing. Furthermore, this experience is grounded in the inherent capability of the person/s undertaking the activity. We also propose that project experiences are on a spectrum of greater or lesser projectyness. One end of the spectrum is 'very projecty' and the other end is 'not at all projecty' (or operational) (refer below for further information regarding these new terms).

This paper is grounded in the calls for new perspectives on project management that focus on the practice of project management and that challenge the previously dominant foundational paradigms (for example Winter, Smith, Morris, et al. (2006), Blomquist et al. (2010) and the edited monograph *Novel approaches to organisational project management research* (Drouin, Muller & Sankaran 2013)). Specifically, this paper provides a new conceptualisation of 'what is project work' which is more closely reflective of the practice experience.

We introduce this conceptual proposition with the analogy of the varying experience of scariness in riding a rollercoaster. What is a scary rollercoaster is dependent on an individual; their preferences, their biology, and past experiences. As such, rollercoasters are on a spectrum of scariness according to a particular individual. What is scary for one person may not be particularly scary for another. What is interesting is that the degree of scariness is not in the rollercoaster itself, it is in the relationship between the ride and the person riding it. A rollercoaster is not scary without people who find it so.

Our discussion stems from a continental perspective of project work and takes key concepts from Heidegger, Merleau-Ponty and Dawkins to consider an alternative perspective of what a project *is* within our broader experience of work. Traditional conceptions of projects, we would argue, are based in a positivist ontology (also refer Bredillet (2004)) and analytical philosophy, and draw an absolute distinction between operational and project work. For example, we may distinguish project work from operational work in terms such as uncertainty, unique, cross-functional, temporary, and change (Office of Government Commerce 2009). Operational work being ongoing work that has stability and is routine, and project work having a defined start

and finish, and delivering a new product or service. Furthermore, traditionally, it is implied that it is possible to clearly distinguish between these two types of work. Our reconceptualisation is in contrast to both these traditional definitions and distinctions.

Using continental philosophy thinking tools, we propose that there is not a clear distinction between operational and project work. Furthermore, we propose that varying levels of capability is the source of more or less projectyness.

The terms projecty and projectyness are new terms to the project management discourse. We consider the introduction of these new terms to be justified as they highlight to the reader the significant shift in our conceptualisation of work. Projecty is a particular perception or experience of work. This perception is not just cognitive but also emotional. More projecty is an experience of greater spikiness, roughness, or emotional ups and downs (refer van der Hoorn (2015) for this experience of project work). Less projecty is an experience of greater smoothness or stability. When we refer to the terms spikiness, roughness, and ups and downs, we are referring to a dynamic experience in work. For example, moving between an experience of happiness, thrill, and excitement to an experience of stress, anxiety, and frustration. The focus is not on the ups (e.g. thrill) or the downs (stress), but on the moving between the experiences. We could visualise these as shown in Figure 6.3. A more projecty experience is the result of one's lesser capability or greater hindrances to undertake that work. A less projecty experience is a result of one's greater capability or lack of hindrances to undertaking the activity. We call this spectrum of greater or lesser capability to undertake an activity: projectyness (refer Figure 6.4).

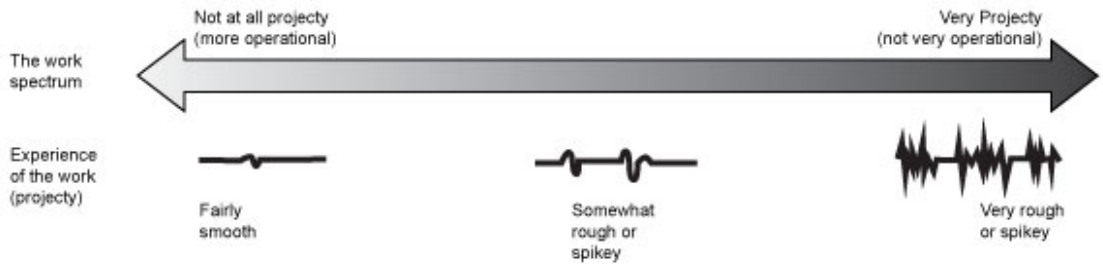

Figure 6.3: The projecty spectrum

Figure developed based on concepts from: Dawkins (2004, 2011); Heidegger (1962); Merleau-Ponty (2004); van der Hoorn and Whitty (2015e)

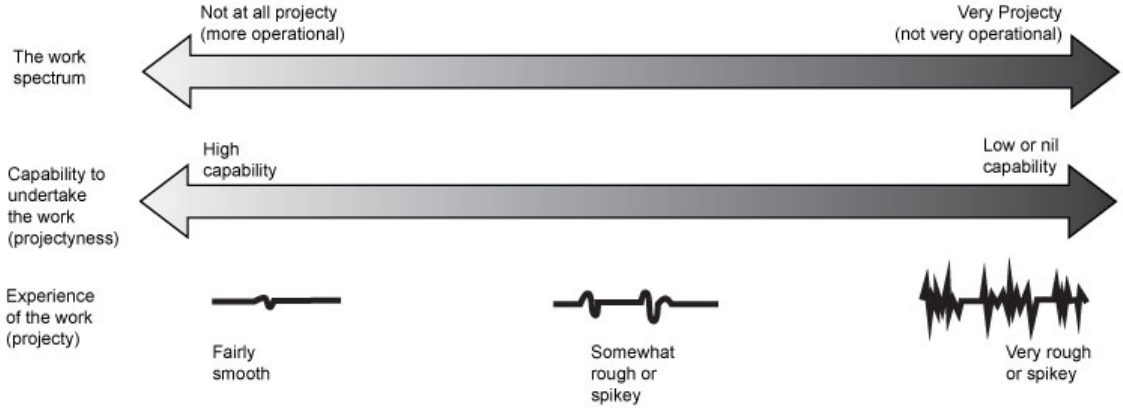

Figure 6.4: The projecty and projectyness spectrum

Figure developed based on concepts from: Dawkins (2004, 2011); Heidegger (1962); Merleau-Ponty (2004); van der Hoorn and Whitty (2015d, 2015e)

We begin by introducing the drivers for our research inquiry in terms of a research problem and introduce relevant literature. Based on this literature review we define a focused area for our inquiry, outline our research methodology, and then key theoretical concepts are introduced. These theoretical concepts are then applied to the project context and we discuss the implications of the findings. Our conclusion summarises the implications of our findings, highlights the limitations of the study, and identifies related areas for future research.

6.4 Research problem

The Rethinking Project Management network in 2006 (Winter & Smith 2006) was a key catalyst for a new research agenda in project management. This research agenda focused on research about practice and the 'lived experience' (or the actuality of what occurs in projects) (Cicmil et al. 2006). It is commonly recognised as a shift from the positivist, functional and analytical underpinnings of the discipline (Bredillet 2004, 2010; Bredillet 2013; Cicmil & Hodgson 2006a; Rolfe 2011; Thomas & Mengel 2008). This agenda was driven by the ongoing dissatisfaction with how despite a developing research discipline there was not significant improvement in project delivery – this continues today (Alenezi et al. 2015; Bloch, Blumberg & Laartz 2012;

Chanda & Ray 2015; Cicmil & Hodgson 2006a; KPMG 2013; PM Solutions Research 2011; Thomas 2006; Winter, Smith, Morris, et al. 2006).

Since the Rethinking Project Management network there has been a growing discourse on alternative philosophical perspectives and research methodologies for the discipline. For example, Cicmil (2006) proposes the use of interpretative and critical perspectives for researching projects and their management. Rolfe (2011, p. 59) challenges the dominant conceptions of project management by arguing that projects are better considered as "an existential response to a crisis" than application of 'best practice' tools and methodologies. Jacobsson, Lundin and Söderholm (2015) argue for the necessity of a plurality in our understanding of projects and draw on the concept of family resemblance to understand 'what is a project.' And in a final example, Young (2015) highlights the need for exploring new epistemological and ontological perspectives in our project management inquiry. He highlights the need for a practice focus rather than the traditional research with their prescriptive bodies of knowledge and best practice guidelines. While such new propositions are important in providing new paradigms and perspectives, they generally continue to have an 'object' focus. By an 'object' focus, we are referring to the designation of projects as being something 'out there,' – a thing – which is separate to the 'subject' which can witness the 'object'. (The philosophical grounding of this concept is further discussed in section 6.7) Similarly, there remains an overall sentiment in the literature that project work can be distinguished from operational work in a discontinuous fashion. We propose that it is necessary to consider an alternative 'lived experience' approach to these assumptions of objectivity and discontinuity in work. And through this, we can newly understand what a project is from a practice perspective, and further open the way to develop tools and techniques that will improve their delivery.

6.5 Literature review

Our objective is to consider an alternative 'subject' perspective of project work, and also a classification of project work in terms of a continuum of experience of work. As such, we will begin by establishing that the current dominant perspectives of project work are grounded in an 'object' perspective and discontinuous thinking. We will then review new philosophical positions that have been proposed as being

relevant to the management of project work and that offer an alternative perspective to the traditional positivist paradigm. It is through such paradigms that a subjective and continuous perspective may be created.

6.5.1 Projects as objects

We propose that the dominant conception of projects is that they are 'objects'. That is, they are activities or things separate to those undertaking or affected by them. To highlight this characterisation we review some of the current definitions of projects, then the conceptualisation of projects per the nine project management schools as proposed by Bredillet (2008). We also draw on some of the project classificatory and complexity literature to highlight the underlying assumption of projects as 'objects.'

Presented below are three definitions of projects from dominant industry guides or manuals:

> "A project is a temporary endeavour undertaken to create a unique product, service, or result." Project Management Institute (2013, Sec. 1.2)

> "A project is a temporary organization that is created for the purpose of delivering one or more business products according to an agreed Business Case." (Office of Government Commerce 2009, Sec. 1.3)

> "A project consists of a unique set of processes consisting of coordinated and controlled activities with start and end dates, performed to achieve project objectives." (International Standards Organisation 2012, p. 3)

We would argue that these definitions characterise projects as things in their own right: 'objects.' They may be activities undertaken by people, but the definitions imply that they are a thing that can be acted upon and that have behaviours or characteristics in their own right. For example, they have an 'end date,' or they create a product or service. Even in terms of 'temporary organisations,' it is implied that it is a thing (a grouping of people) existing in its own right.

In common parlance, we can see the implicit assumption in how we talk about 'scheduling a project' or a 'project's budget,' or 'managing risk to the project.' This is

a signal to the dominant underlying assumption that projects are 'objects.' Projects are considered to be things that can be acted upon, or organised, that will run ahead, or rather more likely, behind schedule.

For a more scholarly perspective, we firstly draw on Bredillet's (2008) discussion of the nine schools of project management. In discussing the diversity and richness in the discipline, Bredillet (2008, p. 4) uses a series of metaphors and key ideas to describe each school's conceptualisation of a project. For example, the metaphor for the Optimization school is "the project as a machine"; the metaphor for the Success school is "the project as a business objective". However, despite this diversity, each of these schools and their metaphors, we would argue, are underpinned by an 'object' perspective. There is no reference to the project as a person/s subjective experience of work or an activity.

Of relevance to a view of projects as 'objects' is the lack of reference in the literature to a person's relationship to the work and how this may relate to our concept of projects. Certainly, there is discussion of the importance of people management (for example: Fisher (2011); Hanif and Tariq (2014); Medina and Francis (2015); Pant and Baroudi (2008)). There is also growing interest in the 'lived experience' of project work (for example: Hodgson, Paton and Cicmil (2011); Sampaio, Marinho and Moura (2014); Smith (2006); van der Hoorn (2015)). However, there is limited discussion of how the subjective personal experience could be central to the concept or definition of project work. There is some reference to a person/s capability to undertake the work being an indicator of project complexity. For example, Remington and Pollack (2007, p. 88) in their discussion of types of technical complexity, state, "Do we know how to build/make it?". Similarly, in Geraldi and Adlbrecht's (2007) discussion of 'complexity of faith' and 'complexity of fact,' there is subtle reference to the relevance of a person/s capability to undertake work. For example:

> "The tasks comprising this kind of complexity are vague and *cannot be solved with "off-the-peg" solutions, with predefined procedures or answers.* Thus, one will be trying different approaches, and learning by doing; consequently, first attempts tend to have to be modified and the scope will constantly change… The concentration of this type of complexity depends on *previous know-how* (Geraldi & Adlbrecht 2007, pp. 34-5)(Italics added)."

However, this relational component (of a person being capable of undertaking the activity) does not become central to their arguments.

6.5.2 Project work and operational work: a discontinuous classification

We also propose that the dominant literature conceives of project work and operational work as being categorically distinct. There is 'project work' and there is 'operational work.' Again, we see this in the dominant 'best practice' guides such as the Guide to the Project Management Body of Knowledge (Project Management Institute 2013) and PRINCE2 (Office of Government Commerce 2009). These guides contrast project work to operational work, suggesting that there are clear differences between project work and operational work. Office of Government Commerce (2009, Sec. 1.3) states: "There are a number of characteristics of project work that distinguish it from business as usual…"

This discontinuous thinking is also evident in some project classificatory frameworks. For example, Turner and Cochrane's (1993) and Evaristo and van Fenema's (1999) matrix project classification models, assign projects discretely to particular categories. Partial continuity is shown in some classification models, for example, Shenhar and Dvir's (2007) NTCP model. The NTCP model is not binary (as per the matrix models), and they do show axis of various values along which a project can be ranked. We do note that in a discussion of the management of dynamic projects and their unknowns, that Collyer and Warren (2009) draw on Cioffi (2006) in recognising that projects are on a continuum of project and operational work. However, Collyer and Warren's (2009) model adopts a linear perspective of this spectrum which could be the subject of further discussion and critique when related to personal experiences or perception.

6.5.3 Alternative philosophical concepts

As introduced in the research problem (section 6.4), there is a growing body of literature that proposes alternative foundations for exploring project management. Non-positivist perspectives have been proposed as providing a more contextual 'lived experience' viewpoint for exploring project management (Bredillet 2015; Cicmil

2006; van der Hoorn 2016a). Examples of this literature drawing on these non-positivist perspectives include Rolfe's (2011) exploration of projects in the broader organisational (crisis) that draws on existential concepts and Rorty's (1976) criticisms of epistemology; the examining of project management through evolutionary (including memetic) frameworks (Whitty 2011b); the use of Sartre's 'condemn to be free' concept to explore decision-making in projects (van der Hoorn & Whitty 2015a); and the use of Heidegger's concepts of signs to examine project management artefacts and terminology (van der Hoorn & Whitty 2015b). Such papers are examples of the fruitful use of non-positivist lenses to derive new insights into projects and their management.

For further information on the ontology and epistemology of project management, the reader is referred to: Cicmil et al. (2006), Biedenbach and Müller (2011), Bredillet (2010) and Gauthier and Ika (2012).

6.5.4 Literature review summary

In this literature review, we have established that a dominant view in the literature is that projects are 'objects'. A 'subjective' perspective relating a person/s capability to 'what is a project' has not been explicitly identified. Furthermore, there is a tendency towards discontinuous thinking when considering project work versus operational work. We have also found that there is a variety of new thinking or philosophies in the discipline and these may be useful in considering an alternative to this dominant 'object' and discontinuous definition of project work.

6.6 Research methodology

Given the findings of the literature review, our research inquiry will examine whether a continental 'subject' focused philosophical lens can provide new understandings into the subjective perspective of work, including the nature of project and operational classifications.

In this study, we will use selected continental philosophical concepts as a lens (or viewpoint) to reflect on the notion of project work. A continental philosophical position is in contrast to the traditional positivist paradigm, Cartesian, functionalism,

and analytical perspectives that have underpinned project management discourse (Bredillet 2004, 2010; Bredillet 2013; Cicmil & Hodgson 2006a; Rolfe 2011; Thomas & Mengel 2008; van der Hoorn 2016a).

We will briefly describe each theoretical concept that will befit our 'subjective' lens and then consider what insights and understandings may emerge if these viewpoints are applied to notion of project work.

A continental approach to projects has been posited by van der Hoorn (2016a) and is founded in the currents of thoughts of a group of philosophers associated with concepts such as being-in-the-world, existentialism, primacy of perception and aesthetics. This article is linked to the school of thought of the continental philosophers Martin Heidegger and Maurice Merleau-Ponty. It also draws on the concept of continuous (as opposed to discontinuous) thinking proposed by Dawkins (2004). Continuous thinking reflects an anti-positivist (black and white) perspective. Such concepts have already been established as providing useful insights into the experience of project work as introduced in the literature review.

This work is also aligned to a continental approach to projects in its building on the Heideggerian conception of a project provided by van der Hoorn and Whitty (2015e). van der Hoorn and Whitty (2015e, sec. 6.1) propose that "a 'project' is the situation that emerges when people are required to deal with a broken or disrupted situation, and lack the capability to do so." This subjective definition of a project is the foundation for our argument rather than the traditional objective definitions of projects that characterise this type of work as having a defined start and end, being temporary, having risk and being unique and/or involving cross-functional teams (Office of Government Commerce 2009; Project Management Institute 2013).

6.7 Key philosophical concepts

6.7.1 Heidegger and modes-of-being

In his magnum opus *Being and Time,* Heidegger (1962) discusses the concept of modes-of-being. This concept can be used to emphasise the relevance of context, specifically that what is a project is context dependent. The three primary modes-of-

being are Dasein (human beings), ready-to-hand, and present-at-hand (Blattner 2006; Wheeler 2014). Of interest to this inquiry is ready-to-hand and present-at-hand. Things that have some purpose for human beings are said to be ready-to-hand (Blattner 2006). Objects are ready-to-hand when they enable human beings to achieve something; they are equipment (Dreyfus 1991). The present-at-hand mode-of-being decontextualises things from their purpose (Brandom 2005). If we adopt Heidegger's traditional example of the hammer, a ready-to-hand understanding would see us discussing a hammer in terms of its ability to nail objects into wood (fulfil a purpose). A present-at-hand mode-of-being would see us discuss its shape (without reference to its suitability for hitting a nail), its weight (without reference to its suitability to be easily manoeuvred for hammering), and its material (without reference to it being sufficiently hard to pierce the nail into the wood).

This concept of understanding things in a ready-to-hand versus present-at-hand mode-of-being is relevant as it highlights the pertinence of context, as we will argue that what is project work is entirely contextual. And this 'context' is related to a capability relationship between those involved and the activity. A hammer is not a hammer in a world without nails and wood and needing to join these materials together. In the absence of these contextual factors, we can only describe the thing in a present-at-hand (decontextualised manner): its weight, the materials it is made from, and its shape. It is not these properties that make it *be* a hammer. It is only a hammer in a given context (where a nail is being - or needs to be - hit into wood). A large brick (clearly with a different set of present-at-hand characteristics to the tool we commonly call a hammer) may actually become a hammer if there is no 'proper hammer' available in a given situation. Describing project work as having a defined start and end, being temporary, and having risk etcetera is a decontextualised present-at-hand description. The modes-of-being lens enables us to come to understand that there are particular contextual properties that make work *be* project work *for* a particular person. Therefore, work is only project work when it is considered in a particular context of capability.

6.7.2 Merleau-Ponty and "honeyness"

Merleau-Ponty's work is also of a continental philosophical approach (Critchley 2001) and is of interest to this inquiry because of the primacy he places on perception.

In our argument, what is project work (or what is a project) is in the 'experience of the beholder.' And this experience is born from their relationship to that work activity. Therefore, one cannot stand in an objective 'nowhere' position and universally categorise something as a project. Merleau-Ponty's primacy of perception sees our individual sensory-perceived experience of something as being no lesser than the posited objective perspective of science. Merleau-Ponty (2004, p. 43) states:

> "Science subjects the data of our experience to a form of analysis that we can never expect will be completed since there are no intrinsic limits to the process of observation… the data of perception and, more generally, the events which comprise the history of the world, cannot be deduced from a certain number of laws…"

In providing a specific example in the physics of relativity, he states (2004, p. 43):

> "[the] absolute and final objectivity is a mere dream by showing how each particular observation is strictly linked to the location of the observer and cannot be abstracted from this particular situation; it also rejects the notion of an absolute observer."

In summary, Merleau-Ponty is positing that when we are looking at something, we are in a certain situation. He also argues that when we perceive, we do this as part of a whole and relevant to our interest in a given situation or thing (Matthews 2009). Matthews (2009) uses the example of a pen. He highlights that if we were looking at a pen from a purely scientific viewpoint, we may be interested in its black plastic tube and the metallic tip. However, if we adopt a broader perspective, perhaps including the aesthetic and emotional, the pen may have a meaning to me in terms of being a gift from a friend (another person seeing me using this pen is not likely to recognise this meaning). Subsequently, the meaning of the pen (the experience of that pen) is not solely in the pen, nor solely in me, it is in the relationship between the pen and me.

The work activity we experience as project work not only presents a challenge (to our capability) but it is work that we have attached meaning and significance to in some way. It is work set in a context were we have a level of 'care' to restore a situation (van der Hoorn & Whitty 2015e). Refer to section 6.8.3 for further information on the concept of restoration.

Merleau-Ponty (2004) builds this whole body relational concept further in his examples of honeyness and anger that also demonstrate his emphasis on embodiment. The experience of being honeyed – the feeling of stickiness between the fingers – is not only in the honey – but in the relationship between me (as an embodied human being) and honey as the object. He also posits that in a situation of one person being aggressive with another, the anger (which may traditionally be assumed to be in the aggressor's mind), is rather in the whole body of the aggressor *and* in the space (physical and conceptual) that unfolds between two people. In summary, he is highlighting that our experiences would lack meaning if they were separated from us as human beings (beings in a world) and that experiences are not *in objects* but rather *in our relationship 'with' objects*. This notion is pertinent to this inquiry as we discuss the subjectivity and criticality of the personal perspective in perceiving or experiencing an activity as being projecty.

6.7.3 Dawkins and the discontinuous mind

We draw on Dawkins' (2004, 2011) concept of the discontinuous mind when we discuss project work as a spectrum. Aligned with the tenants of a continental approach to project work, Dawkins' highlights the problematic nature of categorisation (and black and white classification). He discusses this particularly in evolutionary terms, but also in broader contexts such as poverty/economics, educational rankings, height, human biology, and ethnicity (Dawkins 1993, 2004, 2011). We will also argue that what is a project is not a black and white distinction – projectyness is a spectrum of experiences. Dawkins (2011) states that there are some scenarios where categorisation is possible (and required). However, we find it hard to admit there are intermediaries and "our language is ill-equipped to deal with a continuum of intermediates" (Dawkins 2011, p. 57).

Dawkins example of academic rankings is perhaps his closest analogy to our use of this lens in terms of projects. Dawkins (2004) highlights that a cohort of students will each have a numeric total that reflects their performance in a given course according to some criteria. At this point, there is a continuum of numeric values – a continuous spectrum – of a group of students' performance. However, often the next step is to divide this continuous spectrum into discontinuous categories such as first class, second class, third class and apportion students to these classes. It is here that

Dawkins (2004, p. 258) highlights the issue with a discontinuous mind (or a primacy to categorisation rather than acceptance of a continuous spectrum):

> "As things are, it is clearly unfair: there is far more difference between the top of one class and the bottom of the same class, than there is between the bottom of one class and the top of the next class. It would be fairer to publish the actual marks obtained, or a rank order based upon those marks. But the discontinuous or qualitative mind insists on forcing people into one or other discrete category."

We also highlight the alignment of Dawkins concept of the discontinuous mind to essentialism. Essentialists maintain that things can be defined as such due to certain core properties (Rolfe 2008). Such essentialist thinking can be traced to Plato's ideals and was sustained in the development of the scientific method (all be it through a different approach) (Rolfe 2008). Dawkins (2004, p. 259) discusses the fallacy of 'essence' and in his exploration of the misnomer that "sheep are sheep" and "goats are goats". He highlights that the only reason that such categorisation (the system for naming species) is possible is due to gaps in the fossil record. We posit that essentialism is strongly aligned with black and white thinking, and therefore a more analytical philosophical approach. This further grounds this discussion, which will highlight the continuous nature of (project) work as having continental philosophical alignment. We acknowledge that Whitty and Schulz (2007) have noted the tendency of the discontinuous mind in dominant project management discourse and practice.

6.8 Projects as experience (related to capability)

We now link the theoretical concepts introduced in section 6.7 to our proposition of the projecty and projectyness concepts that underpin our alternative conception of project work. The grounding of these concepts in the theories introduced in section 6.7 are provided in Figure 6.5.

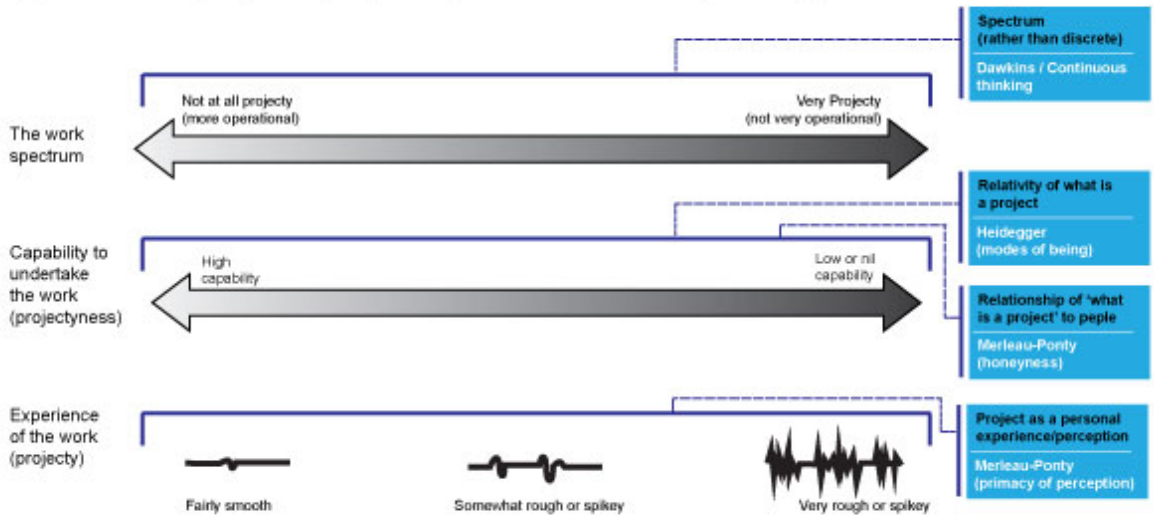

Figure 6.5: The project and projectyness spectrum: theoretical grounding

6.8.1 The Heideggerian conception of a project

We will firstly introduce the concept of projects as an experience rather than a detached thing. We ground this component of our argument in the Heideggerian conception of a project (as introduced in section 6.7.1) as posited by van der Hoorn and Whitty (2015e). Of note, is their argument that 'what *is* a project' cannot be defined without reference to those involved in undertaking the activity. A certain activity is not 'a project' or 'not a project.' Characteristics of an activity (in itself) do not determine whether the activity can be categorised as a project. Rather, whether an activity is 'a project' is dependent on the relationship between a person/s and the activity they 'care' for. van der Hoorn and Whitty (2015e) suggest that the key factor in this relationship is in the person/s capability.

6.8.2 Capability: Not just about skills and experience

We will briefly digress to provide clarification on our use of capability in this discussion. Our use of capability is aligned to "know-how" as discussed by Duffield and Whitty (2015). This definition of capability has been adopted as it explains capability in terms of a spectrum of more of less capable. In their discussion of the systemic lessons learned knowledge (SyLLK) model, they highlight that

organisational know-how (the capability to do something), is distributed across multiple, interconnected organisational systems. In their discussion, these systems are learning, culture, social, technology, process, and infrastructure. This means, for example, that the capability of a coffee shop to serve coffee requires a variety of systems to be set-up to enable this capability. In this serving coffee example, learning may include barista training; culture may include a passion for coffee; social may include peer rapport; technology would include a coffee making machine; process may include optimised division of activities; and infrastructure would include a kitchen/serving area. In summary, capability (in our use) is not just about skills or training ('learning' in the SyLLK model) but is about the many other organisational systems that are required to enable an activity to be completed. As such, a person may be skilled and experienced in completing a particular activity, but if they are not being provided with the appropriate technology or infrastructure to enable them to apply their skills (learning), they may not be capable of completing the activity. Put another way, without the appropriate resources, etcetera, one's capability to complete an activity may be hindered. Therefore, one's capability is inversely proportional to the level of hindrance.

6.8.3 Merleau-Ponty: "Honeyness"

If we recall our discussion of Merleau-Ponty's lens on the primary of perception, honeyness, and anger, we can see a strong conceptual alignment in these concepts and the Heideggerian idea of a project. In both cases, the characteristics of something are not in a detached object. Rather, the experienced characteristic is in the relationship of a thing (an activity one has care for in this case) to another thing (a human being in our example). We posit, that like honeyness or anger, 'projectyness' is not in the activity itself, it is in the relationship between a person and an activity. The projecty experience is brought about by their lack of inherent capability to understand, undertake or manage an activity. Therefore, an activity is never innately projecty – it is only considered that way because a person/s lacks an inherent capability to deal with it. We propose that what we actually consider to be project work is determined by our experience of it. An experience of understanding, undertaking or managing an activity that stretches our capability (in the sense of the word we have introduced in section 6.8.2).

We also highlight that we concur with the Heideggerian-based conception that project work is an activity with a restoration component (moving something from unready-to-hand back to ready-to-hand) (van der Hoorn & Whitty 2015e). This concept is discussed extensively by van der Hoorn and Whitty (2015e) but in summary, Heidegger proposes that an activity is undertaken *in-order-to* achieve something. If this is applied to organisations, we can conceive organisations as undertaking a series of *in-order-to*s (activities or processes) to achieve some objective or provide some service. However, there can be a break down (it becomes unready-to-hand) in this array of *in-order-to*s (or within one) that needs to be fixed or restored (to ready-to-hand). Similarly, the objective or service may change and the organisation needs to reconfigure its *in-order-to*s to meet this new objective or service.

This concept of restoration has also been implied in the findings of a study by van der Hoorn and Whitty (2015d) in which project managers were asked to draw their experience of project managing. The authors interpret that many of the drawings (and the narratives provided by the project managers) suggest that project managing has the experience of moving a group of people from uncertainty and messiness to restoration and order.

Of note, whether something is broken (unready-to-hand) and requires restoration is based on subjective personal perception. We will discuss the implications of this concept in future work.

We will now provide a phenomenological example to illustrate our proposition that project work is a particular experience along a continuum of capability to complete the work. We will use the example of baking a cake. There are many different cakes that can be baked: from a simple sponge from a packet recipe, a cheesecake from scratch, or a multi-tiered wedding cake. For an 8-year old who has never baked, even with help, making a sponge cake from a packet mix is likely to be a projecty experience. However, for his parent who has made several of these packet sponge cakes before, baking the cake is not a projecty experience. For the parent, being required to bake a multi-tier wedding cake (if they do not have the capability – likely gained through experience) is likely to be projecty. However, for a pastry chef, the multi-tiered wedding cake may be something she does every day, and therefore, this activity is not experienced as projecty. We see that neither baking the packet sponge

cake nor baking the multi-tiered wedding cake is project work in itself. It is only more or less projecty because of the capability of the person who is undertaking the activity. Furthermore, what is a project can change for someone over time. Take our 8-year old child; given many experiences of having baked the packet sponge cake, they are likely to increasingly experience the baking of the cake as less projecty. Similarly, if our parent undertook classes in wedding cake baking and began baking these cakes on a regular basis, this activity would become less projecty as their capability increased.

6.9 Projectyness as a spectrum

Furthering our proposition that project work is an experience not a thing, we argue that this experience unfolds along a spectrum – the experience can be more or less projecty. We ground this argument in Dawkin's lens of the discontinuous mind and the aligned concept of essentialism. As introduced in the literature review, for example, refer to Shenhar and Dvir (2007), Crawford and Pollack (2004), and Turner and Cochrane (1993), the concept of different types and scales of projects is not new. However, we would suggest that traditionally, these methods for categorising make their determination of type by characteristics of the activity (rather than in the relationship between the activity and the person/s involved). For example: cost of initiative, number of stakeholders, and duration. Furthermore, they generally adopt a discontinuity in categorisation where projects fit within some 'box'.

Our proposition is that the placement of an activity in the spectrum of projecty experiences is a function of the (inherent capability) relationship between the person/s understanding, undertaking and/or managing the activity. If the person/s are fully capable of understanding, undertaking, and managing the activity, it is not at all projecty (in fact it would most likely be labelled operational). However, if the person/s lacks entirely the capability (in the sense we have introduced in section 6.8.2) to deal with the activity, it is very projecty. There is also an entire spectrum between the two ends (entirely capable to not at all capable) of possible capabilities in relation to that activity and therefore a *continuous* spectrum of projectyness (refer Figure 6.4).

Drawing on the problem of the discontinuous mind and essentialism, we can see the falsehood in suggesting that project experiences would fit into specific categories in the spectrum. Figure 6.6 illustrates this falsehood. While traditionally such labels may be utilised, in practice, an experience at the bottom of the 'medium project box' may have more in common with the experience of a project at the top of the 'small project box,' than an experience at the top of the 'medium project box.' From a personal point of view, the only 'classifying' that takes place is that an experience is more or less projecty. And we make this judgment in relation to our own experience of the work. We come to know our own personal spectrum of more or less projecty. Andersen (2014) has already recognised that those involved in projects will see project work from varying perspectives based on our social context, knowledge and experiences.

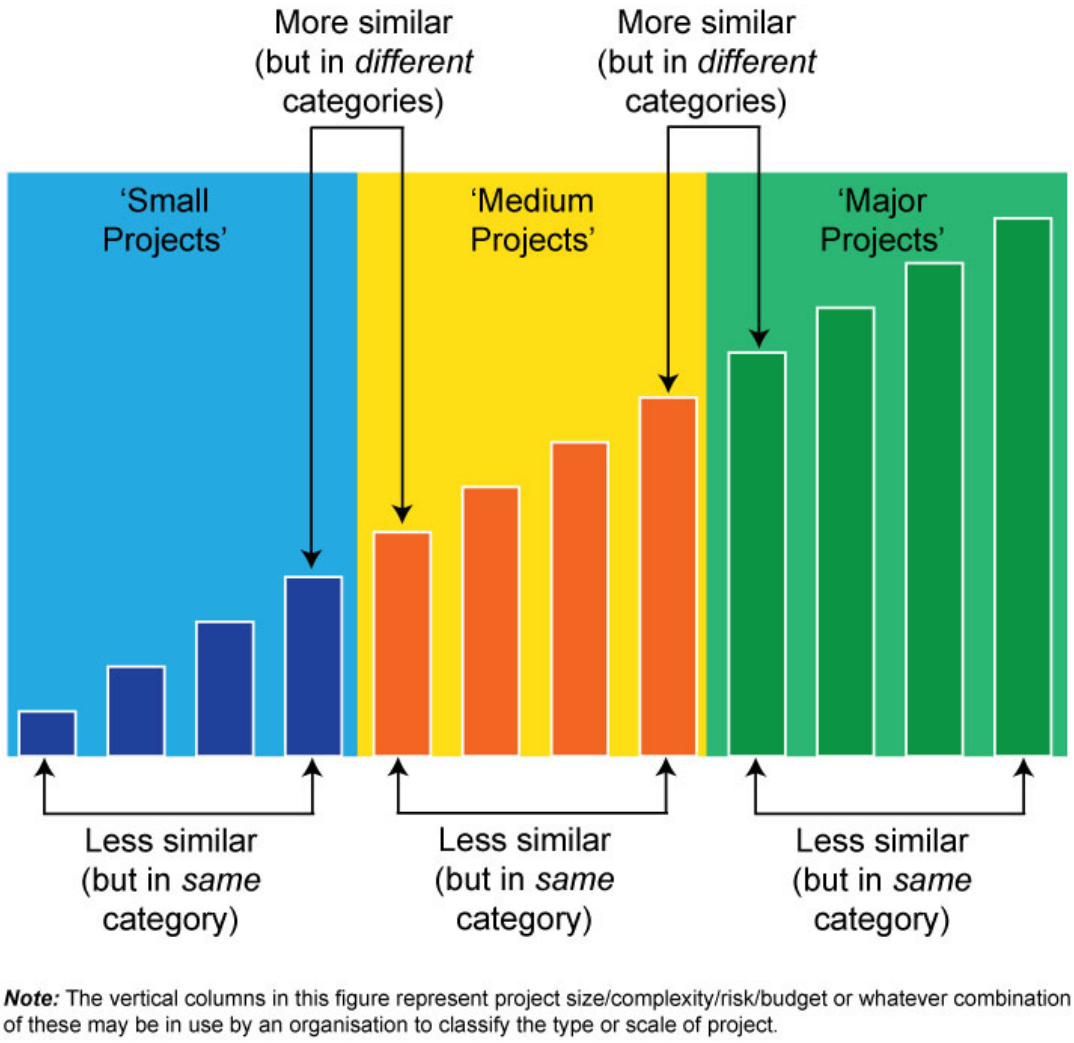

Figure 6.6: How categories can distort similarity in project work

Figure developed based on concepts from: Dawkins (2004, 2011)

We can use our analogy of cake making to also demonstrate this argument in a phenomenological narrative. Consider our parent and our pastry chef introduced in section 6.8.3. Figure 6.7 (part a) shows the projecty experience spectrum of the pastry chef. Figure 6.7 (part b) shows the projecty experience spectrum of the parent. Baking a wedding cake is not at all projecty for the pastry chef; however, it is very projecty for the parent (who does not have the inherent capability to bake this type of cake). On the parent's spectrum, baking a sponge cake mix is not very projecty – they bake this cake twice a week. For the pastry chef, baking a wedding cake with a camp kitchen is very projecty. The camp kitchen affects her capability to undertake the

activity because the normal equipment (technology/infrastructure) to make the cake is not available. Similarly, baking the sponge cake with only half the required eggs for the parent may be quite projecty (if they have not previously had to bake the cake without the correct quantity of eggs).

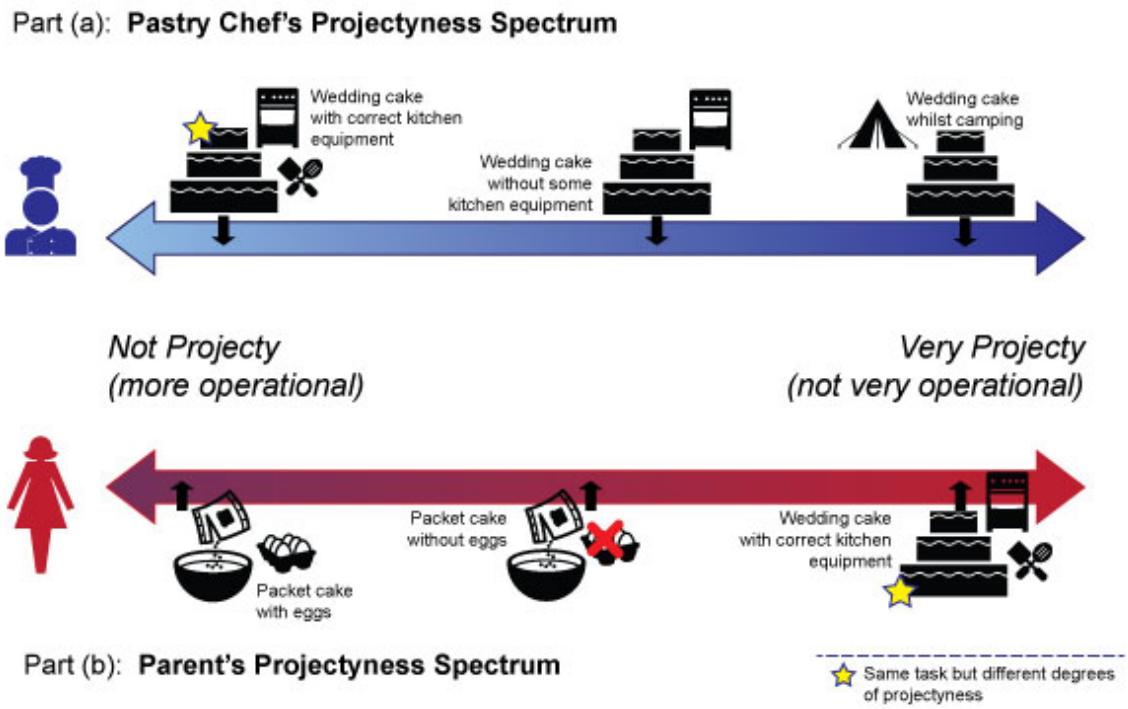

Figure 6.7: Projectyness is dependent on the person/s capability

Figure developed based on concepts from: Dawkins (2004, 2011); van der Hoorn and Whitty (2015e)

With respect to continuous (rather than discontinuous) thinking, we could ask "at what point does baking the wedding cake become a project for the pastry chef if we progressively remove standard baking equipment?" Is it when she has lost the whisk and measuring cups? Or is it when she needs to use an unfamiliar oven? Or is it both of these being unavailable? Our argument is that it is artificial (though potentially linguistically and conceptually convenient) that an activity becomes a project at a given point. Activities are just more or less projecty, given our capability.

6.10 Discussion: Implications of the projectyness and projecty spectrums

Through applying 'subjective' and continuous concepts from continental philosophers, we have offered a new perspective of project work (refer sections 6.8 and 6.9). Particularly, we have proposed a subjective, personal experience perspective, and that project and operational work are on a spectrum (related to capability). This is clearly in contrast to the dominant 'object' perspective in the current literature and the tendency to discontinuous thinking.

We will now discuss the implications of the projecty and projectyness experience spectrums. Firstly, we consider the managerial implications given that a project is an experience rather than a thing. We then discuss the implications of a continuous thinking approach to these experiences. Finally, we discuss the implications for what *is* project managing, if projectyness is a result of lack of inherent capability.

6.10.1 Managing an experience not a thing

We have discussed that an activity of itself (something to be done, or something being done) is not a project. Projecty is a particular flow (dynamically varying in intensity) of experiences one has towards work. It is proportional to the level of hindrance placed on one's capability to accomplish that work. Projectyness is in the relationship between that activity and the person/s involved. It is a quality, state, or condition one perceives and experiences about work that is projecty. One could ask, what does this mean for our conception of what *is* project managing? van der Hoorn and Whitty (2015e) have distinguished between the dominant project management tools/process (project management) and project managing (a broader array of techniques, tools, approaches to restore a situation). We posit that this concept of project managing can be further refined when we acknowledge that we are not managing a thing, but rather that we are managing an experience (and likely many different peoples' varied experience at that).

For example, in a construction project, the client for whom the new factory is being built may experience the activity as being very projecty as they do not have the skills or experience to understand (or actually construct!) the new factory. For the prime

contractor the activity may be somewhat projecty as there is a hindrance imposed, because while they have built similar factories before, the timeframe that has been allowed is tighter than what they have previously experienced. For the electrical contractor, the activity may not be very projecty at all – they are very experienced at these fit outs and none of the parameters (time, budget, etcetera) are outside their business-as-usual process and are not hindrances at all.

If we adopt this perspective that a project is 'in the perceptions of peoples' experience,' we have a new lens on the challenges of project managing. We see that each person involved has a different experience (drawing on Merleau-Ponty's primacy of perception introduced in section 6.8.3) and there is a subsequent complicatedness involved in managing this. In the authors' experiences, those involved with projects often discuss their roles in terms of "taking people on a journey" and "getting people on the same page." We believe this strongly aligns with our proposition that project work is an experience (from each person's perspective). We are not managing a discrete object, we are trying to manage (orchestrate) a series of experiences towards the restoration of an unready-to-hand (broken) situation. Furthermore, as will be discussed in section 6.10.3, we are managing an experience where it is likely that at least some of those involved are experiencing some type of lack of inherent capability (whether this be insufficient time to carry out the activity, or lack of skills or financial resources). This hindrance that suppresses capability creates a tension and angst for those involved with the project (refer van der Hoorn (2015)).

6.10.2 There is no such thing as 'this' and 'that' projects

A key implication for our proposition of a continuous spectrum of projecty and projectyness (rather than discontinuous categories) is the criticality of tailoring our approach to managing work. We suggest that currently if work is classified as a project, generally this will result in a suite of project management techniques being applied. These project management techniques likely result in a significant management and administration overhead. However, perhaps an activity is only marginally projecty. Perhaps it is within the person/s inherent capability and could actually be managed more efficiently with operational techniques.

We acknowledge that some organisations/methods do adopt a tailored approach to the application of project management techniques based on categorisation of their projects (scale/type etcetera). However, we propose that there is still the danger of discontinuous thinking as an activity classified at the lower end of one category could be suitably managed by the techniques of the category below. Similarly, a project at the top of one category may be better managed with the tools prescribed for the category above.

Furthermore, when we acknowledge the falsehood of categorisation of project versus operational work or small projects, medium projects, and major projects, we recognise that prescriptive methods may not actually be the best fit for an actual situation. Rather, there is a need to adopt an authentic (right for the actual situation) managerial approach that responds to the actual capability – activity match. And this determination of the authentic managerial approach is dependent on experienced practitioners rather than textbooks and short courses in project management. This viewpoint aligns with the proposition by Crawford et al. (2006, Sec. 6.1) regarding the need for project manager's to have a reflective practice to respond to the:

> "messy, indeterminate situations, for which there are no "right" answers, and how they deal with these situations is not through the systematic application of textbook theories, but through sophisticated processes of reflection-in-action…"

6.10.3 Project managing is 'lack of inherent capability' managing

Finally, we consider the managerial implication that projecty is grounded in a lack of inherent capability. Again, this is not just about lack of skill or experience but includes supporting infrastructure, technology, processes, and social and cultural enablers. We would argue that given a group of people involved in a somewhat projecty activity, it is likely that some of those people will have the capability required to understand, undertake, or manage the particular activity that they have been allocated or are overseeing. But it is also likely that some of those involved lack the inherent capability. There needs to be a lack of capability for the experience (activity) to be perceived as projecty. This relationship between capability and the

experience of project work is examined an empirical study by van der Hoorn (2015) in which the concept of 'being challenged' is a key experience in project work.

We do highlight an issue with this assumption: in some organisations there may be benefits associated with labelling work as a 'project' even if it is essentially operational. However, in such cases, we posit that this is a linguistic term used to describe an activity to derive some benefit for a person/s, rather than actually reflecting the nature of the experience. We propose that this is commonly the case in much construction management where we would argue the use of the term project is for historic reasons rather than it actually being how the work is experienced for those contractors involved (for whom this is their day-to-day work).

Returning to our argument, if projecty experiences are grounded in lack of inherent capability, what differentiates managing less projecty work to more projecty work is the extent of 'lack of inherent capability' managing required. Experiences of work that are not very projecty are what we may commonly term operational work. Operational work is such because we have capability to execute the activity with relative (or total) ease. This capability is found across a variety of systems: for example, we have a fit-for-purpose factory, our people are skilled and experienced in undertaking the required activity, and we have the social and technical structures to achieve the activity. However, more projecty work is when we do not have the fit-for-purpose factory, we may not inherently have the right skills, or we may have the right technology but it cannot produce the results quickly enough. There is some hindrance or barrier (lack of inherent capability) to undertaking the activity. Project managing is about working with this lack of inherent capability; creating the capability, or finding ways to leverage existing capability in new ways to achieve the restoration.

In practical terms, we are suggesting that what is central to project managing is the lack of perfect conditions to achieve the activity. Challenges are inherent in this type of experience. If the inherent capability existed, the experience would not be projecty. The subsequent implication is that we should not 'expect' projecty experiences to run smoothly. Deviations from the trajectory should be expected, after all, the person/s involved are developing a capability to undertake the activity or are making-do with existing capability to achieve the restoration.

Furthermore, when we recognise that project managing is about lack of capability managing, we begin to identify what is at the heart of the growing use of project management. As the world rapidly changes, and organisations attempt to evolve, they are continually finding that their capability is outdated and there is a need to be able to cope with this lack of capability to remain competitive, sustainable, and resilient. Project management has been recognised as a tool to enable organisations to manage change and remain resilient (Kenny 2003; Kodukula 2014; Rolfe 2011; Srivannaboon 2006). However, we argue that the term 'project management' disguises the actual reality of what an organisation is having to deal with (van der Hoorn and Whitty (2015b) discuss dominant project artefacts that distort the reality of project work). They are dealing with something for which they lack the capability (refer van der Hoorn and Whitty (2015b) and the dominant project management signs cover-up the 'lived experience' of projects. The danger in using the term 'project management' is that we smokescreen the reality of the unescapable challenges of projecty work: we are not currently configured to undertake the activity-at-hand. This situation requires a suite of skills, for example, social skills, political skills, persuasive skills, and dealing with people's anxiety etcetera.

6.11 Conclusion

We have argued that projects are not a thing, rather people have projecty experiences. The degree of this projecty experience is relative to their capability to undertake the activity. Projectyness is a capability spectrum with very projecty (outside capability) at one extreme and not at all projecty (operational and within capability) at the other extreme. We have developed this position drawing on the lenses of continental philosophers Martin Heidegger and Maurice Merleau-Ponty and, the problem with discontinuous thinking as raised by Richard Dawkins, and also with reference to existing empirical work from the project discipline (van der Hoorn 2015). We have also highlighted that in our use; capability is a concept beyond skill or experience and includes social, cultural, technology, process, and infrastructure to enable particular know-how. We have highlighted that this proposition is in contrast to the dominant 'object' and discontinuous perspective in the existing literature.

We acknowledge that this is a conceptual paper and that there is an opportunity for further empirical investigation to validate the proposition. This would require research methods that would enable the personal perspective of those involved to be captured.

With respect to implications, when we conceive of project work as an experience (rather than a thing) we identify a particular emphasis in project managing: the orchestration of a group of people's desire and willingness to achieve a restoration. Project work is not about managing an objective, distinct thing but about managing people. There are also implications for adopting a continuous thinking perspective with work being experienced as more or less projecty. In terms of practical implications, we argue that we cannot definitively say some activity is best managed by project techniques because there is no delineation as to when something becomes 'a project' or 'not a project.' Also of significance is that given projecty experiences are grounded in a relationship to capability, project managing (in practice) is about being able to manage the lack of inherent capability. While 'project management' may be a more palatable term for management, activities experienced as projecty are such because they are difficult for us to achieve (given our inherent capability) and are likely to have challenges.

7 The Project-Space Model: Visualising the enablers and constraints for a given project

7.1 Preamble

This chapter includes my article published in the International Journal of Project Management in 2016: 'The Project-Space Model: Visualising the enablers and constraints for a given project'. The purpose of the chapter is to introduce a project managing tool: the *project-space model,* which aims to present a holistic and pragmatic perspective of the status of projects through drawing on the theoretical grounding of previous chapters (particularly chapter 6) and related themes. It is a tool which can assist project practitioners in explaining the enablers and constraints to project delivery capability.

The chapter introduces the concepts (particularly Gestalt concepts and force field analysis) that underpin the tool and contrasts how the *project-space model* therefore presents a different view to that captured by the currently dominant project management tools. The layout and features of the tool are discussed. A key benefit of the tool is that it enables the enablers to capability for a project to be identified in specific, concrete terms rather than the more dominant discussion of 'critical success factors' in generic/universal terms. This chapter is the theoretical introduction for the discussion of empirical findings related to the project-space model in chapter 8.

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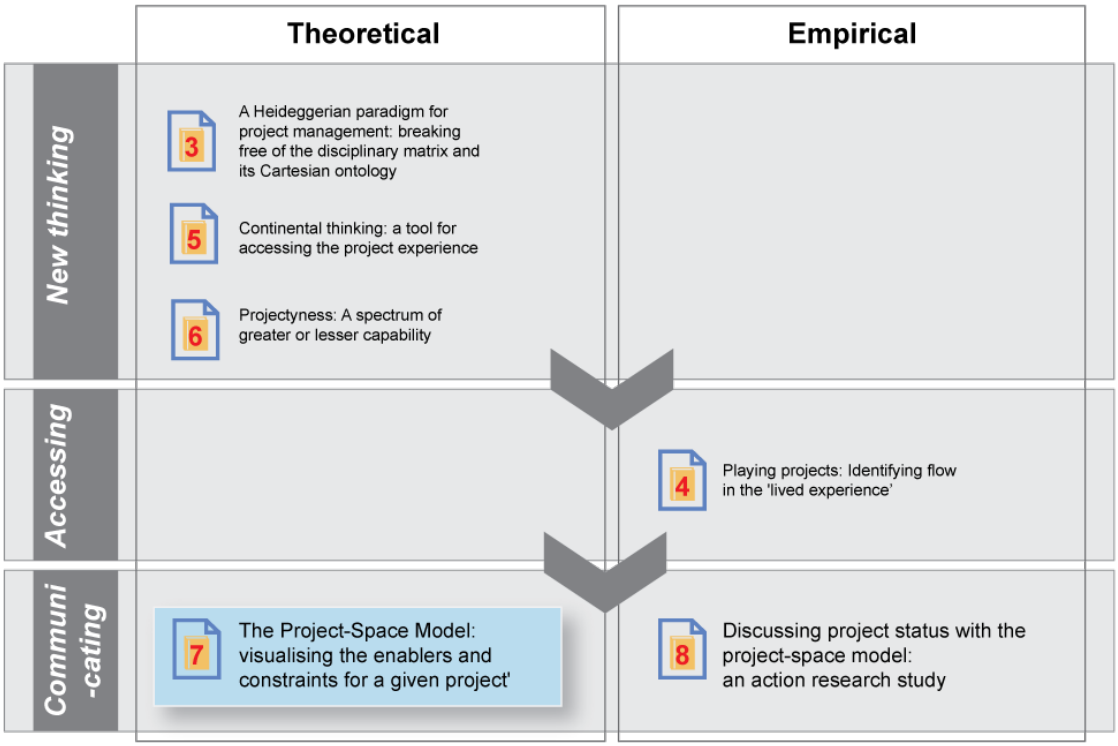

Figure 7.1: Chapter 7 positioning

7.2 Abstract

This paper proposes a tool that can be used by practitioners to identify and represent the enablers to, and constraints on, the progress of a specific project: the Project-Space Model. The diagrammatic tool is a response to the limitations of universal "critical success factors" for projects, and the calls for a more tailored and contextualised approach to managing projects. The Project-Space Model prototype presented in the article embeds concepts from Heideggerian thinking, complexity science, Gestalt theory, and Lewin's Force Field Analysis and Life-space model. The tool has a 'current-space' and a 'forecast-space' and information regarding the enabling and constraining factors is shown through colour, scale and placement of icons within the 'spaces'. The model is currently being tested through an action research case study. It is anticipated that the model will enable stakeholders to identify where their attention and action is most required in a given project.

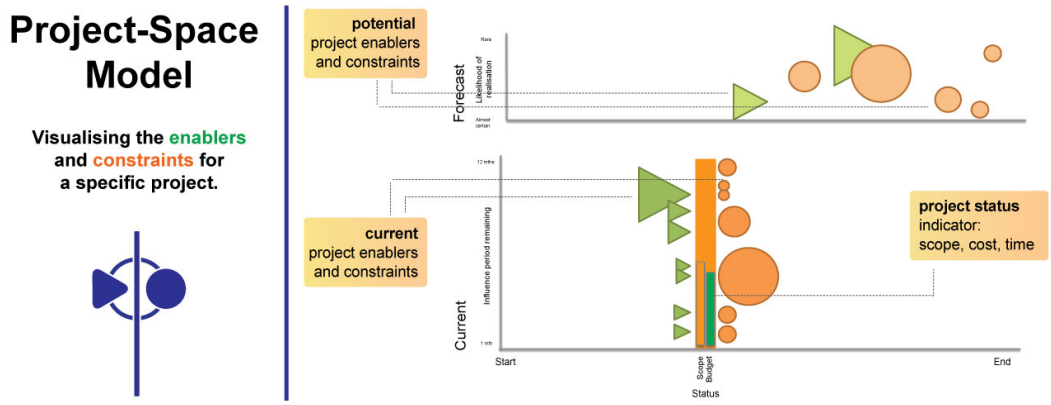

Figure 7.2: Graphical abstract: Project-space model

7.3 Introduction

This conceptual paper proposes a tool for identifying and representing the enablers to, and constraints on, a specific project's progress: the Project-Space Model. This paper describes the theoretical grounding of the model and its conceptual value, rather than empirical validation of its suitability (which will be provided in a future paper). The development of this diagrammatic tool is motivated by the limitations of universal "critical success factors" for projects, and the calls for a tailored and contextualised approach to managing projects (Payne & Turner 1999; Shenhar & Dvir 2007; Shenhar et al. 2002; Söderlund 2004). The tool provides a framework for thinking about, and then illustrating diagrammatically the factors that support or hinder the progress of a specific project at a given time (now) and potentially in the future. The diagram is designed to reflect the relative impact and time dimensions associated with the factors. Subsequently, the project manager and stakeholders are able to prioritise where their attention and efforts are directed to move the project forward (the "critical success factors" for the given project).

The tool is currently in a prototype phase and this article focuses primarily on the theoretical grounding that has been embedded in the prototype version of the tool and its anticipated value to practitioners. The theoretical foundations chosen reflect contextualised and holistic thinking, and include concepts from Heidegger's (1962) *Being and Time*, complexity science, Gestalt theories and Lewin's Force Field analysis and life-space concepts. Following this conceptual phase of the study the tool will be tested as part of an action research case study. Further iterations of the tool are expected as a result of the trial and the results are expected to be the subject of a future article.

This article begins by outlining the motivation for the study (our research problem) that "critical success factors" are not universal and that there is a need for a tailored approach to managing projects. An overview of the literature regarding the research problem is then provided, followed by the research question for the phase of the study discussed in this paper. A series of theories that inform the features of the prototype model (the theoretical grounding for the model) are then presented. Detailed discussion of Lewin's Force Field analysis is provided as this has significantly

influenced the proposed model. The Project-Space Model is then introduced and its features outlined and the value of the model in conceptual terms is provided. Finally, the next steps in the study (empirical testing) are briefly introduced.

7.4 Research problem

"Critical success factors" are a dominant topic in the project management literature (Dvir et al. 1998; Müller & Jugdev 2012; Shenhar et al. 2002). A definition of "critical success factors" can be implied from Pinto and Prescott's (1988) discussion to be factors that are necessary for a project to be successful. To date, there has been little agreement on what are the universal "critical success factors". I would posit (given my subjectivist philosophical stance) that this is because project work is unique and that a pursuit of universal "critical success factors" is problematic. However, this does not negate that those involved in project work need to understand the factors that enable or constrain the progress of their initiative. It is posited that there is no tool in dominant use in project management to support practitioners and stakeholders in specifically representing and communicating these factors (refer Section 7.5.2 for further discussion), yet there is a need for the capability that such a tool would provide. This study is motivated by the need to provide project practitioners with a tool to enable them to identify and communicate the "critical success factors" for their specific project.

7.5 Literature review

7.5.1 "Critical success factors" in project work

There has been significant discussion in the project literature regarding what is project success and what factors enable project success (Dvir et al. 1998; Müller & Jugdev 2012; Shenhar et al. 2002). Müller and Jugdev (2012) highlight that there are two concepts within this literature: "project success factors" (which I posit equate to "critical success factors" introduced above) and "project success criteria". In this discussion I am focused on the prior: "project success factors" or "critical success factors": elements that can be leveraged to increase the likelihood of project success. Despite the significant amount of literature, a consensus has not been reached on what

are the universal "project success factors" (Shenhar et al. 2002; Söderlund 2004). I do not find this lack of consensus surprising, nor do a variety of authors on this topic (refer Dvir et al. (1998)). Rather, there is recognition that trying to identify universal factors is flawed given the unique nature of projects (Dvir et al. 1998; Shenhar et al. 2002).

In response there has been a stream of literature that has investigated the "critical success factors" relevant for specific industries, locations or other project criteria. For example, the varying importance of "critical success factors" at different stages of the lifecycle is explored by Pinto and Prescott (1988). They question whether "project implementation critical success factors [are] of equal and stable importance over the life of a project, or does their relative importance (weighting) change as the project moves through different stages of completion (Pinto & Prescott 1988, p. 6)?" Their finding is that "critical success factors" do vary in their importance across various project lifecycle stages.

Holland and Light (1999) propose strategic and tactical success factors for enterprise resource planning solution projects. Chua, Kog and Loh (1999) use an Analytical Hierarchy Process to identify success factors for construction projects. They find that success factors vary depending on project objectives. They also comment that "practitioners would have composed a set of CSFs [Critical Success Factors] after testing against their experience (Chua, Kog & Loh 1999, p. 142)." Shenhar et al. (2002) investigate success factors on various technical projects. They also conclude that success factors are not universal and that they are contingent upon the specific type of project. More recently, Thi and Swierczek (2010) consider success factors for infrastructure projects in Vietnam. In introducing their study they recognise the criticality of understanding the socio-cultural, political and economic context of a project, but note that this is largely ignored. Their study found that team and project manager competency and external stability have a positive relationship to success.

Of a different track, but pertinent is the Cooke-Davies (2002) discussion on "real" success factors. Whilst, the outcomes presented are 12 "critical success factors" (and the implication is that these are generally applicable), the article highlights that there are multiple questions to be asked regarding success factors that are relevant to my thinking. He asks: "What factors are critical to project management success? What

factors are critical to success on an individual project? What factors lead to consistently successful projects? (Cooke-Davies et al. 2007, sec. 2).” I would argue that the latter question assumes a universality that is unlikely. However, the second question suggests towards a recognition that there may be unique “success factors” for *each* project.

7.5.2 Current methods for identifying “critical success factors”, and enablers and constraints to project progress

It is necessary to understand what current tools may be used by project managers to identify “critical success factors”, or enablers and constraints to their project progress.

7.5.2.1 “Critical success factor” research methods

Firstly, with respect to “critical success factors” I argue that “critical success factor” studies are undertaken by researchers with the objective of finding varying degrees of universality in such factors (i.e. from generalisations applicable to all projects, to generalisations applicable to a particular type of project). Subsequently it is not surprising that they use a variety of traditional research methods to identify these factors including questionnaires, interviews and analysis of the literature that enable them to respond to particular research question. Table 7.1 provides examples of the methods used in recent studies identifying “critical success factors” pertaining to the scope of their studies.

Table 7.1: Methods used to identify "critical success factors"

Study	Description	Research Methods
Chow and Cao (2008)	Agile Projects: Empirical testing of whether anecdotal success factors claimed in literature (drawn from case studies and research theories) align with survey findings by these researchers	Literature analysis Web-based Questionnaire N = 109
Ika, Diallo and Thuillier (2012)	World Bank Projects: Empirical testing of success factors identified in extant literature	Literature analysis Web-based Questionnaire N= 178
Olszak and Ziemba (2012)	Business Intelligence Systems: Identify what are the critical success factors for Business Intelligence Systems Implementations in Small-Medium Enterprises in Poland	Literature analysis In depth interviews N = 20
Ahmad and Pinedo Cuenca (2013)	ERP Implementation: Identification of critical success factors for ERP implementation in Small-Medium Enterprises	Literature analysis Questionnaire N = 20 Interviews N = 8
Verburg, Bosch-Sijtsema and Vartiainen (2013)	Dispersed working conditions: Identify conditions necessary for fully dispersed work conditions in projects	Literature review In depth interviews N = 30
Zou et al. (2014)	Public Private Partnership Projects: Identification of critical success factors for relationship management in Public Private Partnership Projects	Literature review In depth interviews N = 11 Questionnaire N = 16 (full completion of survey)

7.5.2.2 Gateway reviews, stage gates to identify early warning signs

I also highlight a study by Williams et al. (2012) on early warning signs in complex projects. This study is of relevance as it is exploring the framework of early warning signs that I would argue is attempting to identify constraints or threats to a project's progress. The article discusses various literature that highlights the limitations of tools such as gateway reviews and "stage gates" (including over optimistic assessment and underestimation of risk) that should identify potential problems. The study also interviewed 14 participants regarding insights gleaned from such assessments and the benefits of the assessments were inconclusive; their value was not established. However, Williams et.al.'s (2012) analysis of eight case studies, showed the reviews to be generally useful, but that they are limited in their ability to pick-up early warning signs. An outcome of the study was that in addition to formal assessments, dialogue was key – everyday communication is better at identifying potential problems than assessments. It is also found that the *process* of the assessment (in opening dialogue and posing critical questions) can be more important than the assessment outcomes. Williams et al. (2012) also give focus to the importance of "gut-feeling" approaches and that more methods leveraging this "gut-feeling" are needed.

7.5.2.3 Status reporting

The 'best practice' guides such as the Project Management Body of Knowledge (2013) and PRINCE2 Guide (2009) recommend the use of reports as part of the monitoring and control of projects. This is the only tool identified for day-to-day (or more likely week-to-week or month-to-month) monitoring of the project experience. These reports can vary significantly in their presentation however a key focus is generally comparison of progress and forecasted progress to the baseline or project plan (Office of Government Commerce 2009; Project Management Institute 2013). Key issues and risks are also generally included in these reports (Office of Government Commerce 2009; Project Management Institute 2013). I would argue that the nature of the comparisons to baselines such as cost, schedule, scope etcetera in these reports, whilst beneficial can cause attention to a deviation (in quantitative

terms) but without identifying or communicating the actual causes for these problems. Similarly, where risk and issue identification occur this is often narrative and may not allow stakeholders to easily identify where remediation action is most critical. These reports can also become reductionist in their approach to the project environment – focusing on project management knowledge areas such as scope, budget, and schedule in a quantitative assessment rather than on the holistic progression and experience. It is also proposed that with the exception of traffic light dashboards utilised in some projects, these reports are generally textual in format. Similar to Williams et.al.'s (2012) discussion, Snow and Keil (2002) and Thompson, Smith and Iacovou (2007) highlight perception/bias/credibility issues between actual and reported status in reporting on information systems projects.

In summary, whilst there may be value in the "critical success factor" studies such as those in Table 7.1, they do not provide a pragmatic, 'in-the-now' method for a practitioner to use to identify and communicate concrete "critical success factors" for their project at a given time. Indeed, this is not their focus – they are seeking to derive generalisations that can be used in proactive manner in future projects (in general terms). Additionally, William et al.'s (2012) discussion of early warning signs and their effectiveness highlights the need for pragmatism and the importance of an 'everyday' method for discussing potential or actual project problems. The only existing project reporting for 'everyday' appears to be status or highlight reports. I posit these are often reductionist in nature, largely textual and can fail to highlight the enablers and constraints to actually achieving the project's objectives as their focus is generally on assessment of progress against baselines.

7.5.3 Calls for a tailored approach to project work

Building on my discussion in section 7.5.1, the recognition of the lack of universality of project theory can also be seen in the calls for (and discussion of) a tailored approach to project management. For example, a study by Payne and Turner (1999) found that on average their study participants reported that they experienced greater success if they tailored their management approach to the project type. Contingency theory is applied to projects in Shenhar's (2001) exploratory research regarding the different ways that projects are managed. Söderlund (2004) in his discussion of the

problems with universal theory in project management calls for debate on the contingency and contextual dimensions of the discipline.

The fact that one size [project management] does not fit all [projects], is a key driver underpinning Shenhar and Dvir's (2007) Diamond Framework. They argue that not understanding differences between projects can lead to project failure. In their discussion of collaborative research projects, Vom Brocke and Lippe (2011) discuss the changing facets of a project over time, and the need for different management approaches for various situations. Based on organisational contingency theory, they argue for a context-specific approach to management. Turner, Ledwith and Kelly (2012) argue that small to medium enterprises require a simpler, people-focused approach to project management.

In summary, it is posited that the literature examined demonstrates that there cannot be universality in "critical success factors". This is reinforced in the calls for, and discussion of the necessity of a tailored approach to management of projects. Where there is existing research on tailoring it still largely assumes a universality of projects within the category (industry, size, uncertainty etcetera) being discussed. It is suggested, that this tailoring and lack of universality can be taken a step further in recognising that projects will have their own unique set of "critical success factors". Of course, there will be overlap in "critical success factors", and probably similarities between similar initiatives. However, these situations-of-sameness cannot be assumed. Furthermore, it has been established that there is a lack of methods that are suited to prompting the identification and communication of the enablers and constraints to a given project. As such, I propose that there is a need to develop a tool that assists in the identification, and communication of the enablers and constraints to a specific projects progress.

7.6 Research question

Given this discussion of the problematic nature of universal "critical success factors" for projects, the calls for a tailored approach to the management of projects, and the lack of currently available tools to support the identification and communication of enablers and constraints to a specific project's progress the research question is:

How can theories and models that embody context and holism be designed into a tool that allows the *enablers and constraints for a given project to be graphically represented*?

7.7 Project-Space Model: theoretical grounding

In designing a tool that recognises the contextual nature of project work, I have drawn on philosophies, theories or thinking that gives primacy to context, and does not seek to derive an 'objective' positivist perspective. I believe that Heidegger's *Being and Time* (1962) ontology, the principal Gestalt concept, complex systems theory and Force Field analysis are examples of such thinking. I now introduce these concepts in terms of how they can contribute to a tool that allows the enablers and constraints for specific project work to be identified and communication. The contribution of each of these elements to the prototype model is provided in Table 7.3.

7.7.1 Heidegger's *Being and Time* ontology

Heidegger's *Being and Time* (1962) provides an alternative paradigm to current project management theory for considering the phenomena of projects (van der Hoorn & Whitty 2015e). Currently, the methods and teachings of the project management associations are based on positivist research and theories at best, and at worst have no evidence-base (Lineham & Kavanagh 2006; Morris 2013; Smyth & Morris 2007; Whitty 2011c). Heidegger's ontology draws on phenomenology (Wheeler 2014). Phenomenology rejects scientific realism and argues that knowledge is gleaned from participation in everyday life (Schwandt 2007). Given this grounding in phenomenology, it is posited as a suitable foundation for underpinning a tool that aims to disclose what is actually happening in a given (concrete) situation. I will now explore particular Heideggerian concepts that can assist in shaping the tool.

7.7.1.1 Being-in-the-World

Being-in-the-World is a cornerstone concept in *Being and Time* (1962); it highlights the distinction between Heidegger's ontology and Cartesian subject-object dualism. The Being-in-the-World concept is that Dasein (the mode of being that is associated with human beings), is not separate from its environment, rather humans are infused

within their world (Blattner 2006; Schatzki 2005). Dasein does not project meaning onto objects, rather, through Dasein's interaction with objects, meaning is generated. Dasein's being is understood through the objects with which it interacts (Dreyfus 1991).

This thinking is in contrast to a Cartesian, dualism perspective, in which human beings are separate from discrete objects in the universe, and project meaning onto objects (van der Hoorn and Whitty (2015e) provide a diagrammatic comparison of this concept.) Such Cartesian perspectives are evident in current theory that proposes a rationality and prescriptiveness in project management practice. For example, a reliable and predictable transition through a project management lifecycle. For this tool, the objective is to embed Being-in-the-World thinking through features that enable the experience of those in the world-of-the-project to be captured. This is not a rational, distanced perspective; it captures the perceived experience of those involved in the project.

7.7.1.2 Temporality

Heidegger's concept of temporality has some relationship to the traditional term 'time', however it is a unifying concept that suggests that past, present and future are unified in Dasein (Blattner 2005a). That is, the present, past and future inform one another. Dasein's scope of possibilities, is influenced not only by what one wants to do, but what has been done/experienced and the current situation (Cerbone 2008; Wheeler 2014).

Current project management theory is 'clock-time-centric'; it is perceived as a series of isolated 'now points'. Generally, the definition of a project is an activity with a defined start and end (Project Management Institute 2013). Whilst this may be useful, it can be misleading. Projects, through the people that are immersed in them, are rather inextricably coupled together - they are not isolatable in terms of what they are affected by nor what they will affect (van der Hoorn & Whitty 2015e). Decisions on one project can affect decisions on another project even if there is a gap of many years between projects. In adopting Heidegger's concept of temporality it becomes possible to have insights into what is affecting the project's progress outside of this 'artificial' project lifecycle. I aim to incorporate this insight into the tool through

encouraging practitioners to think outside the artificial parameters of start and finish and recognise how their present situation is affected by the past. Similarly, how what is occurring now will affect future progress.

7.7.1.3 Spatiality

Heidegger's spatiality is a contrast to the Cartesian idea of physical space. Spatiality is the degree of closeness or distance of the objects to Dasein in its world (Blattner 2006; Dreyfus 1991; Kaelin 1988). In other words, distance between objects and Dasein is more related to the degree of mattering to Dasein than that of physical distance. Traditional project management does leverage this possibility of some influences or stakeholders being more influential (or of greater importance) than others. Additional, risk matrices showing impact are commonly promoted for assessing risk (Office of Government Commerce 2009; Project Management Institute 2013). That is, a risk that has been categorised as extreme (via the risk matrix) in spatiality terms is closer to the project, than a risk that has been classified as low, even if in terms of their physical (or time) distance from the project, the inverse is the case. Similarly, in terms of stakeholder management, just because a particular stakeholder is physically distant from the project (i.e. they may be located in another city or country), in terms of their spatial relationship they may in fact be highly influential to the project, and therefore 'near'.

Whilst practitioners may use this thinking to understand certain aspects of their project, it is suggested that this theoretical basis on which they are drawing is not recognised, and there is potential to link these phenomenological practices into the macro and theoretical understanding of projects. Spatiality provides an ontological basis on which influence and impact in the project management environment can be grounded. This concept of Heideggerian spatiality and degree of mattering is embedded in the tool.

7.7.2 Gestalt theories

The Gestalt concept of the whole being *different* to the sum of the parts (Sabar 2013) is also of relevance to the development of the Project-Space Model. The literature highlights that traditionally, science isolated the components of the whole, analysed

these components, and then considered the aggregation of this analysis as reflective of the whole (Cooke-Davies et al. 2007; Ellis 1967). As such, it is no surprise that traditional project management theory, underpinned with positivist approaches also has this atomistic perspective. For example, the Project Management Institute's (PMI's) Body of Knowledge (PMBOK) has ten knowledge areas (2013). These ten knowledge areas (including scope management, time management etcetera) are the major component of the PMBOK and yet nine of the knowledge areas could equally be utilised as part of operational management (Thomas 2006). As such, it prompts the question, if it is not actually these individual components (knowledge areas) that make projects unique, why is the body of knowledge divided into these topic areas which encourages atomistic and reductionist thinking and that does not actually disclose the differences in managing projects (versus operational work)? It is acknowledged that one of the knowledge areas is integration management. However, the division of project work management into the nine discrete areas is argued to be reflective of the dominant atomistic thinking.

The Gestalt 'whole being *different* to the sum of the parts' concept, is proposed in this research study as critical to enabling an understanding of project reality. Simplistically, I will aim to present the status of the project in holistic terms. Individual project management knowledge areas of a project (scope, procurement, communications et cetera) should not be considered in isolation because it is the configuration of these components and their relationships (often dynamic) and in a concrete situation that create the reality of the whole. I posit that in actuality, we do not experience enablers or constraints to projects in terms of these knowledge areas or similar generic categories. Rather, actual enablers or constraints are an aggregation of such elements realised in some concrete factor that is pushing a project towards the desired outcome or inhibiting its progress towards this outcome. The lens of the PMBOK guide knowledge areas can limit our ability to access and describe the concrete situation.

7.7.3 Complex systems theory

A holistic and emergent perspective underpins complex systems theory and has already been noted as relevant to project management (Aritua, Smith & Bower 2009;

Curlee 2011; Jaafari 2003; Morris 2013; Shenhar & Dvir 2007; Skyttner 2001). A central tenant of complex systems theory is that the whole cannot be understood by analysing its components in isolation (Whitty & Maylor 2009; Willy, Neugebauer & Gerngroß 2003). As posited in section 7.7.2 and as per Aritua, Smith and Bower (2009), to date, the reductionist paradigm has dominated project management theory. This is evident in tools such as the work breakdown structure and the critical path method, which segregate components of a project from one another (generally in categories reflective of the PMBOK areas). However, there is growing agreement in the literature that projects are examples of complex systems (Aritua, Smith & Bower 2009; Curlee 2011; Jaafari 2003; Morris 2013; Shenhar & Dvir 2007; Skyttner 2001).

Emergence is a key concept within complex systems theory: that is, complex systems have behaviours or characteristics that are not readily apparent from the individual components. There is the property of non-linearity- that is repeating an action and deriving different results (Bar-Yam 1997; Whitty & Maylor 2009). It has been proposed that project activities are subject to the influence of both its parent firm and also the broader external environment, and that practitioners need to be able to adjust to the dynamic characteristics/influences of this broader network (Aritua, Smith & Bower 2009). It has also been suggested that viewing projects as complex systems would suggest that rather than rigid systems, a flexible approach to management is required. The Project-Space Model tool is to be crafted to feature this concept of emergence.

7.7.4 Lewin's Force Field analysis and life-space model

Lewin's concept of Force Field analysis is particularly pertinent in the development of the Project-Space Model as it is an existing diagrammatic method to illustrate enablers and constraints and has established usage in the organisational management literature. Given its contribution in the development of this tool, it will be discussed in some depth, including case studies that discuss its value.

7.7.4.1 Force Field theory

Force field theory played a central role in Kurt Lewin's work; it allowed him to understand the behaviours that sustained undesirable consequences and enabled

changes to these behaviours (Burnes & Cooke 2013). Lewin (1943) argued that there are two approaches to understanding a given situation: firstly, to draw conclusions from history; or to use diagnostic tests of the present. He argued that the former method is risk-prone, as the systems (such as human beings) being analysed are not closed systems, and therefore relying on the past as being indicative of the current or future is unreliable. Rather, he argued for assessing the present, and recognising that the influence of the past and projections of the future will be evident in the present condition. This aligns with Heidegger's notion of temporality (Heidegger 1962).

The method adopted by Lewin for assessing a given 'subject' (person or situation) was through considering the totality of all forces (factors) affecting the life-space of the 'subject' at the given time (Burnes & Cooke 2013) (refer Figure 7.3 for an example of the life-space diagram). This life-space was built on the data provided by the participant (Burnes & Cooke 2013) . Lewin posited that (Burnes & Cooke 2013, Defining the field theory):

> "[i]f one could identify, plot and establish the potency of the forces in a person's life space, it would be possible not only to understand why individuals, groups and even entire organizations [sic] act as they do, but also what forces would need to be diminished or strengthened in order to bring about behavioural change."

Consequently, the focus of the theory is on the forces (factors) that can have an influence on the subject achieving its goal and/or determining its current state (Schwering 2003).

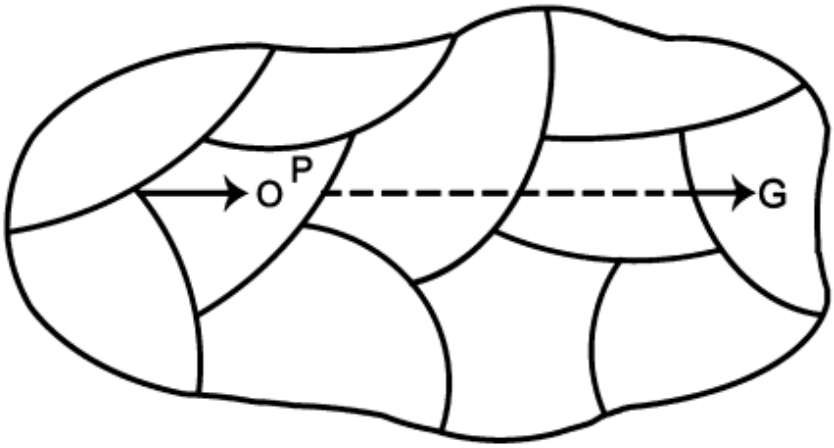

Figure 7.3: Lewin's life-space diagram (showing person and goal)

"P is the individual, O represents their current situation or behaviour, and G is the goal that they wish to achieve or the change that they wish to make. The dotted line represents the shortest path between where they are in their life space and where they want to be. The sectors immediately above, below and behind O represent the forces for change, and those between O and G represent the forces resisting change. The other forces in the field will also exert an influence on the change the person wishes to make and will also be affected by the change (Burnes & Cooke 2013, pp. 413-4)."

Source: Burnes and Cooke (2013, p. 414)

7.7.4.2 Case studies

A series of case studies using Force Field theory from the literature will now be discussed. It is highlighted that within the literature, when case studies utilising Lewin's Force Field theory are being discussed, the focus is generally on Force Field *analysis* that uses the tool that diagrammatically represents Lewin's theory in a given situation. A generic force field analysis diagram is provided in Figure 7.4.

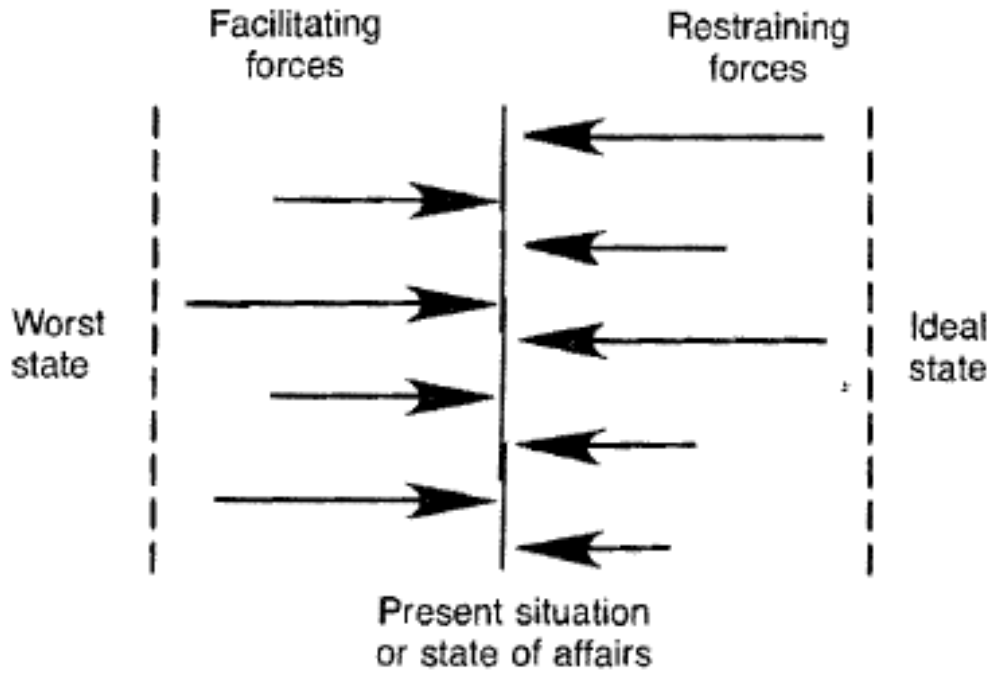

Figure 7.4: Generic force field analysis (modern-day usage)

Source: Nicholas (1989, p. 29)

7.7.4.2.1 Nicholas (Project Management)

The only reference to the use of Force Field theory or analysis in academic project management literature is from Nicholas (1989). His paper, however, does not assess the actual effectiveness of the tool in a case situation; it only proposes that it is a useful participative tool for distinguishing factors that inhibit or support project performance. In his paper, Nicholas (1989) provides a generic example of drivers and constraints in the project environment in the format of a standard Force Field analysis.

7.7.4.2.2 Brager and Holloway (Health facility for the elderly)

Brager and Holloway (1993) observed the application of Force Field analysis to a change of the intake process for residents at an aged care facility. The Force Field analysis was primarily used during the planning stage of the change as a means to understand the required support to enable the change. Brager and Holloway (1993) use the term ‘amenable’ to classify forces that are likely to be able to be modified for the purpose of achieving the change. The tool enabled the determination of the possibility of the change (including the identification of politically-orientated issues).

However, it is highlighted that the tool's value is directly linked to the quality of the information gathered and incorporated into the analysis/tool.

7.7.4.2.3 Baulcomb (Rostering change in the health sector)

Baulcomb (2003) discussed the change of a shift system within a hospital ward. In this change initiative, Lewin's Force Field analysis was used to assess the required change. This included identification of driving and constraining forces and assignment of weights to these forces; it is noted that the change also adopted Lewin's unfreeze, move and refreeze approach. Baulcomb (2003) states that the Force Field analysis enabled the drivers and constraints to be identified and explained. The Baulcomb (2003, p. 287) Force Field analysis is provided in Figure 7.5.

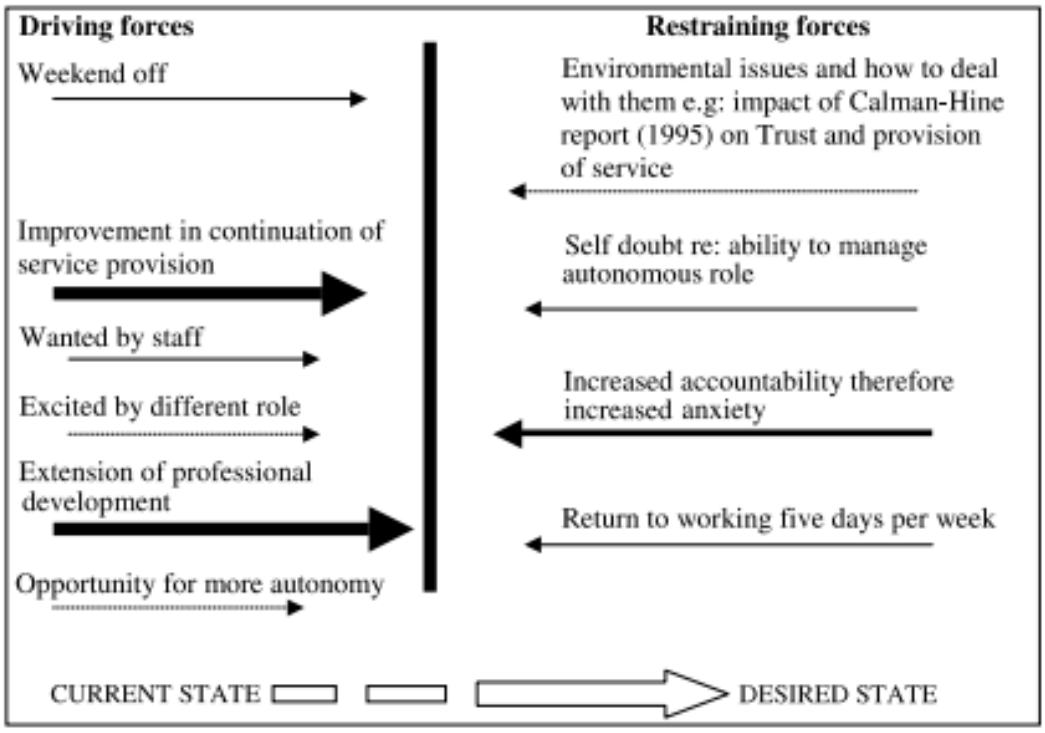

Figure 7.5: Example of Force Field Analysis diagram from Baulcomb (2003)

Source: Baulcomb (2003, p. 287)

7.7.4.2.4 Wilson and Thomson (Management history)

Wilson and Thomson (2006) utilise Force Field analysis to analyse how British managers have transitioned from a 'salaried' to a 'professional' status. They argue that management is a derivative of other drivers, and these drivers have determined

how management has evolved. Wilson and Thomson (2006) present two Force Field analysis diagrams contrasting the forces driving towards and restraining against managerial capitalism; the first is of the forces in 1900 (refer to Figure 7.6) the second shows the forces in 2000. It is noted in the article, that these Force Field analyses, also provide phenomenological information regarding the life of a manager (i.e. what they are dealing with). In contrasting the diagrams, it is evident that there were significantly more restraining (than driving) forces against managerial capitalism in the 1900s, and vice versa in 2000. Hence an understanding of the emergence of managerial capitalism (from the forces in the environment) in the latter period can be understood.

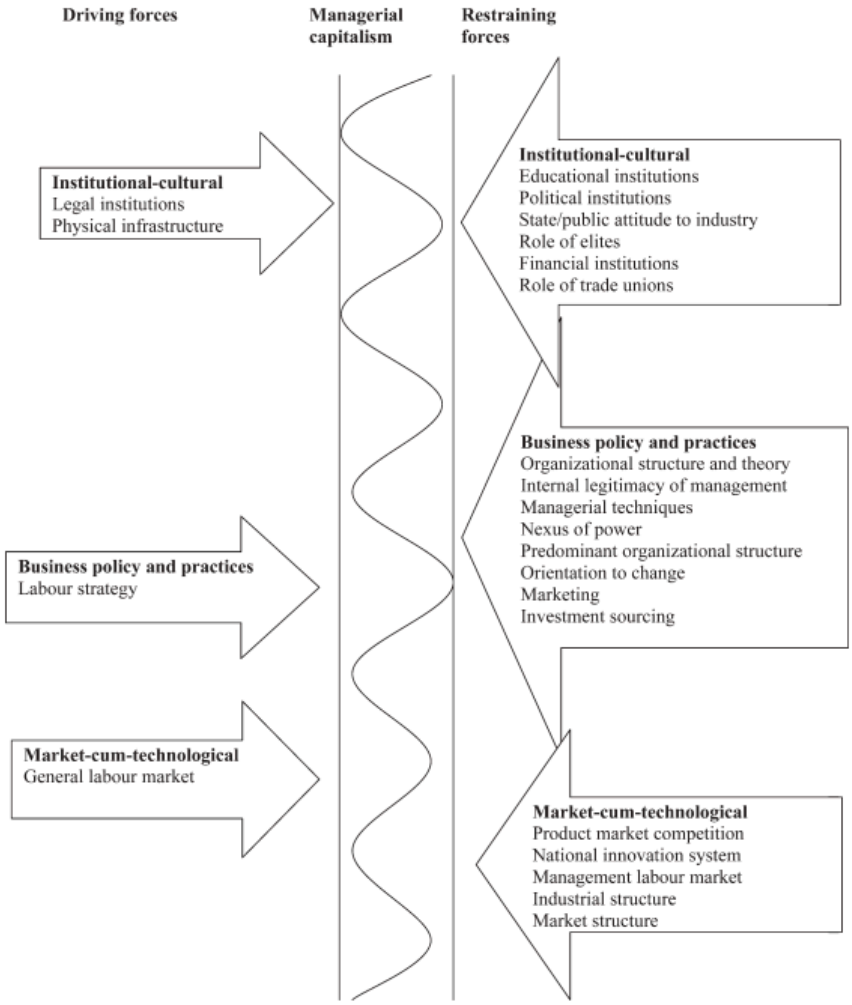

Figure 7.6: Example of Force Field Analysis diagram from Wilson and Thomson (2006)

Showing forces affecting what it was like to be a manager in Britain in the 1900s

Source: Wilson and Thomson (2006, p. 364)

These brief explorations of case studies utilising Force Field analysis (the prominent diagrammatic realisation of Force Field theory), highlight its potential use and value. Table 7.2 outlines the relevance of each of these cases to the development of the model, the text in green emphasises gaps that this research study proposes to address (including the empirical phase), text in orange emphasises support for use of the tool in the context of this research study. It is noted that this is not proposed as the total

justification for the study or the gaps to be addressed, rather it is those arising from these cases.

Table 7.2: Case studies: relevance to research study

Case	Relevance to study
Force field analysis in project management **(Nicholas 1989)**	This is the only identification of use of force field analysis in a project management context in the academic literature. It does not empirically assess the value of the tool in a case study environment; it is a theoretical discussion.
Health facility for the elderly **(Brager & Holloway 1993)**	Highlights the value of the tool in assessing change readiness. It does not assess the suitability of the tool in continually assessing progress.
Rostering change in the health sector **(Baulcomb 2003)**	The tool is used to assist in identifying barriers and constraints to a required change. The tool is used as part of a broader suite of Lewin change tools (this will not be the case in this research study).
Management history **(Wilson & Thomson 2006)**	Use of the tool to identify the forces driving different managerial paradigms. The study recognises the phenomenological insights that can emerge from the use of the tool.

7.7.4.3 Discussion of benefits and criticisms of force field analysis

7.7.4.3.1 Benefits

In addition to the assessments of the tool in the cases above, an array of benefits associated with the use of Force Field analysis has been discussed in the literature. For example, it has been recognised that Force Field analysis is a useful tool in identifying, understanding and enabling a response to forces at play in a given situation; the reason for a given status; or factors influencing the ability for change (Burnes & Cooke 2013; Hurt 1998; Schwering 2003). The process of Force Field analysis has also been recognised as suitable for use with groups; it includes by-products such as increasing engagement and dialogue (Hurt 1998). Schwering (2003, p. 362) states that: "As a 'social architecture of planning', this method can create a productive dialogue among potentially contentious stakeholders". The technique is also able to be used both prior to instigating a change and during the execution of

change (Schwering 2003). By way of conclusion, it is proposed that if the Force Field analysis tool can derive such benefits as increasing engagement, enabling the identification, and supporting the management of forces at play in the environment, and can be used prior to, and during an implementation period, then its features may be suited to incorporation in a project management tool for identifying and communicating the enablers and constraints to a given project.

7.7.4.3.2 Criticism

However, the theory/technique is not without its critics. Burnes and Cooke (2013) report that Lewin has been widely criticised for becoming focused on the mathematical rigour of his theory rather than its practical relevance. However, the use of the tool in practice would indicate that such precise mathematical grounding is not what is valued by practitioners (Burnes & Cooke 2013). Other cautions identified when using the theory/analysis is associated with the validity of data. Firstly, and as per any such tool, the Force Field analysis is only as useful as the data which is identified and collected by the theory/analysis users (Schwering 2003). It has been proposed that formal prompting techniques or conceptual models can be useful in guiding the identification of forces (Schwering 2003). It has also been noted that if the analysis is being undertaken prior to change (i.e. assess readiness), there is an assumption that causality can be implied in identifying the driving and restraining forces. In very complex environments, such prediction of causality may not be possible (Schwering 2003), and therefore the analysis would be better suited as an in situ (current status) tool. In summary, Force Field analysis has been criticised for its (original) positivist leaning, but this element has subsequently been omitted from practitioner use, and there are caveats regarding its use in practice.

7.7.5 Integration of theoretical grounding

Having introduced these theoretical ideas and types of thinking it is necessary to highlight their interrelationships. Heidegger's (1962) *Being and Time* concepts provide a philosophical viewpoint into which the other concepts can be grounded. Specifically, it sets our thinking in the concrete experience of everyday life and draws our attention to our infusion in the world (rather than an objective Cartesian perspective). It also provides a particular conception of time (temporal unity) and

spatiality (mattering) on which to design the model. To this Heideggerian philosophical grounding, complex systems theory and the Gestalt theories are added. These lenses highlight more pragmatic viewpoints of phenomena such as emergence and the whole as being different to the sum of the parts - an argument for a more holistic and pragmatic view of experience. Finally, Force Field theory and analysis is an already established tool that can be seen to embody elements of the Heideggerian philosophy, complex systems theory and Gestalt theory lenses. In summary, the discussed theories provide an integrated perspective, moving from a philosophical grounding to an existing pragmatic tool that can inform the development of a model for identifying "critical success factors" in a holistic manner in a concrete situation.

7.8 Introducing the Project-Space Model

The initial prototype of the Project-Space Model is now introduced. Table 7.3 summarises the elements of the theories identified in section 7.7 that are designed into the Project-Space Model with the corresponding feature that reflects this aspect. Figure 7.7 is a prototype of the tool with annotations. Following is a description of the tool's features, and the anticipated value of the model compared to extant concepts and tools.

Table 7.3: Embedding of theories within Project-Space Model tool

Theory/ framework/ thinking	Concept	Feature in tool or research approach
Heidegger	Being-in-the-World	Content is put into the tool from the perspective of those who are involved in the project: what they subjectively perceive in the situation.
Heidegger	Temporality	The tool has a primary focus on the 'now'. This can include effects of the past on the now, and how the now can affect the future.
Heidegger	Spatiality	The degree of mattering of a factor is indicated by the size of the enabler or constraint.
Gestalt	Whole is different to sum of parts	The tool considers the cumulative (emergent) result of enablers and constraints. The tool is showing an overall perspective on the project. The focus is on actual factors that enable or constrain- not a breakdown of factors such as scope, time etcetera.
Complex systems theory	Emergence	The tool considers the cumulative (emergent) result of enablers and constraints. The tool is showing an overall perspective of the project.
Force Field Analysis	Enablers an constraints as determinants of status	Use of a status line with forces (of varying impact) moving the line forward or backward.

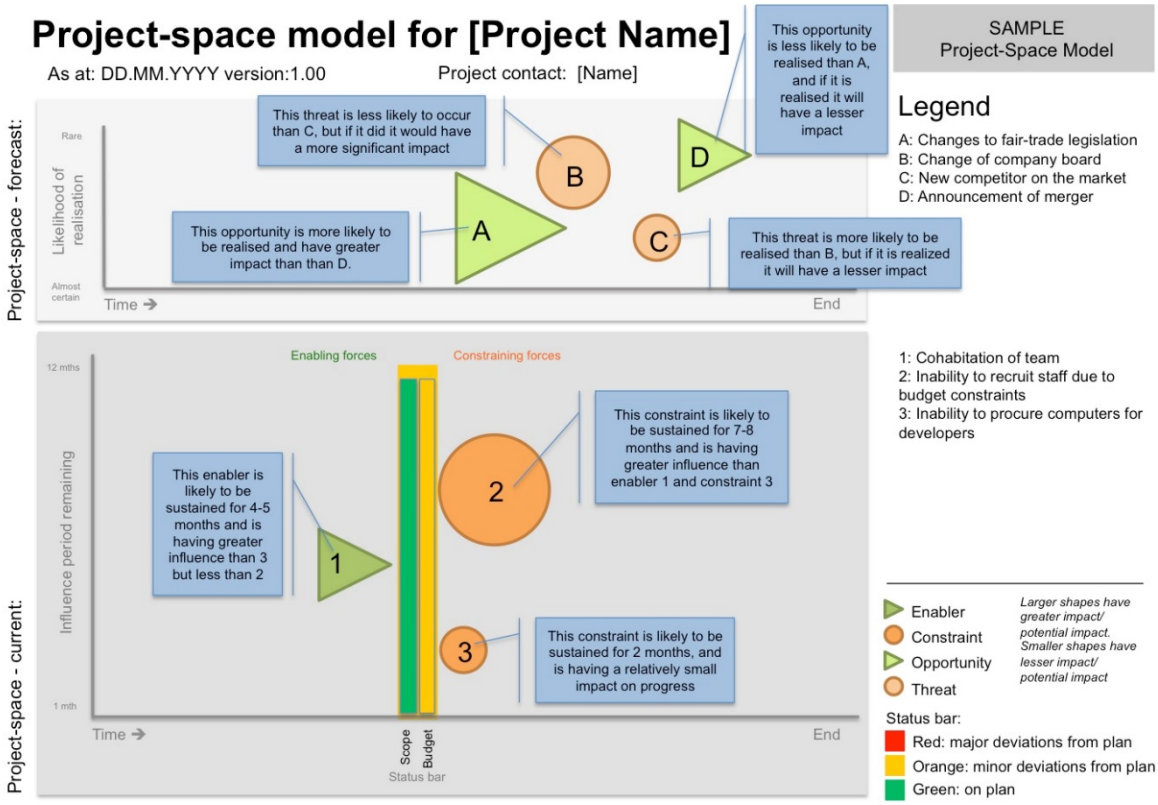

Figure 7.7: Prototype of Project-Space Model tool

7.8.1 Model design

The Project-Space Model has two sections: the current-space and the forecast-space. The current-space is focused on the experience of those involved, now. The forecast-space is the environment into which those involved are projecting towards as they perceive it now. I highlight that the forecast-space is not necessarily the future that will be experienced by the participants. It is only what they foresee now that may be the future for the project work. In both spaces, the triangles indicate factors that are enabling the progress of the project work (in dominant language the "critical success factors" that are currently in place within the project). The circles indicate the factors that are constraining project's progress (the "critical success factors" that need to be enacted). The larger the circle or triangle the greater the relative impact of the factor (*degree of mattering – spatiality*). The smaller the circle or triangle, the lesser the relative impact of the factor. It is anticipated that this strongly visual representation will allow stakeholders to quickly and easily identify where their attention is best

directed (i.e. the larger circles), compared to text-based reports. Refer also Nelson, Reed and Walling (1976), Childers, Heckler and Houston (1986), Larkin and Simon (1987), Tufte (1983), Marcus, Cooper and Sweller (1996), and Cheng (2004) regarding the cognitive processing and recall benefits of visualising data.

In both grids the x-axis is representative of linear time. This has been chosen purely for contextual purposes. In the forecast-space, factors can be shown where they are anticipated to be realised in 'clock-time'. However, in the current-space (the now - which is all that *actually* exists), enabling and constraining factors will only ever be placed around the status bar (the vertical line). This is emphasising Heidegger's *temporality* concept and that time is unified in the now. In the forecast-space the placement of enablers and constraints in the y-axis indicates the current perception of how likely it is that the factors will become realised in the current-space. The lower on the y-axis the more likely it is forecasted to be realised (to come into the current-space). The y-axis in the current-space indicates the anticipated duration in which the factor will be sustained without any further intervention. The status bar in the current-space is placed in linear time according to the forecasted length of the project. The status bar can be divided into elements of the project's status such as scope and budget (if required) and traffic light colours (red, amber and green) can be used to indicate overall status of the project or sub-element.

The term 'space' has been used in the tool's name to reflect that participants are in a particular experience (or space) with various factors (enablers and constraints) populating (mattering) within that space. It is also aligned with Lewin's terminology: 'life-space'.

I anticipate that the model is 'self-checking' in that the project team's perception of the project's status should align with the enablers/constraints balance indicated by the model. This is grounded in complexity science's concept of emergence. That is, the model enables the influences to be considered holistically, not just as isolated 'knowledge area' components.

Those using the model in a given context will be prompted to consider the enablers through questioning such as: what are the concrete factors in this situation (people, processes, infrastructure etcetera) that are enabling the project team to achieve the

project's outcomes? These are factors that are pushing the project in the right direction. Similarly, to consider opportunities as things or events that *may* (if able to be realised) would assist in achieving project success. Conversely, constraints are any factors that are making progress difficult, hindering progress towards the desired outcomes. Threats are factors that *may* have an adverse effect on progress if realised. Visually, the enablers are pushing the project's status towards completion (right hand side of the current-space), and the constraints are inhibiting this progress.

The project team will be encouraged to think pragmatically and specifically and to avoid general terms such as "communication". An example of a constraint may be that a particular approval has been delayed and therefore progress is being slowed and there is a likely impact on the overall delivery timeframe. It is anticipated with this degree of specificity, action can then be effectively targeted to further bolstering those factors that are already enabling success (the project's "critical success factors") and eliminating or reducing those factors (constraints) that are increasing the chance of failure or disappointment in delivery. It is noted that constraining factors are indicators to the "critical success factors" (obviously to varying degrees as shown by size) that are not currently in place but are necessary at a specific time in the project or more generally.

It is anticipated that some practitioners may find it difficult to identify enablers, as 'what is enabling success' in a given context may not normally be reflected on 'in practice' during a project. However, the thinking prompted by identification of these enablers is proposed as a benefit of the tool. Collectively, a series of Project-Space Models for a project can be reflected upon by practitioners and stakeholders to identify 'what were the "critical success factors" for a given project?'. If this reflection were to take place at an organisation-wide level, trends may be identified that could assist with project planning (a type of 'positive' lessons learned). Similarly, if constraints continually arise in organisations this may be indicative of a consistent issue in the project capability (or infrastructure) that requires attention.

7.8.2 Conceptual assessment of the value of the model

In alignment with the conceptual phase of this study and the focus of this paper, I propose now the anticipated benefits of the tool in contrast to existing project

concepts and tools (refer Table 7.4). These benefits require empirical validation as outlined in section 7.9. I link these benefits to the discussion provided in the literature review relating to: the challenges associated with universal “critical success factors”; the current methods by which “critical success factors” are established; the current methods associated with early warning signs; and the ‘best practice’ reporting methods.

Table 7.4: Conceptual assessment of value of project-space model

Extant tool or concept	Description	Project-Space Model Concept	Anticipated value / benefit /difference of Project-Space Model
Universal success factors concept	Identification of *generic* factors to ensure in place for a project (or specific type of project to be successful). Developed based on *historical* data (cases, interviews, questionnaires)	Project-Space Model is developed on *current* data in a *specific* context.	Results (i.e. the developed model) is *absolutely relevant* to the current project in the now. They are the "critical success factors" for "this" project now.
Methods for identifying "critical success factors"	Generally include *literature analysis, interviews and questionnaires* with the aim of deriving *universals* for use in future projects (through quantitative methods) and undertaken *by researchers*.	Developed by practitioners in a *concrete situation for the same situation*. Can be derived from observation, other reports, meetings, focus group discussions etcetera in the *current* project.	Results (i.e. the developed model) is *absolutely relevant* to the current project in the now. Can be developed with input from stakeholders and project team therefore opening dialogue regarding the project's progress, including challenges being encountered.
Gateway reviews/stage gates	Often undertaken by an *external party* to the project, generally at key/milestones or gates. Often associated with a decision to continue or end a project, or an assessment of project management performance with a focus on problems. Can become largely textual, politically sensitive documents.	Can be developed by *practitioners in the case project at any time interval* deemed beneficial. Has an equal focus on *enablers (positive factors)* and *constraints*. It is a *succinct, visual tool* to open dialogue and enable the project manager to discuss positive and negative factors affecting the project.	The "critical success factors" for the projects can be addressed at any time without external assistance. Visualised information can be easier for busy stakeholders to quickly synthesise. Provides a holistic 'snapshot' of the enablers and constraints on a single page.

Extant tool or concept	Description	Project-Space Model Concept	Anticipated value / benefit /difference of Project-Space Model
Status/highlight reports	Generally, textual and quantitative documents with a focus on comparing progress (and forecasted progress) to baselines. Can be reductionist due to these scope, schedule, time etcetera baseline comparisons. Risks and issues often presented in a tabular format.	Does not focus on comparing progress to baseline. Focus is on factors currently or potentially enabling or constraining progress towards completion. Diagrammatic representation of data. Information is presented on concrete enablers or constraints not in terms of project management knowledge areas. Ongoing capturing and presentation of data to inform lessons learned related to both constraints and enablers.	Can bring focus to resolving constraints or sustaining enablers rather than judging performance. The specific causes of deviations are made visible for treatment. Visualised information can be easier for busy stakeholders to quickly synthesise. Actual problems are described in pragmatic language (rather than project management jargon or a reductionist manner); decreased need for stakeholders to have project management knowledge. A record of the key factors enabling and constraining factors as the project progressed to inform future projects.

In summary, it is anticipated that the Project-Space Model will enable the identification and communication of a holistic, in-the-now, context relevant, capturing of the "critical success factors" (both those currently in place and those requiring attention) in a visual format. It is also anticipated that it can be used as a tool to open dialogue as it does not have a focus on baseline deviation but rather on discussing the 'why' for status (whether it be good or bad), and where necessary trigger discussion on the remediation of constraints.

7.9 Future research

As highlighted earlier, the purpose of this conceptual paper is to describe the theoretical grounding of the model. The next stage of research is the empirical validation of the tool's value. A case study action research method will be adopted. The objective will be to assess whether the tool is useful in enabling the case study project's stakeholders (particularly its project board) to understand the project's 'big picture' and where their attention is most needed: i.e. removing significant constraints and continuing to support major enablers. As part of each action research cycle the researcher will be seeking reflections from stakeholders on the tool, and will adjust this initially presented prototype in alignment with such feedback. The findings from this empirical study will be provided in a future article, which will also capture the detailed research methodology associated with the testing.

7.10 Conclusions

In this conceptual article I have proposed a prototype of a project managing tool, the Project-Space Model, that can be used to identify and visually represent the enablers of, and constraints on, the progress of a specific project – its "critical success factors" (at a given now and over time). The prototype of the tool has been crafted from a variety of philosophies, theories and thinking that have a holistic, contextualisation focus. The differences and therefore value and benefits of the tool to existing models have been provided and are summarised as: highly context-

relevant, pragmatic, holistic and an 'in-the-now' capturing of the 'why' for a project's status.

In developing this tool, I have made a conceptual contribution to the challenges associated with universal "critical success factors." Specifically, a tool has been developed that gives primacy to the uniqueness of each project and reflects the calls for tailored approaches to project managing. Through use of the tool, it is anticipated that practitioners and stakeholders will be able to more clearly identify where their attention and managerial efforts are most effectively and efficiently directed. This initial conceptual stage of the study has also demonstrated how theoretical constructs such as the Heideggerian paradigm of project management, complexity theory, Lewin's Force Field analysis and Gestalt thinking can be embedded into a tool for practice application. The value of the tool 'in practice' is currently the subject of an action research case study and will be discussed in a future paper.

8 Project-space model: an action research study

The article: 'Discussing project status with the project-space model: an action research study' published in 2016 in the International Journal of Project Management is provided in this chapter. The chapter provides an empirical evaluation of the project-space model (introduced in chapter 7) in an action-based research case study. The chapter provides an important empirical contribution to this thesis. It provides validation of the proposed benefits of the project-space model and also highlights how alternative philosophical foundations can be translated into tools that are useful in practice. The case study project was chosen for its scale and complexity. Following relevant ethics approvals, the organisation was approached; and both management and individual participants provided consent to participate.

Some of the findings also further disclose the 'lived experience' of project work in the case study project (building on the work in chapter 4). The chapter provides a valuable contribution to practitioners in highlighting the use of a new tool 'in practice' that has been designed to disclose what is actually enabling or constraining a project's progress. Feedback from the action research participants highlight the value that they found in using the tool, for example:

> The thing I like about it is… it's the higher [view]…: This is what I perceive to be the current balance of the whole project. It is quite hard out of any of the other reporting we've got to get a sense of balance. Whether it's 'we're roaring ahead beautifully and there's very little in the way'. Or in fact 'we're going ok, but there's a hell of lot in the way but we're managing it all'. But it is quite hard to get the nuance, but I do think you get that out of the project-space model diagram. [Project Manager, Cycle 1]

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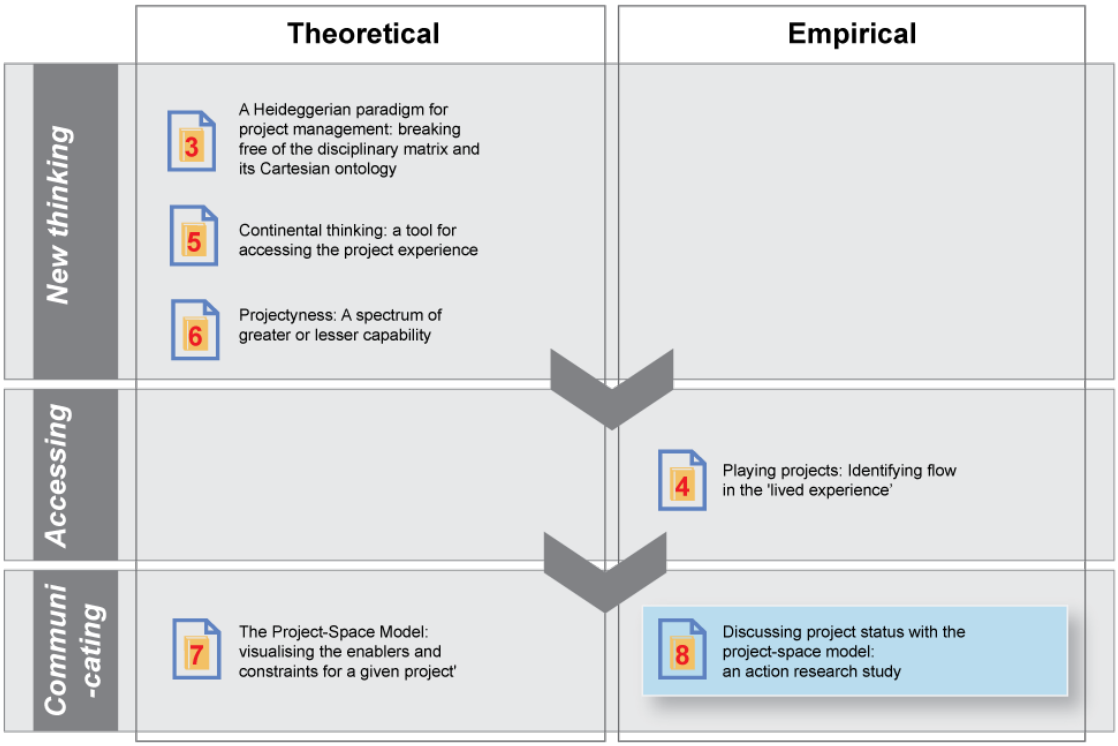


Figure 8.1: Chapter 8 positioning

8.1 Abstract

This empirical research article assesses the use of the project-space model as a tool for improving communication and understanding of a project's status, and the enablers and constraints to its progress. The study is driven by the Rethinking Project Management network calls for new approaches and frameworks that enable projects to be considered from different perspectives. The project-space model is already established in the literature as a project communication tool. This study uses an action research method, underpinned by an interpretivist research methodology, in a single case study environment. The model is found to be successful in enabling an improved strategic, integrated and holistic conversation regarding the case study project's status that reflects the 'lived experience'. This article contributes to the literature by providing empirical testing of an alternative tool for communication of project status, enablers and constraints.

8.2 Introduction

This action research case study examines whether the project-space model is a practical tool for a project manager to holistically and pragmatically communicate project status and problems. In 2006, the Rethinking Project Management network proposed a research agenda for project management, with a greater focus on practice (Winter, Smith, Morris, et al. 2006). However, since the network there has been limited discussion on practical, stand-alone tools or techniques that align with the thinking espoused by the network. It is important for project managers and stakeholders to be able to communicate what is constraining and enabling them to achieve their project objectives (van der Hoorn 2016b). Traditional reporting and gateway reviews have limitations and are arguable grounded in traditional project management thinking (refer section 8.4 (literature review)). van der Hoorn (2016b) has proposed the project-space model to address this limitation in the practitioner tool-set. The objective of this study was to empirically assess the project-space model tool in a case study environment.

The project-space model is a communication tool that presents information regarding the reason for a project's status in a visualised manner (van der Hoorn 2016b). It

shows the factors enabling a project to progress and those constraining its progress. van der Hoorn (2016b) states that it also captures potential (future) enablers and constraints. The action research method used in the study enabled modifications to be made to the model as its impact was assessed. The use of the project-space model in the case study project was found to be successful in enabling an improved strategic, integrated and holistic conversation, reflective of the project manager's and team's 'lived experience' regarding the project's status.

Firstly, the research problem to be addressed will be introduced; and pertinent literature to the research problem outlined. This is followed by the research question, the research methodology, an introduction to the case study project and the research method. A brief introduction to the project-space model tool as described by van der Hoorn (2016b) is then provided. The findings of the action research study are then examined. A discussion of these findings against the research question, and the extant literature are presented. Finally, limitations of the study are noted.

8.3 Research problem

In 2006, the Rethinking Project Management network proposed a potential agenda for future project management research (Winter, Smith, Morris, et al. 2006). As per Winter, Smith, Morris, et al. (2006), the network derived the following directions as being central to future research in the discipline: theory about practice; theory for practice; and theory in practice. These directions were in response to ongoing criticism of project management theory and the need for a focus on what actually occurs in practice: the 'lived experience' of project management (Cicmil et al. 2006; Winter, Smith, Morris, et al. 2006). Of specific interest to this study, in describing the 'theory for practice' direction, Winter, Smith, Morris, et al. (2006, sec. 4.2) state the need for: "new images, concepts, frameworks and approaches – to help practitioners actually deal with this complexity in the midst of practice" and asks "what new concepts and approaches could usefully assist practitioners in conceptualising projects and programmes from different perspectives?"

Since 2006, there has been an increase in research aligned with the network's proposed themes (refer Svejvig and Andersen (2015) for a review of the literature) and in the challenging of the conceptual foundations of the discipline (for example:

Cicmil and Hodgson (2006b); Rolfe (2011); van der Hoorn and Whitty (2015e); Whitty (2011b)). Some of this literature has proposed less rigid and more flexible approaches or methodologies to meet the needs of specific projects (rather than universal prescriptions) (Svejvig & Andersen 2015). This literature is aligned to the call for new frameworks and approaches. However, no literature has been identified that has tested a practical, standalone tools that enable practitioners to capture and communicate their 'lived experience' of a specific project's status. This aligns with Svejvig and Anderson's (2015) argument that diffusing the Rethinking agenda in practice remains a challenge. And their call for "offering [of] alternative practices, which have been proven in praxis, showing superiority to classical project management (Svejvig & Andersen 2015, Sec. 5)".

Contributing to the remediation of this gap is critical if we are to mobilise the Rethinking agenda in a meaningful and practical way for practitioners. It is necessary to provide project managers, teams and boards with pragmatic and fit-for-purpose tools that enable them to embrace an alternative way to practice their craft. Without alternative practical tools, practitioners can only but continue to use extant tools of the traditional paradigms that are problematic and have not been proven to contribute to project success (Koskela & Howell 2002; Maylor 2001; Morris et al. 2006; Whitty & Maylor 2009). Furthermore, it is an important step in expanding the Rethinking project literature. Undertaking empirical work associated with new ways of project managing will assist in increasing the empirical studies within the Rethinking literature. As such, we propose that there is a need to consider what new practical tools would assist project managers to communicate project status and problems, whilst reflecting the 'lived experience' of the project work, and in alignment with the Rethinking agenda.

8.4 Literature review

The focus of this paper is to contribute to the literature by testing a practical tool which may provide an alternative way to communicate project status and problems. As such, traditional tools that have been used for capturing the status of projects and raising problems in the project environment will be briefly reviewed. This will be followed by a review of approaches or tools that align with the Rethinking agenda.

Attention will also be given to a brief exploration of decision-making and managerial reporting more generally to assist in the identification of the research question.

8.4.1 Traditional tools for communicating status and problems

Periodic reports to enable monitoring and control of a project's progress are proposed in the 'best practice' guides such as the Project Management Body of Knowledge (2013) and PRINCE2 (2009). Generally, the focus of these reports is on comparing actual project progress or performance against the project management plans or baselines (Office of Government Commerce 2009; Project Management Institute 2013). Such guides also identify risks and issues as being commonly included in these periodic reports. A more contemporary development in this reporting has been the use of traffic light dashboard (red, amber, green) reporting (Lamptey & Fayek 2012). However, generally these reports remain largely text-based. Often, these reports reduce projects to parts of the plan based on knowledge areas (e.g. scope, time, budget) or some other theoretical construct for the purpose of tracking variance. Quantitative assessments (i.e. number of days ahead/behind schedule or budget tracking) can also become the dominant feature.

The other traditional tools for assessing project progress and identifying problems are gateway reviews and/or stage gates. Williams et al. (2012) provide a discussion of these tools and their role in providing early warning signs of problems in complex project work. Their examination of eight case studies highlights that despite their purpose of identifying risks or barriers to progress, these assessments are often flawed. The reviews can be based on optimistic assessments of progress and underestimation of risk. Subsequently, their value in early detection of problems is unproven. Williams et al. (2012) propose that in addition to formal assessment, everyday communication is key. Ongoing dialogue is better at identifying problems and assessing progress than formal reviews. The value in gut-feeling approaches is also argued by Williams et al. (2012).

In summary, the two traditional tools for reporting status and identifying problems are periodic reports and the more formal gateway or stage gate reviews. It is argued that these tools align with the traditional (pre-Rethinking) foundations or theory of

the discipline. Periodic reports have a focus on deviation from planning; which implicitly suggests that the plans should be followed. Reports can also be reductionist and focused on the 'theoretical' components such as scope or schedule, rather than how the project may be holistically experienced by the participants. Furthermore, gateway reviews, due to the potential implication of reprimand or project closure, may result in project managers disguising problems or poor performance. There may be limited incentive to disclose challenges, if a 'progress should follow the plan' culture is present.

8.4.2 Tools and methodology flowing from rethinking

The Rethinking Project Management agenda (Winter, Smith, Morris, et al. 2006) has been an influential catalyst in driving work that provides a broader conceptualisation of project work (Svejvig & Andersen 2015; Walker 2016). Svejvig and Andersen (2015) posit that work stemming from this agenda has a more holistic and practice-grounded focus than the previously dominant rationalistic and positivist agendas. However, it has not been possible to identify the empirical testing of any practitioner tools that align with the concepts of the Rethinking agenda or that propose a new way to communicate status or problems. However, it is noted that there has been discussion of overall changes in 'practice thinking' and 'practice approaches'. There has also been the proposition of a tool, the 'project-space model' (van der Hoorn 2016b), which is aligned with the Rethinking agenda.

8.4.2.1 New approaches to project management practice

The literature has several examples of the calls for alternative approaches to the practice of project management. A key theme is the use of systems thinking and complexity science to guide project practice. For example, Kapsali (2011) studied 12 case studies of innovation projects. It was found that the adoption of a systemic, flexible approach can be more effective than traditional prescriptive methods in managing complex projects in uncertain environments. From a project management education perspective, Sheffield, Sankaran and Haslett (2012) argue for the instruction of project managers in systems thinking tools. Specific examples of the tools include: use of the iceberg metaphor and the four-level model of systems thinking; rich pictures capturing an individual's feelings about a project; causal loops

and system archetypes. However, it is noted that this is a conceptual proposition relating to education rather than use in practice.

Kreiner's (2012) discussion of the limitations of plans and planning is also relevant in considering new approaches to project practice. Reflecting the Rethinking agenda, he highlights the imperfect, complex and ambiguous environments in which projects are undertaken. He notes the importance of theorising and practice that reflects this reality. He argues specifically for alternative approaches to project plans and planning and avoiding mechanical implementation of plans.

Aligned with this shift from a 'implementation follows plan' approach, is the discussion of improvisation in project management. For example, Leybourne (2009) discusses the benefits of improvisational working for project managers. He highlights how it provides an alternative approach to the "rigid prescriptive planning-based project management models (Leybourne 2009, p. 523)". Klein, Biesenthal and Dehlin (2015) further highlight improvisation as a concept which is important in bridging the gap between theory and practice.

A process view of projects is also aligned with the Rethinking approach and has received coverage in the literature. This view, grounded in the work of Pettigrew (1997) recognises the dynamism, context dependency and interactivity of organisational phenomena. For example, Green (2006) draws on the process perspective in disclosing the actuality of project work in the construction sector. An Enterprise Resource Planning System project is examined by Boonstra (2006) using the process view to disclose a stakeholder's perspective on system implementation. A Middle Eastern project case study was examined by Small and Walker (2011) drawing on a project as social process view. The study highlighted the criticality of context and disclosed factors that shaped project outcomes but that were not accessible through more traditional research paradigms.

Sauer and Reich (2009) also consider the need for new approaches to project management, grounding their investigation in the Rethinking agenda. They interviewed 57 project managers in the IT sector, and found nine principles that needed to underpin project management practice. The themes include: willingness to continually adapt; devolved, collective responsibility; learning orientation; creativity

and innovation; and focus on ultimate value. Their article does not discuss what tools project managers are using to enable these principles to be embedded in their practice.

8.4.2.2 Project space model

The project-space model is a stand-alone project management tool that has been identified in the literature as aligning with the Rethinking agenda. The project-space model is grounded in Heideggerian philosophy (a Continental, intepretivist approach), the gestalt theories, complex systems and force field analysis (van der Hoorn 2016b). van der Hoorn (2016b) hypothesises that the model enables the enablers and constraints to a project's progress to be captured and communicated. Also that it will open dialogue between stakeholders on the reasons for a project's status and the areas requiring problem resolution. However, until this study, the proposed project-space model has not previously been empirically tested (van der Hoorn 2016b).

8.4.3 Dashboard reporting

A more recent development in managerial communication or reporting has been dashboard reporting, particularly the balanced scorecard. For example, DeBusk, Brown and Killough (2003) examine generic organisational dashboards. They find that the information selected for display on a dashboard should be contextual to the situation. Edwards and Thomas (2005) examine a government case study relating to dashboard reporting. In this case a dashboard which reflects some but not all of the balanced scorecard approach are adopted. It is proposed that this dashboard view is useful for both the municipal government executives and also citizens. As introduced above, there has also been some discussion of dashboard reporting in project management. Stewart and Mohammed (2001) adapt the organisational balanced scorecard in project work and conceptually propose that it is a useful tool for decision-making. It is noted that all the dashboards examined or discussed in these studies have an outcome (or performance) focus. This is a significant difference to the project-space model, which includes some outcome information however it is primarily focused on enablers and constraints to desired outcomes.

8.4.4 Decision-making

In section 8.3, the call for alternative approaches to managing projects is introduced. The call for more holistic and practice-based perspectives, and therefore approaches and tools that acknowledge the messy nature of project work needs to pervade through all aspects of project managing including decision making. As such, literature on the team aspects of decision making will be given brief attention, as will literature on the cognitive load aspects of decision making.

De Dreu and West (2001) discuss the benefits of including team members in decision making processes. This prompts the question: what tools can be used to enable team members to participate in decision-making? The criticality of shared mental models to effective team performance is discussed by Cannon-Bowers and Salas (1998). Shared mental modes are the common view of 'what is the situation? Again, this prompts the question, are there tools for project managers which can enhance the development of these shared mental models? Group decision making is also examined by Hollenbeck et al. (1995). They particularly examine decision making where there is inequity in the status of group members and variance in the level of expertise or visibility on the problem. In their two empirical studies the criticality of information distribution was highlighted. Specifically, the ability to translate raw data into recommendations was seen as contributing to better decision making. Similarly, effective communication was seen as being valuable to decision making.

The literature on the impact of cognitive load and decision making is also relevant. Gonzalez (2005) highlights the cognitive load challenges associated with processing information and then making decisions. Relating to the discussions on group decision making, Kirschner, Paas and Kirschner (2009) propose that the limitations of cognitive load can be mitigated through dividing the processing of information amongst group members in the context of learning. The benefits of visualising data to assist in decreasing cognitive load burden have also been discussed by many researchers, including: Nelson, Reed and Walling (1976), Larkin and Simon (1987), Tufte (1983) and Cheng (2004).

8.4.5 Literature review summary

This literature review has confirmed an opportunity for this research to contribute to the literature. It has shown that the dominant project management reporting and review tools are aligned with traditional project management thinking rather than the Rethinking agenda. Furthermore, there are suggestions as to new approaches that can embody the Rethinking agenda in practice. However, there is a need for testing a practical tool for communicating status and identifying and resolving problems. The project-space model, is a tool, which has been conceptually proposed in the literature and may meet this need. The importance of tools which can support effective group decision-making in a holistic way and assist with easing the challenges of cognitive load has also been suggested.

8.5 Research question

In response to the research gap (refer section 8.4.5), this study will seek to identify whether the project-space model is effective in responding to the research problem in a case study situation. This focus will assist in identifying a practitioner tool which can enable the communication of the 'lived experience' of project work. Subsequently, the research question is:

Can the project-space model support a project manager to capture and communicate status in a pragmatic and holistic way that highlights enablers and constraints to project progress as per their 'lived experienced'?

8.6 The project-space model to be tested

To aid the reader in understanding the findings, a brief introduction to the Project-Space Model prototype model is provided. For a more detailed explanation, please refer van der Hoorn (2016b). The model is a diagrammatic tool that provides a visual language (symbols, size of symbols and placement of the symbols) to convey information to project stakeholders (refer Figure 8.2 for an annotated prototype). van der Hoorn (2016b) describes the model as having two areas: the upper forecast-space and the lower current-space. Factors (represented by triangles and circles) affecting

the project *now* are placed in the current-space; factors that may affect the project in the future are placed in the forecast-space (van der Hoorn 2016b).

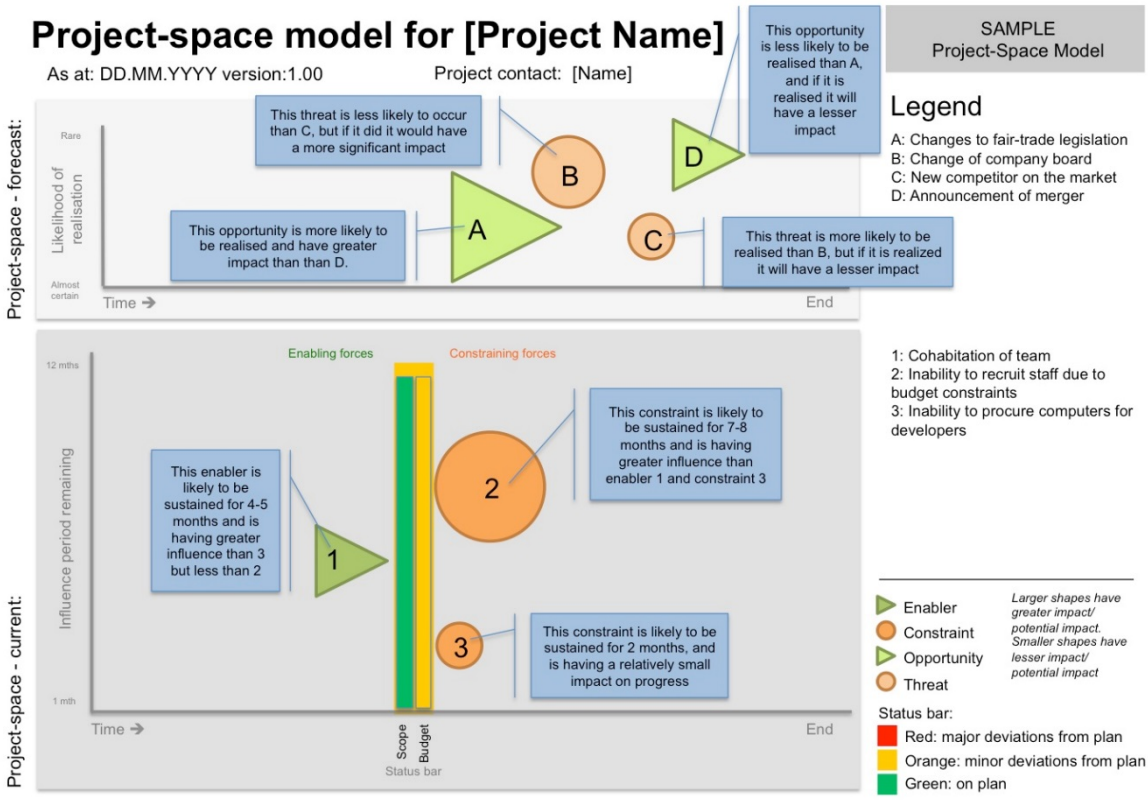


Figure 8.2: Prototype of project-space model

Source: van der Hoorn (2016b)

Factors that enable the project to progress are shown as triangles, with larger triangles having a greater positive impact than smaller triangles. Factors that are constraining project progress are circles. Larger circles are having a greater negative impact than smaller circles.

The x-axis in both grids is representative of linear time. The current stage of the project in linear time is shown by the status bar. The overall status of the project (and if desired by the project, sub-areas such as scope and budget), can be indicated using red (project significantly 'off-track'), amber (project somewhat or predicted to go 'off-track'), green (project 'on-track') colouring. The further the status bar is to the right, the nearer it is to completion (van der Hoorn 2016b).

In the forecast-space, factors are placed on the timeline to align with where they are anticipated to be realised. In the current-space, factors are situated directly either side of a vertical status bar emphasising that they are 'hitting' the project now. In the forecast-space the y-axis indicates the current perception of how likely it is that factors will become realised in the current-space. The lower on the y-axis the more likely it is forecasted to be realised (to come into the current-space). In the current-space the y-axis is representative of the anticipated duration of the factor affecting the project (van der Hoorn 2016b).

The factors (both enablers and constraints) shown on the model are specific things affecting that project. No links need to be specifically made to project management terms such as scope, budget or schedule (van der Hoorn 2016b). For example, a constraint may be 'a failure to receive council approvals for the block C development'.

8.7 Research methodology

The research methodology adopted for this study is grounded in a continental philosophical position. van der Hoorn (2016a) proposes a continental grounding for research in the discipline highlighting that continental philosophical concepts are likely to derive outcomes that capture a subjective, in-the-experience perspective of projects. This is proposed as suitable for this study, as the research question is seeking to confirm stakeholders' perceptions of the model's suitability/impact. Furthermore, the tool being examined is looking to capture the concrete in-the-experience enablers and constraints to the project. Accordingly, the research methodology is grounded in an interpretivist ontology that recognises the subjectivity of experience and plasticity and plurality of meaning (Saunders, Lewis & Thornhill 2009). Cicmil (2006) discusses the potential value of such interpretative approaches for project management research. In accordance with this research philosophy and methodology, a mixed-methods approach (i.e. use of both qualitative and quantitative methods) (Bergman 2008; Saunders, Lewis & Thornhill 2009) has been adopted. For further information on the mixed-methods approach refer section 8.7.2.2.

It is highlighted that conceptual information relating to the project-space model is already in the literature (refer van der Hoorn (2016b)). This paper extends this conceptual work by undertaking an empirical study. Such an approach has been previously adopted in the literature. For example, Benaroch (2002) firstly introduced to the literature a model of 'real options' in evaluating IT investments. In a later paper, the empirical worth of his proposal was provided (i.e. Benaroch, Lichtenstein and Robinson (2006).

8.7.1 Case study project

The Australian human services sector is changing with significant devolution of responsibility for service provision. The case project for this study is a significant initiative in this reform. Specifically, the case project is responsible for supporting the successful transition to the new services model being initiated by the federal government. A significant amount of communications and engagement activities with a diverse range of stakeholders are required to be undertaken. Dependency management given the scale of the national transition is also significant. The case study for this project was an information-orientated selection of what is posited to be a paradigmatic case (refer Flyvbjerg (2006a) regarding selection of cases).

The project was approximately seven months into execution of a five-year lifecycle when the baseline/diagnosis cycle was undertaken. At this stage, it was already evident that there was significant complexity and risk in the project with several work streams reporting through to the project board. The primary reporting tool that the project manager had available to communicate the project's status were stream highlight reports and a dashboard-style highlight report.

The project board had approximately 10 members. Also attending the project board was the project manager who would present the project-space model during discussion of the project's status. On a day-to-day basis the project manager was supported by a project management office team and a group of workstream leads (approximately 10).

It is emphasised that it was a key requirement of the case study organisation for participating in the study that "content-matters" relating to the project and meetings

were not to be the subject of any publication, or discussion outside the project team and board. As such, in discussing the findings, minimal contextual information relating to the project itself is provided.

8.7.2 Research method

The research method selected was an action research case study. The selection of action research is justified based on the tool being an 'intervention' to a situation (project work) and the study is seeking to assess some outcome (refer section 8.5 (research question)). The action research method is also deemed suitable as it enables the tool to be refined continually in response to the feedback from stakeholders (Sankaran & Dick 2015). Furthermore, there is alignment between the action research method and the research study context. Specifically, there is a continual feedback process inherent in project work that is aligned with the cyclical nature of action research (refer section 8.7.2.2 for data collection methods).

8.7.2.1 Action research

Action research can be described as a process that considers a situation (the dependent variables); brings an intervention to the situation (action/independent variable); and then reassesses the situation (reflection on the intervention or effect of the independent variable on the dependent variable) (Gibson 2004; Newton). This cycle might be repeated on several occasions and is commonly depicted per Figure 8.3.

Figure 8.3: Action research cycle process

Adapted from: (Baskerville & Pries-Heje 1999, p. 4)

With respect to project management research, Er, Pollack and Sankaran (2013, p. 179) state:

> "AR (Action research) could be useful in investigating PM (Project Management) where there is a need to seek a better understanding of processes in projects that have social implications; in working collaboratively to find practical solutions to problems arising in a project and in situations where there is a need to implement major changes in a project with the stakeholders."

It is argued that this proposition aligns with the nature of this research problem and the research question. Previous examples of action research in project management include studies by Bourne and Walker (2008), Algeo (2014), Takey and Carvalho (2015) and Duffield and Whitty (2016).

8.7.2.2 Action research method in this study

For this research study a single case study project was used (refer section 8.7.1 for case details). A baseline assessment was undertaken within the case study project (diagnosis of the problem – the dependent variable) followed by five cycles of the intervention (independent variable) with refinement of the intervention in each cycle (refer Figure 8.4). The process was undertaken over six months with the action research cycles aligning the project's board meetings.

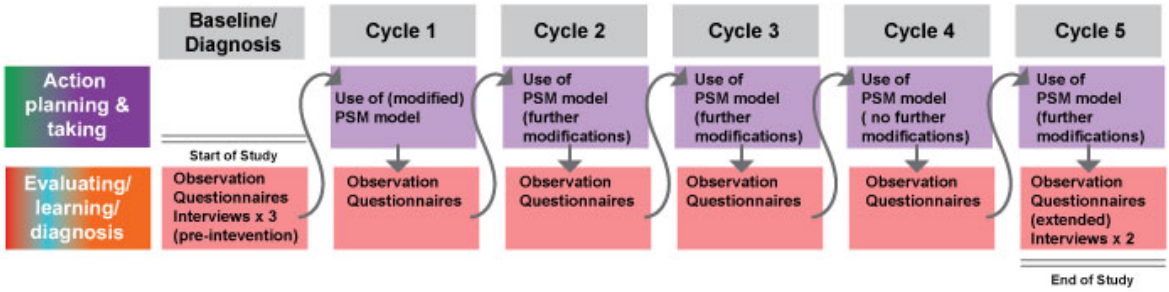


Figure 8.4: Action research cycle for this case study project

The problem addressed in the case study was that the project manager did not have the ability to effectively capture and communicate their experience of the status of the project work (dependent variable). Particularly, what was enabling and constraining the project and therefore where the project board's attention was most needed. The intervention (independent variable) in the situation, the mechanism to assist in resolving the problem, was the project-space model. The elements of the project-space model (layout/colour/textual support etcetera) could be changed during the cycles to resolve the problem (refer Figure 8.5).

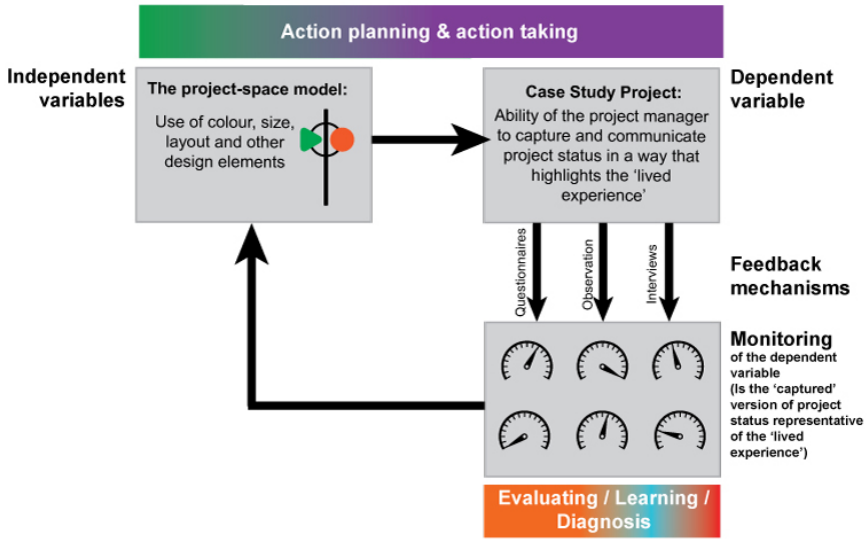


Figure 8.5: Dependent variable, independent variable and monitoring in the case study project

To assess the improvement (or otherwise) of the dependent variable (the evaluating/learning/diagnosis aspect of the cycle), and to enable further refinement of the intervention (the project-space model), a variety of feedback mechanisms were used. This reflected the mixed-methods approach (Creswell 2011; Hanson et al. 2005; Saunders, Lewis & Thornhill 2009). Bazeley (2008) and Saunders, Lewis and Thornhill (2009) have recognised mixed-methods for their ability to provide a triangulation of data and therefore increase the validity of the results. For example, quantitative data can provide information on trends whilst qualitative tools can provide a more indepth understanding on the views of participants (Creswell 2011). Refer Table 8.1 for further information on the data collection methods used, their purpose and relationships.

Table 8.1: Mixed-methods research approach adopted in the study

Ref	Research method	Purpose / relationship to other methods
1.	**Board member questionnaires** • Written questionnaire with likert scale and open text questions. • Answered by board members after each meeting. • Primary interest was in how responses to questions changed over time. • Responses entered into study database. • Final questionnaire had some additional questions. • Survey questions included in appendix 1.	• Unique information related to the board members' experience of the model. • Results enabled comparison of board members' feedback over the action research cycles. • (Triangulated by research method #2)

Ref	Research method	Purpose / relationship to other methods
2.	**Board member interviews** • Multiple interviews of approx. 45 min each. • Two board members. • Baseline interview and cycle 5 interview. • Semi-structured interviews: • Interview 1 focus: current reporting and challenges. • Interview 2 focus: impact of the project-space model.	• Provide greater depth on, and triangulation of information gathered through research method #1.
3.	**Project manager questionnaires** • Written questionnaire with likert scale and open text questions. • Answered by project manager after each meeting. • Primary interest was in how responses to questions changed over time. • Responses entered into study database. • Final questionnaire had some additional questions. • Survey questions included in appendix 1.	• Unique information related to the project manager's experience of the model. • Results enabled comparison of project manager's feedback over the action research cycles. • (Triangulated by research method #4)
4.	**Project manager interviews** • Two interviews of approx. 45 min each. • Baseline interview and cycle 5 interview. • Semi-structured interviews: • Interview 1 focus: current reporting and challenges. • Interview 2 focus: impact of the project-space model.	• Provide greater depth on, and triangulation of information gathered through research method #3.

Ref	Research method	Purpose / relationship to other methods
5.	**Observation of project board meetings** • Undertaken by researcher at each board meeting • Written notes taken by the researcher • Focus areas: • What were the types of questions being asked relating to status? Strategic discussion? • Degree of engagement of participants in the discussion? • Amount/nature of discussion related to enablers and constraints to progress? • Project manager's ability to articulate constraints and enablers? • Board members focus on areas required by the project manager. • Primary interest was in how this changed over time. • Observation notes written up and incorporated into study database.	• Triangulation of all other data collection methods. • Provide prompts for interviews (research methods: #2 & #4)

8.7.2.2.1 Questionnaires

Questionnaires are recognised for their ability to provide descriptive data that can be useful in identifying trends (Saunders, Lewis & Thornhill 2009). It is with this purpose that a series of closed questions were asked during the diagnosis and action research cycles. Furthermore, they were deemed appropriate for the study as they encouraged the board members to report honestly on their experience as anonymity of response was possible. An opportunity to provide further comments (an open text response) on all questionnaires allowed for feedback beyond that prompted by the closed questions. The board attendees were asked to complete mini-questionnaires immediately after each meeting (refer Appendix 12.1) for the questions and response options). There was also an opportunity for board members to verbally ask for changes to the model. The questions were consistent for all cycles – refer Appendix 12.1.

The project manager also completed a questionnaire each month regarding whether the ‘problem’ (of feeling that they were able to effectively communicate the ‘lived experience’ of the project work, its status and constraints) was being reduced and whether the tool was useful in this regard. Appendix 11.1 provides the project manager questionnaire questions and response options.

8.7.2.2.2 Interviews

Supplementing the observations and the questionnaires were five in-depth semi-structured interviews (approx. 45 min each); all audio recorded with the participant’s consent. Semi-structured interviews are utilised for their ability to support exploratory research (finding out what is happening from a particular perspective) (Saunders, Lewis & Thornhill 2009). They enable data from questionnaires to be better understood through the interplay that can occur in conversation between researcher and research participant; they assist in building a depth of understanding about a phenomena (Arksey & Knight 1999).

Three interviews were undertaken at the start of the research study: two with board members, and one with the project manager. Two further interviews were undertaken at the conclusion of the fifth cycle with a board member and the project manager. The focus of the initial interviews was to understand from both a board member and project manager perspective the nature of the problem and limitations of existing tools. The later interviews were focused on understanding in detail the effect of the project-space model and whether the ‘problem’ had been resolved. That is, the interviews were to provide greater insight than could be provided from the questionnaires and observation alone.

8.7.2.2.3 Observation

The researcher observed a section of each of the project board meetings. The observations were focused on factors such as: the nature of discussions relating to status; what were the types of questions being asked; how engaged were participants in the discussion? (refer Table 8.1 for further information). Observation is an ethnographic tool that is used to derive information about a phenomenon (or in this case, an intervention) in its natural setting (Baker 2006). In this study it was used to

triangulate data collected through other methods and to serve as prompts to questions in the interviews.

As introduced previously, the selection of these data collection methods are consistent with the use of both qualitative and quantitative methods for action research (Sankaran & Dick 2015). It is noted that Algeo (2014) also utilised observations and interviews in her project management action research study. Similarly, Bourne (2005) utilised interviews, questionnaires, and observation in her action research cycles trialling the Stakeholder Circle.

8.7.2.3 Data collection and analysis

The researcher audio recorded and made notes of the observed sections of the board meetings, and transcribed sections of the audio recorded from the meetings that directly related to the model or its effect on capturing status and communicating problems with progress. Similarly, the semi-structured interviews with the board members and project manager were audio recorded and sections relating to the problem and its resolution transcribed. This data was entered into the study's database. The responses to the questionnaires after each cycle were recorded in a spreadsheet; including both quantitative rankings and qualitative comments.

There were challenges with the continuity of board member attendance. This inconsistency in board member attendance is not considered to be a major threat to the study validity as other feedback mechanisms were in place (interviews, observation etcetera) to triangulate the data and the cycles themselves fulfil a self-checking mechanism. Furthermore, the units of analysis are the 'project board' and the 'project manager' therefore the overall response of board members (rather than the board members as individuals) is considered of primary interest.

8.7.2.4 Refinement of the tool based on data

Following the feedback of each cycle, the researcher collated a list of the suggested changes from the board members and project manager. These were tabulated and the researcher drafted changes to the tool to address the problem, or implement the suggested change. This was then discussed with the project manager and in many cases the project team who were consulted in populating the content of the project-

space model (in cycles 2 – 5); changes to the tool for that cycle were then confirmed. Or in some cases, the project manager rejected suggestions made by board members and these were highlighted (with an accompanying rationale) to the board members at the next meeting.

8.8 Findings

The data gathered during the action research cycles is now summarised. Firstly, information relating to the baseline situation (prior to the intervention) is provided. This is followed by information related to the participants' experience in using the tool.

8.8.1 Diagnosis cycle

The aim of this cycle was to provide a baseline for the questionnaires and the nature of pre-intervention discussion relating to status and communicating problems. It was also the first opportunity for the researcher to introduce the board members to the study in person and to explain the research method that would be adopted. The project-space model was not used in this cycle; this was a baseline/diagnosis cycle only with no intervention.

8.8.1.1 Board meeting observation

At this initial board meeting the project manager did not present a project-space model diagram, only the summary dashboard report and subsidiary highlight reports were presented (as per previous practice for this project). Two areas were discussed in-depth. It is noted that they were not discussed with reference to a particular problem that might require board attention or in terms of their overall impact (constrain or enable) on the project. A senior member of the board commented on the detail that was in the highlight reports and that this level of granularity was useful, but that there was appetite to consider alternative options for communicating key messages and issues relating to project status.

8.8.1.2 Board member questionnaires

During this diagnosis cycle the first questionnaire was issued to the board members. Seven board members completed the questionnaire. Of a possible maximum of 30 points (if all six questions were answered as '5') - indicating a very good understanding of the 'big picture' of the project work and enablers and constraints. And a minimum of 5 points (if all six questions were answered as '1 - indicating a very poor understanding of the 'big picture' / enablers and constraints) the range was 15 – 24, and the average 18.5. No qualitative comments were recorded.

8.8.1.3 Project manager questionnaire

The project manager also completed a questionnaire during the diagnosis cycle. Of a maximum of 15 points (if all three questions were answered as '5' – suggesting a resolution of the problem with communicating status and issues) and minimum of 3 points (if all three questions were answered '1'), the total of the project manager's first questionnaire was 7. No qualitative comments were recorded.

8.8.1.4 Board member interviews

Two senior board members [BM1 & BM2] were interviewed regarding their perception of the current reporting within the project and its ability to provide them with the information they required to fulfil their responsibilities and make decisions. The questions were focused on the strengths and weaknesses of the current tools used by the project manager to explain status.

BM1 commented that the consistency in formatting of reporting across the various projects he was involved with was helpful. He also reported a satisfaction with the reports, but a sense that they could be clearer in providing a holistic perspective. For example:

> [With respect to existing highlight reports] they do provide a snapshot and way of looking at kind of where we're at… but I think, some of the things that are difficult is where you've got the [project name] which is complex, multilayered, lots of things happening. It is hard not to just see things as singular things, rather than overall how this program of work is shaping up. [BM1, interview]

BM1 commented on the usefulness of traffic light (red, amber, green) reporting to draw attention to problem areas of the project work. On further inquiry, he indicated that it is the red and amber areas that he is particularly looking to understand more when attending board meetings. When prompted on discussing the content of the current project reports, particularly achievements versus issues, it was commented that whilst achievements were important and nice to read about it, he gravitated towards the issues and problems. BM1 perceived that a key role of the board was to help resolve problems and overcome barriers.

BM2 also commented on the comprehensive detail in the existing reports (including the importance of this), and the use of graphical elements in the existing reports. However, it was also suggested that whilst there can be a lot of data, the value add in terms of providing a holistic perspective can be missing. He elaborates:

> [It's] that you can get crowded out by lots of data, lots of information at a board level doesn't really cut to the key issues unless you do a fair bit of work yourself to comb through that… So what is going to bite me now? What's going to be drop-dead next week? Are we on smooth seas? Are there hailstones ahead? That sort of thing needs to be clearly enunciated. Sometimes traditional reporting can over crowd that space so you can't see the weather forecast by virtue of the fact that they've flooded you with paperwork about the forecast. [BM2, interview]

In questioning BM2's expectation of what reporting will provide, he commented:

> In simplistic terms, where have we been, where we are up to and where are we going? And giving people that in the context of the bigger grand plan, so I understand that, so I don't get buried and lost in the bigger plan, but I know how we are tracking in context. [BM2, interview]

BM2 later commented:

> It is important for the project director, project manager to comb out the issues, to really highlight where we've been, where we're up to and where we're going. And to give that in a very enunciated way without giving it too light a touch. And without making it a too heavy touch. [BM2, interview]

When BM2 was prompted as to whether existing project reports met his needs, it was stated:

> It's often given me a good picture of where we've been, not necessarily of the other two. [BM2, interview]

BM2 did note that in general terms the quality of reporting is largely linked to the experience and skill of the project manager.

8.8.1.5 Project manager interview

The focus of the first interview with the project manager [PM] was to understand their current tools for reporting status, and their perception of their strengths and weaknesses of these tools. The project manager indicated that existing reporting was largely narrative by workstream with some graphical elements for key indicators such as schedule, risks etcetera: "words mainly". The project manager indicated that they believed the reports told a story about what had been achieved in the previous month, but that it can be a sanitised version for various reasons.

When discussing the challenges associated with existing reporting tools the following comments were made:

> Well I thought that the standard reporting around the red, green, orange, the little light thing, didn't really reflect the [project name]... It's not a fixed budget to deliver a fixed product within a fixed time… we couldn't start the [project] by going 'ok- these are all the steps we must do and if we follow those we'll get to the end point'. It's shifting sands all of time and there's a whole lot of unknowns that you only find out as you're going along. [PM, interview]

The project manager discussed the challenges in having visibility of a large, complex project and that very few people actually have visibility of the whole. They commented:

> I try and get all of the workstream leads to talk to each other so you can see what's going on and what the nuances across the board are. But it's quite hard to get in and create a picture and view, and there's not very many people who can do it. And you have to work very hard to try and get that. [PM, interview]

The project manager further stated when discussing current reporting:

> We've cut it by workstream because we had to cut it somewhere. But it's actually a Rubik cube, and until you do that last turn of the dial, it looks messy, and is messy, and people keep going, 'but I can't see the whole picture'. Well you're never going to see the whole picture until it's completed. [PM, interview]

8.8.1.6 Summary of baseline

The key outcomes of this diagnosis cycle can be described as follows. Discussion of the project's status at the board meeting appeared to lack a strategic / 'big picture' focus. Furthermore, considering the results of the questionnaires in aggregate, the board members at the baseline meeting perceive they have a reasonable understanding (average 18.5/30) of the project's status, and the enablers and constraints to progress. In detailed discussion with two board members it became evident that whilst the project's existing detailed reports were useful and necessary, there was opportunity for crafting a summative view of the project's status that would direct board members to key issues. Understanding these issues was critical to them fulfilling their role as board members.

Additionally, the project manager also commented on the challenges in eliciting and communicating a holistic view of this large and complex project work. An opportunity had been identified for an intervention that would assist in improving the ability to capture and communicate the reasons for the project's status in a holistic manner.

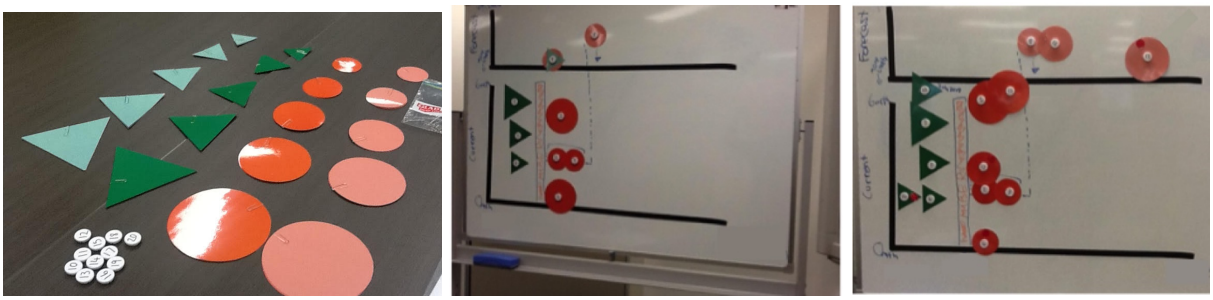
8.8.2 The experience of using the project-space model

8.8.2.1 Process/overview

The project-space model was used by the case project over five action research cycles. A key component of the first cycle was educating the project manager and the project board on the model's layout and how this communicated the enablers and constraints to the project's progress and therefore its status. In this first cycle, the project manager and board were also provided with written support documentation on the project-space model. The researcher worked very closely with the project

manager in developing the first model for the case study project. The researcher also provided the project manager with a PowerPoint template with the various shapes etcetera and the base grids which could be manipulated/placed in various positions to illustrate the current status of the project. The format was a discussion where the researcher prompted the project manager to consider what factors (in purely pragmatic and concrete terms) were currently (and potentially in the future) enabling the project to move forward, and what were the constraints or barriers to progress. As the various factors were discussed these were mapped onto the project-space model template.

The researcher continued to support the project manager in using the tool during cycles 2 and 3. A whiteboard kit was also introduced in cycle 2 to assist the project manager in developing the model with their team. Figure 8.6 (part a) shows the elements of the kits (various size shapes representing the enablers and constraints) that could then be affixed by magnets onto a whiteboard that had the current and forecast grid pre-drawn. Figure 8.6 (part b) shows the model from a previous month magnetized to a white board, and the updated version (part c) following discussion. As the workstream leads were involved in developing the model each cycle (from cycle 2), this was an interactive way to enable the model to be developed and to show changes as they were made in a group setting.



(part a) *(part b)* *(part c)*

Figure 8.6: Project-space model whiteboard kit

In cycles 4 and 5 the researcher adopted an observer-only role. As per the previous cycles, the project manager led the discussion with their team. However, in cycle 5,

the program management office did not set-up the whiteboard kit and instead had the previous month's project-space model on a projection screen and made changes to the model via computer. The development process across each of the cycles is summarised in Table 8.2.

The project-space model developed by the case project for action research cycles 1 and 5 are shown in Figure 8.7 and Figure 8.8, respectively. The legend relating the alpha-numeric values to the actual content removed to protect the identity of the project.

Table 8.2: Summary of data relating to action research cycles

Cycle	Development process	Changes		Board member Questionnaire (Average Min: 5 – Average Max: 30)			PM Questionnaire (Total Min: 3 - Total Max: 15)
		Changes Implemented	Requested	Sample size	Range	Aver-age	Total
Base-line	NA	NA	NA	7	15 – 24	18.5	7
1	Researcher working with PM (no tools utilised)	Dotted line to indicate linkages Dotted line to indicate a factor that could be a threat/opportunity	Reduce the need for unpacking alpha-numeric values Method to identify if constraints have been mitigated as much as possible & enablers optimised	9	17 - 23	20.2	10
2	Researcher working with Workstream Leads (Whiteboard kit used)	Keywords/prompts on the actual diagram Use of outlines to indicate maximization/minimization of enablers and constraints A "new icon" for factors that were new to the model Provision of previous month's model to enable comparison	Request to see change in size/location of factors between cycles Remove maximisation/minimisation of enablers and constraints – this was not helpful Show alpha-numeric linkages Show whether factors were within or outside the project boards control	8	18 - 26	22.75	11

Cycle	Development process	Changes		Board member Questionnaire (Average Min: 5 – Average Max: 30)			PM Questionnaire (Total Min: 3 - Total Max: 15)
		Changes Implemented	Requested	Sample size	Range	Aver-age	Total
3	Researcher working with PM & Workstream Leads (Whiteboard kit used)	Call outs showing board member feedback from previous months Change in size/location from previous month Outlines to indicate whether factors were within or outside the project boards control	[Nil requested]	7	18 - 25	22.4	13
4	PM working with Workstream Leads (Whiteboard kit used) (Researcher observing only)	[No changes]	Use of a textual narrative of what the PSM is describing	8	20 - 26	22.75	13
5	PM working with Workstream Leads (Changes directly onto a computer) (Researcher observing only)	Narrative of what the PSM is describing	NA	7	21 - 29	24.4	13

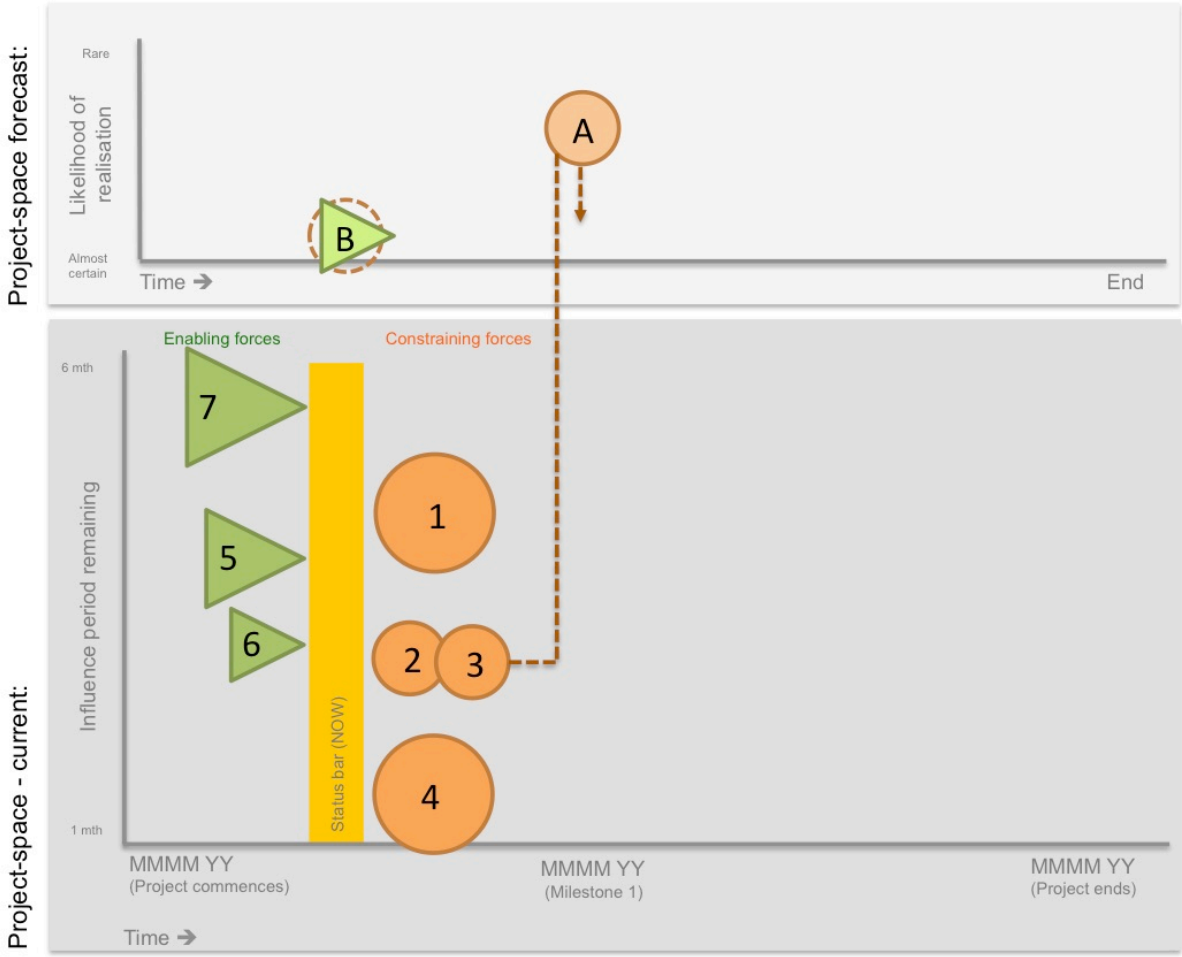


Figure 8.7: Project-space model for intervention cycle 1 (excluding legend)

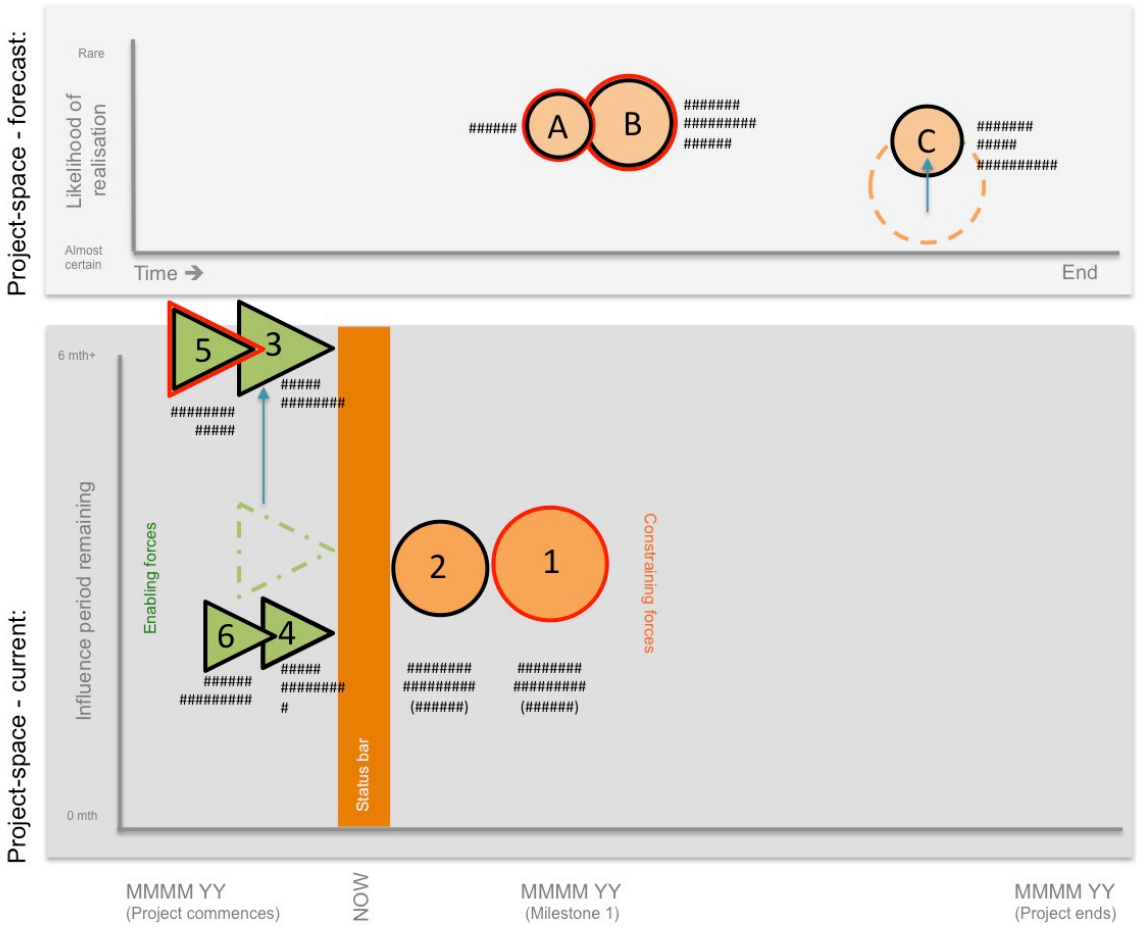


Figure 8.8: Project-space model (pg. 1 only) for intervention cycle 5 (excluding legend)

8.8.2.2 Learning from the model

Learning is a key aspect of the action research process. As such it is pertinent to consider how the model was evolved in response to the feedback during the action research cycles. Table 8.2 summarises the changes implemented and requested during each action research cycle. There were a relatively small number of changes to the model, with the most significant being an icon to indicate new constraints and enablers; keywords/prompts on the diagram regarding what each enabler/constraint meant (in addition to the legend); and showing whether a factor was within (or outside) the organisation's control. As these elements were modified there was an ongoing increase in the positive feedback regarding the model.

8.8.2.3 Feedback on the model

8.8.2.3.1 Board meeting observations and comments

In the first use of the project-space model it was observed there was already a change in the nature of discussion relating to status generated by the use of the project-space model. For example, the project manager explained the content of the model – the enablers and constraints in concrete (how they experienced them) terms to the board and then highlighted that the model's purpose was to open a discussion, and if necessary identify further enablers or constraints. The project manager also highlighted that the constraints were like "bricks" that the project needed to break through.

Of note, when the discussion started different board members had different perceptions of the size (i.e. impact) that various factors should be. One of the board members commented directly on the model as a tool for communicating enablers and constraints stating:

> I suppose, what I'm extrapolating from this is, typically, you'd need to go to PRINCE2 and a whole range of Gantt charts and a whole range of other words and potentially whole stack of slides and infographics. What you're trying to do here is say 'board, this is the gig at the present moment, and this is the storyline that sits behind it, and do you agree?' I'm seeing this as very clever. Because even though you need to unpack the numbers and the alpha from the left to the right and vice-a-versa (sic). It does place on the table what is currently going on. Albeit that it may be different sizes of things depending on where you are. [BM2, Cycle 1]

Another board member replied:

> … [A]s you say, it gets to discussion, and to strategic discussion. [BM3, Cycle 1]

Some board members commented on the model not showing future project activities. The project manager replied that this was not the intent of the model (which is focused on capturing the enablers and constraints to progress).

The researcher spoke further with the project manager after the meeting who indicated that they wanted to include their team leads in the development process

and potentially that they would develop versions of the model to represent the enablers and constraints to their streams. The project manager also commented that:

> The thing I like about it is I don't think it's necessarily a replacement for the words, it's the higher [view]…: This is what I perceive to be the current balance of the whole project. It is quite hard out of any of the other reporting we've got to get a sense of balance. Whether it's 'we're roaring ahead beautifully and there's very little in the way'. Or in fact 'we're going ok, but there's a hell of lot in the way but we're managing it all'. But it is quite hard to get the nuance, but I do think you get that out of the project-space model diagram. [PM, Cycle 1]

During further action research cycles the benefit of the tool was further discussed:

> I think as this project-space model is evolving it's becoming quite helpful. Earlier on I wasn't quite sure it would be this helpful, but I think it is. I think it's particularly helpful because we've got that legend as well as the pictorial demonstration within the graph... It would be really helpful if we could go through the legend and anything there that strikes us as 'well, what are we going to do about that?' and have a strategic conversation about those things… [BM4, Cycle 2].

In cycle 2, one of the board members highlighted that the project-space model was providing an alternative view to the traditional highlight report to consider the status of the project. In cycle 3, the project manager commented on the project team's increasing maturity in identifying and describing the factors. The project manager asked the board whether the model gave them a "story" of the project's progress and the response from several board members was that it did do this. However, the project manager's accompanying commentary was critical, the diagram was not stand-alone.

In cycle 4, the project manager when discussing the model with the board stated:

> [T]his diagram and this model is essentially for me to try and describe to you as the board how I feel the project [is going]… and not just on the individual items, it's trying to look over the whole thing. [PM, Cycle 4]

8.8.2.3.2 Questionnaires

Table 8.2 provides a summary of the quantitative feedback on the model over the cycles (including the diagnosis cycle). There is an increase in the scores on the questionnaires for both the board members and project manager over the action research cycles. Specifically, an increase from a mean score of 18.5 / 30 (baseline cycle) to 24.4 / 30 (action research cycle 5) for the board member questionnaire. For the project manager questionnaire there was an increase from 7/15 to 13/15. Qualitative comments as follows were also noted on the questionnaires over the action research cycles:

> Good discussion prompts [from] the document provided today. [BMx, Cycle 1 questionnaire]
>
> This did start an improved content conversation. [PM, Cycle 1 questionnaire]
>
> My creation of what was on the PSM was from my knowledge – so some information may not be coming through from [board] members. [PM, Cycle 1 questionnaire]

In the final action research cycle, an extended questionnaire was used. In response to the (new) question: 'I would like to see the continued use of the project space model as a tool in this project' (response options: likert scale 1 – 5 with 5 being strongly agree), six of the seven participants indicated 4 or 5, the other participant noted a 3. Their qualitative responses (also new questions to the survey) are provided in Table 8.3.

Table 8.3: Qualitative responses to final board member questionnaire

Question	Responses
The strengths/benefits of the model are:	"Simple depiction which can be tracked over time" "Easily able to identify strategic issues from the large number of factors in the project" "Visual, succinct" "Strengths v challenges" "Simple, clear, easily identifiable"
The weaknesses/limitations of the model are:	"High level- sometimes needs to unpack the detail below" "Took me a while to get my head around it" "The model needs interpretation for it to be well understood"
What has been the best part about using the project-space model?:	"Action learning – thanks" "A new and different approach to being able to discuss key project issues" "Visual element" "The dialogue"

The project manager was also asked to complete an extended questionnaire in the final cycle. Of the three new quantitative questions (I will continue to use the PSM as a tool in this project; I would use the PSM in other projects in the future; I would recommend the project-space model to others involved in projects) (likert scale 1 – 5 with 5 being strongly agree) they indicated 5 against all questions. Their response to the qualitative questions are provided in Table 8.4.

Table 8.4: Qualitative responses to final project manager questionnaire

Question	Response
The strengths/benefits of the model are:	"Allows a rounded discussion about the project. And allows for an effective summary to be described."
The weaknesses/limitations of the model are:	[no response]
Do you feel the PSM model is better now than when we started this process? Why/why not?	"Better: Because we've been able to develop it (around margins only) to be effective for the style of this project."

8.8.2.3.3 Interviews

To triangulate the data from the questionnaires and observation during the action research cycles, a second interview was held with one of the board members [BM2] to gain further information on their response to, and perceived impact of the model. BM2 confirmed a desire for the ongoing use of the model in the project in alignment with the questionnaire responses. He commented:

> [The] project-space model has added value and certainly draws out the key things that the board needs to consider each month. I'd like them to continue in that vein… often the reporting that comes to these sorts of boards can be over engineered and very heavy and you need to dig quite deep to find what the essence of what the real issues are. The good thing about this model is that it actually draws that out for you. So it actually takes you straight to the conversation pieces. So, I'll be encouraging the program office to use that kind of approach in the future. [BM2, interview]

It was noted by BM2 that the model's value is linked to the skill of the project manager developing it and that the quality of the project manager's understanding will affect the value of the model as a tool for the board. The board member also

highlighted that a key concern for him was being able to forecast into the future, and the model in its current use did not provide this given its 'now' focus. However, it was proposed that the model could be used in a scenario planning context where how the project would look (it's state) at a future point (given certain action or lack thereof). That is, future scenarios could be described using the same visual language as the current model.

BM2 was also asked how he felt the model differed from traditional reporting. It was stated:

> This is different. It's a combination of graphic, it's a combination of relationships and interfaces between certain parts of the project. But it also, in my mind, is the drawing out, it's not the mass of things that are a large complicated gantt chart that has a 150 elements, it's the drawing out… shapes, colour and emphasis and circles and the like, actually promotes another story and therefore promotes another awareness but it actually invokes the conversation in the board. That's what we're looking for. [BM2, interview]

Finally, BM2 was asked to comment on whether the model invoked different conversation with the board. BM2 stated that different conversations had emerged, stating:

> There is a temptation in other reporting methodologies to talk about lots of other things that are, noteworthy, but they could take the time of the board. What this does, is it draws you straight to it, gives you the salient points and makes you have the conversations that are around the things that are mission critical, for the project. If we actually stand back and say "what's the best use of a board? What's the best use of the due diligence of a board meant to do? And indeed what is their purpose?" If it is about governance, oversight, monitoring, stewardship and leadership over the activities, and if this is drawing about where things are up to, it helps them fulfil those roles. So if I go back to my corporate governance role, this is assisting the group fulfil this role. [BM2, interview]

Similarly, a final interview was also held with the project manager to further triangulate their perception of the tool. In asking them how they would describe the project-space model to a project peer they indicated that it was a way of holistically summarising the project, summarising the project in a different view that gave a

more "fulsome" perspective of how the project manager 'felt' the project was going. Of a similar nature, in asking whether the project-space model was useful in a project manager's toolkit, it was highlighted that it is particularly useful when you are required to use the classic methodologies such as PRINCE2 because it:

> [S]hifts you from thinking item by item and how each item is doing to thinking about the whole of the project. So, I think it, for me, it was really important, because it enabled, it gave me a tool to actually, look at it from a totality perspective. [PM, interview]

They commented that it was useful as an "add-on" because it need not interfere with other methodologies being used:

> [It] "doesn't muck with the organisation's system but it does enable you to have a better conversation about things. [PM, interview]

The project manager was asked to reflect on the impact of the project-space model on their management of the project. Their response included:

> It's made it faster and easier for me to work out what I thought the important components were to report back to the board; it helped me work it out and it helped me explain it more easily to the board. [PM, interview]

The project manager also felt the model had similar benefits for the team:

> It enabled us to actually burrow in and think more deeply about what it was, how we really felt about how the project was, rather than just thinking in its component parts. Because if you just thought in the component parts you'd say 'yeah they're all ok' or 'we're worried about this bit', but actually there were things running through them all, and that was the hard one to pull out. And that's what the tool enabled us to do. [PM, interview]

> I think it's being able to, firstly generate the conversation, the creation with the team, and it's a good way that – the constraints and the enablers – the concepts of going 'what are the things that are getting in the way of making this happen or what are the things that are keeping it progressing' – those two things probably the most powerful… [PM, interview]

They commented that it was a useful tool for having a conversation with their work stream leads about progress and barriers.

With respect to the nature of interaction with the project board, the project manager felt there had been a change over the cycles (this was not solely attributable to the project-space model, but was assisted by it):

> If I remember back [prior to the model], to where the board conversations went, prior to this, it was more burrowing into the detail of one little thing, which to a greater or lesser degree was kind of irrelevant. Sometimes, you know, clearly, it has relevance, but it was just one component of a broader thing. And while that still happens, people, as they're saying it, they're acknowledging the broader thing. [PM, interview]

In reflecting on how the model differs from their established reporting tool it was commented:

> [The existing report is] very compartmentalised. And I kind of understand why it's like that… it's a narrative of what's happened, it's not an assessment of how good or bad that is. [PM, interview]

The project manager commented that the project-space model's value as a tool would be jeopardised if it was over-engineered or became another "box ticking", "hard-line project management" exercise. There also needs to be a willingness to disclose the problems and challenges. They suggested that the whiteboard kit was more valuable than developing the model electronically with the team. The project manager also indicated that they would need to mix-up the discussion style in the coming months to avoid the team just defaulting to the same constraints and enablers each month.

8.9 Discussion

The research question will now be considered with respect to the study findings. To recall, the research question was: *Can the project-space model support a project manager to capture and communicate status in a pragmatic and holistic way that highlights enablers and constraints to project progress as per their 'lived experienced'?* Given the findings outlined in section 8.8, the project-space model has

achieved this outcome in this case study. The justification for this affirming assessment is outlined below. Followed by an examination of how the findings relate to the extant literature.

8.9.1 Project manager's response

The average score of the project manager's questionnaire increased over the cycles (7 to 13). Furthermore, all project manager feedback indicated that the intervention was very successfully. The following direct quotes from the project manager triangulate the survey result:

> [The project-space model has] made it faster and easier for me to work out what I thought the important components were to report back to the board; it helped me work it out and it helped me explain it more easily to the board. [PM, interview]

> It enabled us to actually burrow in and think more deeply about what it was, how we really felt about how the project was, rather than just thinking in its component parts. [PM, interview]

> I think it's being able to, firstly generate the conversation, the creation with the team, and it's a good way that – the constraints and the enablers – the concepts of going 'what are the things that are getting in the way of making this happen or what are the things that are keeping it progressing' – those two things probably the most powerful… [PM, interview]

The project manager's feedback can be summarised as follows. The concept of "enablers" and "constraints" was particularly useful: it generated a different conversation. The model encouraged the project manager/team to think about the status of the project in a more holistic and integrated manner and it assists in communicating this to the board. A different type of conversation with the project board (more integrated and strategic) was triggered when the project-space model was used. The model did not preclude the use of other methodologies. It allowed for an expression of a "gut feeling" of how things are going – a capturing of "feeling". But that there was a risk of over-engineering the tool and it becoming "hard-line" project management-ish.

8.9.2 Board members' response

The quantitative outcomes of the board members' questionnaires have been previously provided in Table 8.2. Overall, there has been an increase in the average (18.5 to 24.4) and range (15 – 24 to 21 – 29) of the board members' responses. Table 8.5 provides the specific change in average response to each of the board member questionnaires from the diagnosis cycle to cycle 5. The qualitative comments from these questionnaires, observations of the board meetings, and the indepth interviews also found that the project-space model was of value to the board members and they wanted to see its continued use. Board member reflections triangulating the result of the quantified responses included:

> [The] project-space model has added value and certainly draws out the key things that the board needs to consider each month. I'd like them to continue in that vein… often the reporting that comes to these sorts of boards can be over engineered and very heavy and you need to dig quite deep to find what the essence of what the real issues are. The good thing about this model is that it actually draws that out for you. So it actually takes you straight to the conversation pieces. So, I'll be encouraging the program office to use that kind of approach in the future. [BM2, interview]

> There is a temptation in other reporting methodologies to talk about lots of other things that are, noteworthy, but they could take the time of the board. What this does, is it draws you straight to it, gives you the salient points and makes you have the conversations that are around the things that are mission critical, for the project. [BM2, interview]

> Easily able to identify strategic issues from the large number of factors in the project. [BMx, Cycle 5 questionnaire]

> Simple depiction which can be tracked over time. [BMx, Cycle 5 questionnaire]

The board member's feedback can be summarised as follows. The project's extant reporting tended to compartmentalise the project, but the project-space model provided a more holistic perspective. The extant reports provided much detail, but often the most important points for the board were not so obvious. The project-space

model brought the important points to the fore in a simple way. This is seen as an important value-add for project board members and invokes a strategic conversation. The value of the project-space model as a tool is strongly linked to the commentary/narrative provided by the project manager. The current use of the project-space model does not provide sufficient future-directed (scenario) information, but it could be used to fulfill this purpose. And, similar to all reporting, the value of the tool is dependent on the skill of the person developing and using it. It is also subject to the perception of the situation of those developing it.

Table 8.5: Average response to board member questionnaires before project-space model and during the last cycle

Question	Diagnosis cycle (average response)	Intervention cycle (average response)
I feel I have the information about project status to assess progress and make good decisions.	2.44	4.14
I can easily identify where my attention needs to be directed in this project.	2.44	4.29
I can quickly understand the priority and relationship between issues that are preventing the project from progressing.	2.56	3.86
I can easily understand what factors are enabling the project to progress.	2.56	4.29
I can easily identify what factors may exist in the future that would enable the project to progress.	2.22	3.71
I can easily identify what factors may exist in the future that would hinder the project's progress.	2.22	4.14

8.9.3 Integration with the literature

The findings confirm and build on many facets of the existing literature. For example, the board members and project manager commented on the reductionist, compartmentalised nature of traditional reporting tools (discussed in the literature review - refer section 8.4.1). Such insights can assist in recognising the limitations of

dominant reporting approaches and the need for alternative views of project status and progress. The model was also found to enable practical, strategic conversations, rather than focusing on individual baseline deviations. Furthermore, in contrast to the gateway reviews, which can result in disguising or hiding of constraints for fear of judgement, an ongoing transparency in conversation (without the requirement for external consultants) is promoted by the project-space model. This enables communication focused on problems (and potential solutions) between the project team and board to be routine and commonplace. It is proposed that this is a useful organisational habit and enables the board to appreciate what is being experienced by the project manager and their team. This style of reporting brings a focus to removing barriers and sustaining enablers to progress rather than on quantitative assessment of compliance with plans.

With respect to the absence of tools aligned with the Rethinking agenda (refer literature review - section 8.4.2) this study has made a direct and explicit contribution by testing the project-space model. The project-space model was found to support the case study project manager in capturing and communicating in a pragmatic and holistic way the enablers and constraints to the project's progress. Furthermore, it enabled the project manager to communicate how they were feeling about the project in a more 'lived experience' manner. It does not require the project manager to capture or discuss the project in terms of fixed categories or theories (i.e. scope, budget etc.). Rather, the project manager can capture and reflect pragmatically, the problems (constraints) they are encountering (or may encounter) and the enablers they are encountering (or may encounter). Aligned with the Rethinking call for more reflective practice, the project manager highlighted that the model prompted them to think of the project in a new and useful way.

The study findings contribute to the literature on dashboard reporting (refer literature review - section 8.4.3). The project-space model can be classified as similar to a dashboard, but unlike the dominant balanced scorecard approach, this model focuses on the enablers and constraints to desired outcomes rather than the outcomes themselves. Given the value the board and project manager found in this information, it highlights a potential avenue for further exploration of managerial reporting tools more broadly.

The board also recognised the project-space model as supporting them in fulfilling their governance responsibilities. Particularly, the way the model highlighted salient points for their attention – from which decision and direction can flow. It focused the project manager and board on what would enable or constrain the project's delivery, and ensuring these were respectively sustained or removed. In the literature review (section 8.4.4) the benefits and challenges of group decision-making are discussed. This tool can contribute to this domain through offering a tool which may assist in enhancing a group approach to decision-making, increasing the likelihood of a shared mental model, and bringing information visibility to all board members – irrespective of their understanding of project management concepts. The extant discussion on the cognitive load processing benefits of visualised data is also supported by the findings of this study. The visualised nature of the data was seen by the study participants as valuable.

In summary, this study aimed to address a gap in the literature by identifying a tool, aligned with the concepts of the Rethinking Project Management network which could assist project practitioners to capture and communicate their 'lived experience' of a specific project environment. The study has found the project-space model to fulfil this need in the case study project. It has also contributed to the literature more broadly in terms of decision-making tools, general management reporting, visualising of information and the limitations of existing project management reporting approaches.

8.10 Limitations

For those of a positivist mindset, the subjective nature of the research methods may be perceived to be a drawback. However, given the nature of the research inquiry these methods are deemed justified and the drawbacks relating to the approach have been mitigated by considering the opinions of multiple participants and adopting a mixed methods approach – refer section 8.7.

The primary limitation is that a single case study has been used for this research project. Further case studies should be undertaken to confirm whether the findings from this case can be confidently applicable in other project contexts.

With respect to the project-space model itself, the importance of the capability of the person developing the content for the tool each month has been recognised as is arguably the case for any reporting. Further, the tool was not a stand-alone reporting solution for this project as it was deemed as not sufficiently future activity focused.

8.11 Conclusion

This research study has important implications for project practitioners and the literature. For practitioners it provides a new, practical tool that has been established as being valuable in capturing and communicating the 'lived experience' of a project. Specifically, the constraints and enablers (current and forecasted) that are (or could) impact on project status and delivery. It is a significant shift from traditional reporting tools which are more outcomes focused and concerned with deviations from baselines. By contrast, the project-space model captures and communicates the reasons for the current state and potential future states. The explicit disclosure of such information allows for a transparent conversation with project stakeholders that encourages problems to be brought to light and therefore the opportunity for their resolution. Furthermore, the holistic perspective enables a more integrated approach to decision-making to be adopted. The tool does not rely on an understanding of project management terminology or processes which enable stakeholders unfamiliar with such terminology or methods to quickly understand the reason for status.

For the literature, it directly contributes to the calls for further contributions to the Rethinking agenda, particularly the need for new tools for practice. It also confirms and makes smaller contributions to areas such as limitations with existing project management and dashboard reporting, and potential tools for enhanced group decision-making.

In addition to the need for further case studies to confirm the tools efficacy more broadly, there is a clear opportunity to make more definitive contributions to areas of the literature such as group decision-making, visualisation of information and sense-making through examining the project-space model's impact on specific factors. Similarly, links between the use of the project-space model and stakeholder satisfaction with project outcomes, or a project manager's feeling of supported-ness, or timeliness in having project issues resolved could be explored.

The findings from this case suggest that it is highly probable that the project-space model would be a beneficial tool in the project manager's suite of tools. It is a tool that can enable a project manager to identify and share a story of the project's holistic status in integrated and concrete terms that reflects their experience. It also illuminates the areas within the project most needing of the project board's attention.

9 Discussion

The contribution of this thesis can be categorised across the three themes underpinning this work. Table 9.1 maps the contribution that will be discussed in this section by publication and according to themes. Green shading indicates a contribution against a publication and theme. It is noted that the publications on the right of Table 9.1 are publications produced during the period of candidature but they do not form part of the examinable thesis. They are included in this section to highlight their relationship to (and support of) the work included in the examinable thesis.

Table 9.1: Summary of contribution by publications

	Within thesis						Related publications completed during doctorate							
Themes	**Chapter 3: A Heideggerian paradigm for project management**	**Chapter 4: Playing Projects**	**Chapter 5: Continental thinking in project managing**	**Chapter 6: Projectyness: A spectrum of capability**	**Chapter 7: Project-space model (theoretical)**	**Chapter 8: Project-space model (empirical)**	**Signs to dogma: A Heideggerian view of how artefacts distort the project world**	**'Let's discuss aesthetics for projects**	**The project-space model: Enhancing sensemaking**	**'The project manager is condemned to be free: A continental model of angst in projects'**	**'Chocolates, cats, dips and loops: The lived experience of managing projects**	**'From the project manager's desk: the lived experience disclosed**	**Talking with Russian Dolls: revealing the project "lived experience" through Heidegger's spatiality and temporality**	**A "lived experienced" tool for managing and building project delivery capability**
(1) New thinking to access the 'lived experience'														
(2A) Accessing the 'lived experience'														
(2B) Use of alternative research methods														
(3) Communicating the 'lived experience'														

9.1 Contribution 1: New thinking to access the 'lived experience'

This thesis has contributed to the literature by expanding the discourse on alternative lenses through which to explore the phenomena of projects. As described in the literature review, in the mid-2000s there was a significant drive to bring a practice-focus to project management, and to leverage alternative philosophical frameworks to access a practice-based perspective. At the time of commencing the doctorate, a there was relatively little discussion on alternative lenses in the extant literature. The work of scholars discussed in section 2.2 are exceptions to this overall trend. This thesis has drawn strongly on continental philosophical perspectives and has built upon and diversified these perspectives. Chapters 3, 5, 6 and 7 whilst being largely theoretical provide strong evidence of how Continental thinking can change our interpretation of the phenomena of projects. Such a contribution is also evident in works outside this publication published during the doctorate including: van der Hoorn and Whitty (2015a, 2015b, 2015f, 2016a).

The key contribution in this theme from the works in this thesis (i.e. Chapters 3, 5, 6 and 7) is the alternative conceptualisation of 'what is a project'. Using Continental philosophical concepts, it has been argued that an activity is classed as being a project to the extent to which it it is experienced as being beyond inherent capability, and that the activity has the purpose of restoring or changing some situation. Furthermore, the experience of project work is on a spectrum as we can be more or less capable of undertaking an activity. No activity innately is a project, or is not a project. The degree of 'project-ness' is in the relationship between the person/s undertaking the activity and the activity. This contribution has several implications as described in sections 9.1.1 - 9.1.3.

This argument has been built from the thinking of several Continental philosophers. Heidegger's concepts of equipmental totality, modes-of-being and care are central to the 'break/restoration' and 'capability' elements of the argument (refer Chapter 3). Merleau-Ponty's focus on the primacy of perception and embodiment are grounding for the 'experience', 'capability', and 'subjectivity' components of the alternative perspective (refer Chapters 5 and 6). The existential concepts of 'no one right way'

or ‘predetermination’ are drawn on to highlight that there is no one right way to manage project work. The problems with discontinuous thinking, as raised by Dawkins, provide the grounding for the concept of a spectrum of greater or lesser ‘projectyness’ (refer Chapter 6).

9.1.1 On time, on budget? Is it really a project?

This new thinking about ‘what is a project’ brings into focus that ‘projects’ are classed as being projects because we lack the inherent capability to undertake the activity at hand; they are challenging for those undertaking them. It begs the question: why would we expect an activity that pushes capability to run smoothly, to baseline; to be delivered on time and on budget?

This contribution highlights the problem with research agendas and questions associated with eliminating project failure. This is not to suggest that an activity or goal being successfully achieved is bad or undesirable. Rather, it is unrealistic to expect that work which is stressing our capability will be delivered seemlessly. Where our capability is being pushed, this work is ‘projecty’ and will be prone to challenges. Organisations must therefore continue to push their capability as they adapt to their changing environments.

As per Chapter 6, this does not mean that organisations do not call certain activities ‘projects’ or employ ‘project management’ tools for activities that fall short of applying pressure to their capabilities. Rather, in such circumstances, this thesis asserts that the term ‘project’ (and associated tools) is used due to an advantage that derives from their use, rather than that the work itself is actually being experienced as ‘projecty’. For example, in calling an activity a ‘project’ the management team may be able to by-pass normal operational procedures or processes or feel empowered to or be able to access funding so that they can employ a special taskforce, or enlist the support of external funding/consultants or other resources.

9.1.2 What is project managing?

A second implication arising from this contribution comes about through the highlighting of the point that there are skills and tools much more important to successful project delivery than Gantt charts and work breakdown structures (refer

Chapters 3 and 6). These dominant tools are useful in presenting a veil of capability through their presentation of order and control and predictability. But, the important question is: what are the skills and tools required to actually move a team of people through the ups and downs of work that is making demands on their capability? In Chapter 3 it is argued that 'project mana**ging**' is far broader than the employment of 'project manage**ment**'.

The reconceptualisation of project managing and project management directs the discipline to continue its drive to draw theory from practice. What do project managers actually use in practice to deliver project work? It is proposed that human skills such as alignment seeking, negotiation and conflict resolution, and 'optioneering' are far more significant in actually delivering project work than the tools described in the current thinking about project management .

9.1.3 The problem with discontinuous thinking

This contribution also highlights that there is not a point (a categorical division) at which an activity actually becomes project work (a project). Capability to undertake an activity is on a spectrum. A person/s is not 'competent' or 'incompetent' in a binary sense, they will just have more or less capability for that activity. As such, any activity that is restoring or changing a situation will be experienced as more or less 'projecty' depending on where their capability for that activity is on the spectrum. Consequently, we must take care not to arbitrarily apply 'project tools' to a situation.

This argument highlights the futility of categories of projects such as 'small', 'medium' or 'major' (refer Chapter 6). And the assumption that a particular tool-set or managerial approach should be applied to work within each category. In reality, work at the top of one category is more similar to work at the bottom of the next category than the work at the bottom of its own category (refer Figure 6.6).

9.1.4 Additional contribution from work not included in this thesis

In addition to the impact of the papers in this thesis to contribution 1, the use of Continental perspectives in other works undertaken during the thesis have been

significant. Table 9.2 summarises the contribution of these other papers in relation to "New thinking to access the 'lived experience'".

Table 9.2: Additional works for contribution 1

Paper	Contribution	Grounding of contribution/central argument
Signs to dogma: A Heideggerian view of how artefacts distort the project world	Highlights how tools such as the Gantt chart and the professional associations can veil the 'lived experience' of project work.	Grounded in the Heideggerian concept of signs. Many tools and concepts commonly associated with project management actually 'signal' towards an underlying dogma about project management. This dogma is not reflective of the 'lived experience'.
Let's discuss aesthetics for projects	Proposes the need for a research agenda which considers how sensory (aesthetic) factors can influence the experience of project work.	Draws on the concept of the body being a critical component of our experience – both in how we receive the world and respond to the world. It is argued that insufficient attention has been given to this sensory element in project work.
The project manager is condemned to be free: A Continental model of angst in projects	Provides an explanation for the experience of angst in project work.	The Heideggerian concepts of care, unified temporality, anxiety, fear and authenticity are coupled with the Sartrean concepts of 'existence preceeding essence', freedom and choice, and abandonment, angst and despair to provide a model to understand the experience of angst in project work.
Talking with Russian Dolls: revealing the project "lived experience" through Heidegger's spatiality and temporality	Demonstrates how philosophical concepts and themes can be used to illustrate or explain practitioner experiences.	Utilises Heideggerian concepts of spatiality and temporality and the metaphor of Russian Dolls to explain the non-linearity ('nestedness') and subjectivity ('mattering radar') of project work.

9.2 Contribution 2A: Accessing the 'lived experience'

The second area of contribution is in the elicitation of descriptions of the 'lived experience' of managing projects. Chapters 4 and 8 of the thesis are particularly

relevant to this area of contribution. Again, as per the Rethinking Project Management network (Winter, Smith, Morris, et al. 2006), there has been a call to increase our understanding of what happens in projects. Obviously, eliciting the experience of practicing project managers provides a contribution to this call. The study in Chapter 4 examined the experience of multiple project managers using an arts-based elicitation method coupled with a semi-structured interview. The action research study in chapter 8 also enabled descriptions on the experience of those involved in a single case study to be observed and discussed. Two key contributions are related to this area. Firstly, the 'ups and downs' and variation in emotional experience associated with project work. Secondly, the challenges that are experienced by project managers and stakeholders in communicating/understanding project status.

9.2.1 The ups and downs of project work

A consistent finding elucidated in the report as experienced by the study participants in Chapter 4 was the variation in emotions experienced when undertaking project work. Challenges and issues were a consistent feature of the experience: there were times of frustration, angst, despair as well as satisfaction. These findings are considered in Chapter 4 with reference to Csikszentmihalyi and Csikszentmihalyi (1990) 'flow theory'. That is, that anxiety is experienced when demands are being placed on capability, and boredom is experienced when capability exceeds the challenge offered by the activity. Given this, there is a clear alignment with the alternative conception of 'what is a project' outlined in section 9.1. This empirical study (in Chapter 4) found that project work was experienced as challenging, pushing capability, and being associated with angst and pressure.

> "And then you have highs and lows throughout it. You have good when you start make productivity [sic], it's pretty good and then you definitely always have some serious challenges"

> "it was very very hectic… very intense… very manic…"

> "It has bitter sides as well as some sweet sides. Ups and downs."

This finding, which is strengthened when the works outlined in section 9.2.3 is considered, is important in disclosing the 'lived experience' of project work. They provide a realistic account of what project managers are actually dealing with. Project work is not easy, it is messy, and it is full of challenges. The implication is that the tools and approaches we develop for the practice must be considered in this context. There is a need to recognise that projects are not undertaken in controlled environments, and that tight control and stability is an unrealistic expectation of project work environments. Tools and approaches that recognise the messiness, dynamism and challenges of project work are needed.

9.2.2 The challenges of communicating status

An outcome of the action research study in Chapter 8 were observations and descriptions of the challenges of communicating project status using traditional tools such as dashboard reports and baseline deviation metrics.

> The thing I like about it is I don't think it's necessarily a replacement for the words, it's the higher [view]…: This is what I perceive to be the current balance of the whole project. It is quite hard out of any of the other reporting we've got to get a sense of balance. Whether it's 'we're roaring ahead beautifully and there's very little in the way'. Or in fact 'we're going ok, but there's a hell of lot in the way but we're managing it all'. But it is quite hard to get the nuance, but I do think you get that out of the project-space model diagram. [Project Manager]

> [The] project-space model has added value and certainly draws out the key things that the board needs to consider each month. I'd like them to continue in that vein… often the reporting that comes to these sorts of boards can be over engineered and very heavy and you need to dig quite deep to find what the essence of what the real issues are. The good thing about this model is that it actually draws that out for you. So it actually takes you straight to the conversation pieces. So, I'll be encouraging the program office to use that kind of approach in the future. [Board Member]

Their descriptions highlighted the limitations of the dominant tools to capture a holistic perspective or the experience of a particular project situation. In contrast, an alternative tool was found to encourage conversations that actually assisted in giving visibility to project problems. The implication, aligned with section 9.2.1, is that

there is a need for alternative tools that enable the communication of the 'lived experience'.

9.2.3 Additional contribution from work not included in this thesis

The contribution of Chapter 4 (refer section 9.2.1) is confirmed in other work undertaken during the doctoral program but not forming part of this thesis. For example, van der Hoorn and Whitty (2015d) discusses a study which also drew on an arts-based method coupled with semi-structured interviews to explore the experience of project managing. The experience was described by these participants as:

> "You start off really excited and motivated and there's a steep learning curve but you're really quite energetic about getting going… and implementation just seems like a black hole… people scramble around separately, together, possible in a coordinated way… Then you go through a bunch of loops."

> "It drops… then you go back again… very very tough… long, long battle up hill and in the end it was…"

> "I kind of relate my projects to skiing and the fact that you start at the top of a hill… but along the way there's lots of bumps and issues."

> "A reasonably complex project, the issue was that the steering committee and stakeholders weren't across it, didn't understand it, they resisted it because of the cost. So my illustration is pulling teeth… it felt like pulling teeth… So it was painful…"

Similarly, in a further arts-based study (using photographs of project managers' desks to trigger a discussion on the experience of project managing), it was found that there was an element of struggle in project managing (van der Hoorn & Whitty 2015c). In this study, this struggle was largely around the need to elicit information from a variety of sources in order to be able to manage the work.

9.3 Contribution 2B: Use of alternative research methods

9.3.1 Arts-based elicitation for project management research

Associated with contribution 2A, is the contribution made to the discipline through the use of alternative research methods. As discussed in section 2.3 there has been a recognition of the need for alternative research methods to access different insights related to the phenomena of project work. Chapter 4 in this thesis provides a direct contribution to this call -specifically through the use of a music-based elicitation methods, coupled with a semi-structured interview, to access the 'lived experience'.

As discussed in chapter 4, arts based methods have been used previously in the discipline (refer Whitty (2010a) for the use of drawing to elicit insights), however, the use of music is new. The research method – playing the experience of project managing on a xylophone and then discussing this with the researcher – was found to be highly effective in disclosing the 'lived experience'. The emotional experience associated with project work is particularly highlighted through the use of this research method. This is unsurprising given the recognised efficacy for music to convey emotion (refer section 4.7.1). However, in alignment with Daykin (2004) it is emphasised that the accompanying semi-structured interview is critical to providing an interpretation of what was played by the research participant.

9.3.2 Additional contribution from work not included in this thesis

Again, the contribution made by Chapter 4 is supported by other studies undertaken during the doctoral program but not included in this thesis. For example, in the study described by van der Hoorn and Whitty (2015d) drawings coupled with semi-structured interviews are used to elicit the 'lived experienced' of project managing. The findings of this study confirmed the results of the study in Chapter 4. For example, the experience of managing project work is challenging and full of ups and downs. Whilst this is not the first use of drawing as a research method tool in project

managing, it provides further confirmation of its efficacy in deriving new knowledge about the phenomena.

Another new research method for the discipline is the use of photographs, coupled with focus group discussions, to disclose the experience of project managing van der Hoorn and Whitty (2015c). In this study, project managers were asked to take photographs of their desks at multiple points during their work day. They were then asked to review their desk photos and the photos taken by their project management peers, and together discuss what the photos disclosed about being a project manager. The research method enabled the project managers' workplaces to be brought into the focus group room and therefore provided a grounding back to the 'lived experience'. It was found that a key part of project managing was the struggle in trying to elicit and make sense of information from various sources. Using photographs as stimuli to discussion is not new to other disciplines, but this is the first identified use in the project management discipline.

9.4 Contribution 3: Communicating the 'lived experience'

9.4.1 The project-space model

The final contribution is in the development and testing of new practitioner tools. Chapters 7 and 8 of this thesis are particularly relevant as they describe the development and testing of a new tool – the project-space model. This tool is an important contribution in many ways. Most important is how it enables practitioners to communicate the 'lived experience' of project managing a specific project. With this tool they are released from the need to use project management jargon and focus on deviation from baselines. The tool enables them to communicate, in a pragmatic and holistic manner, the enablers and constraints to project progress. In this way, the messiness and challenges of project work (the 'lived experience') can be communicated. The tool is a small step in disclosing the reality of project work. It is clearly different to Gantt charts and work breakdown structures, which as per van der Hoorn and Whitty (2015b) actually disguise the nature of what project managers are dealing with in their work. In using a tool such as the project-space model, project

managers have a mechanism to bring prominence in a simple way to what is actually required to deliver a specific project. Surely, this should be a key focus of project managers and their stakeholders?

The significance of the tool is amplified when considered with the alternative conceptualisation of project work provided by this thesis. That is, if central to project work is a lacking of inherent capability, then the ability to communicate what are the constraints and enablers to this capability is vital. In an attempt to complete an activity which is pushing inherent capability, it is necessary to be able to communicate what is required to be sustained (the enablers) and to be overcome (the constraints). Furthermore, the benefit reported by the case study using the tool highlighted the advantages of discussing the project in new terms (enablers and constraints) and displaying this in a visual way. It is noted that the case study organisation of the study in chapter 8 has continued to use the tool and has expanded its use into other areas of the organisation's management. An argument can be made that this case study demonstrated the value in adopting alternative thinking such as that discussed in Contribution 1 – refer section 9.1 – and underpinning this tool rather than traditional positivist baseline-deviation focused approaches.

From a theoretical perspective, these tools demonstrate the mobilisation of alternative project management thinking (e.g. Continental ideas, Heideggerian philosophy, Gestalt concepts) in a practical way that can be used by project managers in their daily work. These theoretical concepts and philosophical approaches permeate the structure and use of the tool.

9.4.2 Additional contribution from work not included in this thesis

In addition to the papers in this thesis relating to the project-space model, additional studies relating to the model amplify this contribution. For example, in van der Hoorn and Whitty (2017) the value of the project-space model in sensemaking in the project context is demonstrated. Again, the value of new tools grounded in alternative thinking is demonstrated. The potential of the project-space model is also captured in van der Hoorn, Duffield and Whitty (2016). In this theoretical study, the benefits of coupling the project-space model with the Systemic Lessons Learned

Knowledge (SyLLK) model is demonstrated. It finds that these two tools can be used in an integrated fashion to deal with capability constraints on a specific project, and also in developing whole-of-organisation project management capability over the longer term in a tailored and evidence-based manner.

An additional tool developed during the doctoral program (but not included in this study) is discussed in van der Hoorn and Whitty (2015f). In this study, nested Russian Dolls are used as a metaphor to assist in explaining the 'lived experience' of project managers. The use of the metaphor is grounded in Heideggerian concepts – particularly his concepts of spatiality and temporality. The metaphoric tool enables the project manager's personal experience to be prioritised; to access facets of the experience that may not be on the "official" record (because they were unknown or concealed). The tool also enables the highlighting of the non-linearity and complexity inherent in managing project work.

10 Conclusion

10.1 Summary of the contribution

In summary and as per chapter 9, this thesis has provided an integrated and multi-layered contribution to the discipline. The contribution is multi-layered as the thesis spans from new contributions to the philosophical foundations of the discipline through to the testing of alternative tools for practitioners. However, it does this within the context of accessing and communicating the 'lived experience' of project work through Continental philosophical perspectives. It is argued that this thesis has highlighted how a Continental philosophical perspective (specifically the work of the Heidegger and Merleau-Ponty) can transform our understanding of what is project work; and, given this reconceptualisation, change how we explore the phenomena of project work (to disclose the 'lived experience); and then how practitioners can communicate these realities of project work. The implications of this contribution are provided in section 10.2.

10.2 Implications of the contribution

10.2.1 Implications for project management theory

The contributions discussed in sections 9.1 - 9.4 have several implications for project management theory and research. Firstly, the contribution of a Continental philosophical approach to exploring project work provides the discipline with a useful alternative to the traditional positivist and Cartesian foundations of the discipline. The implication is two-fold: firstly there should be continued encouragement of the exploration of alternative philosophical foundations of the discipline; and secondly, Continental philosophical foundations (and the alternative conceptualisation of 'what is a project') can be used as an access point for further project management research. It is argued that the Continental philosophical framework established in this thesis will be an invaluable grounding for further studies attempting to access the 'lived experience'. Continental philosophy brings attention to the personal experience, the concrete experience in all its uniqueness, the mundane and the emotional (to name a few areas of inquiry) and defends the value

of all these perspectives. It diversifies the viewpoints from which we examine project work in an attempt to build a more complete understanding.

Another key implication is that there is now a growing body of literature disclosing that the 'lived experience' of project work is not controlled, linear, or 'execution-follows-plan'. Rather, the work is messy, dynamic, challenging, and puts demands on our organisational capabilities. Again, this highlights the importance of research that breaks free of traditional instrumentation focus and deals with the actuality of the project experience. This insight challenges the primacy that is commonly given to planning and control in the discipline's research efforts.

The thesis also provides efficacy for the use of alternative research methods. Methods that incorporate arts-based elicitation can be used in future studies wishing to access the 'lived experience'.

Finally, the development of the project-space model based on theoretical concepts, highlights how theory can be made manifest in the everyday tools of project practitioners. It perhaps highlights the criticality of the theories underpinning project management research and how this pervades the disciplines practice through project managing tools.

10.2.2 Implications for project management practice

This thesis also has implications for project management practice. For example, the problem of classifying project work into discrete categories is flawed. All work is on a spectrum of more or less projectyness. As such, organisations and practitioners need to take care in their use of project categories; and the subsequent methods, tools, processes; that are assumed to be necessary based on this categorisation.

The next implication is a result of the disclosure of the 'lived experience' of project work. If project work is messy, challenging and full of ups and downs, what are the organisational structures and culture required to deal with this? Clearly, assuming that 'projecty' work will run to a plan is flawed. This is a simple statement, however, the implications are significant. It requires a shift from focusing on whether the baseline is being met as to **how delivery can actually be achieved** (i.e. focussing on

enablers and constraints). It is argued this will be a significant social and cultural shift for organisations and practitioners.

Finally, the development and testing of the project-space model provides a new tool to the practitioner community. Specifically, the tool provides project practitioners with a new way of communicating project status and the reason for this status. The implication is that project managers have another tool beyond those offered by the bodies of knowledge to assist them in dealing with the messiness of project work. It is hoped that its use assists in supporting the cultural shift required to recognise the 'lived experience' of project work.

10.3 Limitations of the thesis

The primary limitation of this thesis is the use of a single case study for the assessment of the project-space model (refer Chapter 8). Whilst this does not negate the value of that research, the potential for more general efficacy could be strengthened by undertaking further action research case studies. It is noted that Chapter 8 has not claimed universality in the efficacy of the model.

A secondary limitation is the scope of Continental philosophers and the concepts they have developed that have already been drawn upon. Whilst those philosophers and concepts included in this thesis are central to the Continental tradition, there are more Continental philosophical concepts and philosophers that can be explored.

It is also proposed that there is an opportunity to further validate the alignment of the 'lived experience' with the reconceptualisation of 'what is a project' through further empirical studies. Whilst Chapter 4 and other works such as van der Hoorn and Whitty (2015d) and van der Hoorn and Whitty (2015c) align with the theoretical proposition, the proposition could be tested further.

10.4 Future research opportunities

Reflecting the limitation outlined in section 10.3 and the implications for theory outlined in section 10.2.1, the following have been identified as future research opportunities:

- Further testing of the project-space model in case study/action research settings. This would increase the generalisability (if sort) of the project-space model's efficacy.
- Broader exploration of Continental philosophical concepts and consideration of their application to project management. It is likely that further aspects of the phenomena would be disclosed through the use of other Continental philosophical lenses.
- Further empirical research to confirm the validity of the re-conceptualisation of 'what is a project'. This would assist in defending the need to shift our thinking about how projects unfold and highlighting the futility in expecting that project work is executed to plan.
- Further use of arts-based research methods to explore the phenomena of project work. This could include the methods discussed in this thesis and also other methods not yet adopted within the discipline.

10.5 Final remarks

This thesis has demonstrated the use of Continental philosophical perspectives to explore the 'lived experience' of project work. This has been achieved through establishing alternative philosophical foundations for the discipline and then demonstrating their usefulness in capturing the 'lived experience' of project work. Furthermore, the practical application of these alternative philosophical foundations has been demonstrated in the development and testing of an empirical tool – the project-space model.

The thesis provides new thinking which has been demonstrated as providing the ability to explore and respond (through new tools) to the 'lived experience' of project work. It is argued that such thinking needs to spread throughout the discipline if we wish to improve our approach to managing projects. It is necessary to recognise that projects overtax our capability. And it is the managing of 'capability-taxing' work that makes project managing distinct. With this in mind, there needs to be a recognition that project work is highly unlikely to unfold to an extensive plan and project managers need the tools, skills and cultural environment to discuss the constraints (and enablers) to delivery. In having an honest

conversation about capability constraints, barriers to progress are then more likely to be resolved or the futility of continuing a project made visible. It's a matter of forgetting the 'shoulds' of project management, and dealing with the 'realities' of project work.

11 References

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11.1 Image acknowledgments for Chapter 4 graphical abstract

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12 Appendicies

12.1 Appendix 1: Chapter 8

Board member questionnaire (baseline – action research cycle 5)

- I feel I have the information about project status to assess progress and make good decisions.
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I can easily identify where my attention needs to be directed in this project.
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I can quickly understand the priority and relationship between issues that are preventing the project from progressing.
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I can easily understand what factors are enabling the project to progress.
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I can easily identify what factors may exist in the future that would enable the project to progress.
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I can easily identify what factors may exist in the future that would hinder the project's progress.
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- Any further comments:
    - Response: Open text

Additional **board member questions** (action research cycle 5)

- I would like to see the continued use of the project space model as a tool in this project
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I would like to see the project space model used in other projects I'm involved with
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I would recommend the project space model to other's involved in projects
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- The strengths/benefits of the model are:
    - Response: Open text
- The weaknesses/limitations of the model are:

    - Response: Open text
- Do you feel the project space model is better now than when we started this process? Why/why not?
    - Response: Yes/No
    - Response: Open text
- What has been the best part about using the project space model?
    - Response: Open text

Project manager questionnaire (baseline – action research cycle 5)

- I think about what factors are supporting (or could support) the progress of the project
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I have the tools to effectively communicate the reason for the project's status; it's 'big picture'
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- The project's stakeholders/management understand the reason for the project's status. I can gauge this by the nature of their questions, their advice and decisions.
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- Any further comments:
    - Response: Open text

Additional **project manager questions** (action research cycle 5)

- I will continue to use the PSM as a tool in this project.
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I would use the PSM in other projects in the future
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- I would recommend the project space model to other's involved in projects
    - Response: Likert scale 1 (strongly disagree) – 5 (strongly agree)
- The strengths/benefits of the model are:
    - Response: Open text
- The weaknesses/limitations of the model are:
    - Response: Open text
- Were there any good or bad things about this "action research" process? Things you liked or didn't like? Things to improve of keep for next time.
    - Response: Open text
- Do you feel the project space model is better now than when we started this process? Why/why not?
    - Response: Yes/No
    - Response: Open text
- Any further comments:
    - Response: Open text