ABSURDITY AMIDST PROJECT WORK

A Thesis submitted by

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ABSTRACT

Responding to the call of the 'Making Projects Critical' movement, this thesis questions the status quo of 'iron triangle' project management through giving voice to the human side of the project-based organisation, and reveals the struggle of project workers and the effects project management is having on them. The aim of this thesis is to develop an understanding of the project worker and their quest for 'connection to work', which has the potential to lead to the fulfilment of their occupational values and a healthier workplace.

By way of this thesis I examine in detail the origins of organisational project management and how it has been shaped by our society, which has responded to economic pressures, inculcated certain values, and embraced particular practices. In a way, the development of organisational project management is what our society felt it should do, as it strived for certainty in dynamic and uncertain economic times. However, as my analysis shows, what looks like economic certainty has come at a cost to the project worker, and therefore society in general.

The worlds where projects occur, such as construction, software development, infrastructure, manufacturing, the retail and defence supply chain, and the education and healthcare system all relate to each other in complex interconnected ways. To deal with the unsettling economic uncertainty this brings, the management class embraced the discourse of measurement and control that we recognise as scientific management. From this springs managerialism, which is a universal way of thinking about organisations, and about who in the organisation should be the privileged decision-makers. I present the case that as organisations have evolved and adapted to their changing environment, so management discourse has evolved, and a variant that I describe as projectmanagerialism (projectmana·´gerialism) has emerged and prospered. This variant comprises the ideals and beliefs that underpin organisational project management practices. These practices centre on the practitioner - the project manager, and the project management tools and techniques they contribute to the organisation for the purpose of bringing its project work to completion. But project management is not cognizant of the human condition, and it disrespects the occupational values of the worker by preferencing managing to cost and time targets.

This thesis comprises of a collection of four interconnected publications that disclose the 'lived experience' of project workers, project managers, and their interaction with senior management. The publications explore how project managers cope and navigate the organisations they work in, and how they cope with senior management's perceptions and impositions on their projects, and the personal impact the project world has on them as well as the project worker.

Methodologically this thesis embraces phenomenology, in that it attempts to address the matters of project management from the perspective of the conscious experiences of individuals. This means that it considers how project management appears to individuals and how project management authentically and inauthentically structures their experiences of the world. Broadly speaking, Chapter 4 (paper 1) considers how the modern Project Management Office (PMO) has come about by taking a Foucauldian archaeological analysis of the situation. Over more than a century it charts how various powers have shaped the function of PMOs and affected the experiences of people who work in and around them. Chapter 5 (paper 2) is a first-person perspective of sham behaviour driven by the discordance of intentions from PMO management. Through a dramaturgical analysis, the study reveals how the ideals of project management can situate the project worker, project manager, and senior management in a relationship with each other where they are required to act out roles and create performances to function and survive in project working conditions. Chapter 6 (paper 3) examines the significant negative impact project work conditions have on the general well-being and physical and mental health of individuals who work in projects. The conditions are replete with ambiguity in roles, goals, authority, resourcing and so on. Project workers feel insecure about their role and purpose, and this leads to reduced professional self-esteem, job satisfaction and morale. Finally, Chapter 7 (paper 4) takes a systemic approach to the various situations the previous chapters present, and illustrates using an influence diagram how the ideology of projectmanagerialism shifts the burden of fixing senior management's disappointment with project delivery methods onto project managers and the PMO, and particularly to the project worker. As a result of senior management's ignorance of the reality of project work, and because project managers and their professional associations have a self-serving agenda to projectify the workplace, senior management are never confronted with the fact that their disappointment is created by conditions they themselves have sanctioned. The paper also illustrates how projectmanagerialism creates conditions for stress-laden project

work, and coerces the project worker to renounce their hard-earned occupational values for the capitalistic values of managing within time and cost constraints.

The thesis endeavours to substantiate the claim that projectmanagerialism is creating Camusian Absurd conditions for all those involved in delivering project work. Through the chapters and in the final discussion, it asserts that this Absurdity can be moderated in several ways. Most influentially, senior management's expectations and understanding of the reality of project work can be reset. This can be achieved by universities and Project Management Professional Associations embracing 'lived experience' research in their curricular. Furthermore, the effects of Absurdity on the project worker can be tamed by the project management profession embracing scenario-based training. These measures will have a significant impact on how project work is conceptualised and managed in the future. With these changes taking effect, rather than indulging in a nostalgia for a universal methodology, senior management and the project workforce will have increased their capability to rebel against projectmanagerialism. Together senior management and the project workforce could co-create a fit-for-purpose management methodology for delivering project work that is sympathetic to the occupational values inherent in the work of the organisation, and consequentially contribute to human flourishing.

Keywords: projectmanagerialism, absurdity, making projects critical, systems thinking, ethnography, dramaturgy, influence diagrams, occupational stress, worker satisfaction, health and wellness, ethics, impression management, cultural factors, sham compliance, organisational project management, project management office

CERTIFICATION OF THESIS

This thesis is entirely the work of Eric John Darling except where otherwise acknowledged. The work is original and has not been submitted for any other award.

Student and supervisor's signatures of endorsement are held at USQ.

Associate Professor Stephen Jonathan Whitty
Principal Supervisor

Dr Bronte van Der Hoorn
Associate Supervisor

STATEMENT OF CONTRIBUTION

Table 1: Details of Contribution

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LIST OF ABBREVIATIONS

Abbreviation	Explicit Statement
AgilePgM	Agile Program Management
APM	Association for Project Management
BoK	Body of Knowledge
CANSO	Civil Air Navigation Services Organization
CMMI	Capability Maturity Model Integration
CPPD	Certified Practicing Project Director
EVM	Earned Value Management
GAO	Government Accountability Office
IJMPB	International Journal of Managing Projects in Business
IJPM	International Journal of Project Management
IT	Information Technology
MBA	Master of Business Administration
MPM	Master of Project Management
MSP	Managing Successful Programmes
P3O	Portfolio, Programme, Project Offices
PERT	Program Evaluation and Revie Technique
PMBoK	Project Management Body of Knowledge
PMI	Project Management Institute
PMJ	Project Management Journal
PMO	Project Management Office
PPP	People, Planet, Profit
PRINCE2	Projects IN Controlled Environments
TAFE	Technical and Further Education
USA or US	United States of America
WBS	Work Breakdown Structure

GLOSSARY OF TERMS

Absurdity	In Camusian terms, absurdity is the futility of seeking meaning and order in a cruel and incomprehensible world. There is a tension between the human need for order and the irrationality of the world.
Back stage	Where the individual practise the techniques of impression management.
Dramaturgy	Dramaturgical acts are the means by which people communicate in presenting the self to their audience. The workplace is a rich source of dramaturgy.
Ethnography	The study of people and culture in their habitat.
Front stage	Where the individual performs their rehearsed act as a character.
Human Factors	Human Factors refers to applied psychology and physiology to understand how people interact with the interfaces of their vocation.
Indigenous management or native management practices	These are management practices that have been derived from work taking place in a particular context. They would emerge as *an aspect of the work* itself. Conducting the work would consequentially bring these practices into being.
Iron triangle	A perceived constraint of time, cost and quality that project-based work must meet. While time and cost are limited resources, quality specification must be met.
Management Class and Managerial Class	Management is a hierarchy of functions and people, including entrepreneurs, professional managers, owner-mangers, administrators, engineers, and professional specialists who hold the top positions in enterprises (Kerr, Harbison, Dunlop et al. 1960). The management class have “neither the capacity nor the will to become the dominant ruling group”, they are the “agents of stockholders, of state bureaucracies, or in some cases workers’ councils” who are “prone to become conformists rather than

	leaders" (Kerr, Harbison, Dunlop et al. 1960, p.244).
Managementism	Managementism is the expression within a community of a biased commitment to assumptions about the central role of management in contemporary society.
Managerialism	Managerialism is a way of describing how all the elements of an organisation exist and relate to each other in a way that reifies the existence and power of the 'manager'.
Occupational stress	Psychological stress stemming from pressures of the occupation.
Project	"a temporary endeavour undertaken to create a unique product, service, or result" (PMI 2017, s.1.1)
Project Management	"the application of knowledge, skills, tools and techniques to project activities to meet the project requirements" (PMI 2017, s.1.1).
Project Management Office (PMO)	An organisational business unit established to solve specific issues within dynamic organisations. Some research has said it may be impossible to identify specific PMO models, rather typologies of PMO's would be more fruitful.
Projectification	Projectification is *the act* of projectising the workplace. A projectised workplace is where all work is regarded to be a project. Therefore the projectified workplace relies on the project construct and project management techniques to structure work activities.
Projectism	The expression within a community of a biased commitment to assumptions about the central role of projects in contemporary society. It is the attempt to claims all endeavours as a product of project management.
Projectmanagementism	A belief that projects have more similarities than differences, therefore the performance of all projects can be optimized by the application of project management skills and theory. It describes how all the elements of an organisation exist and

	relate to each other in a way that reifies the existence and power of the 'project manager'.
Scenario-based training	A type of training that immerses the individual in a learning environment to mimic the realities of an actual situation. This type of training is extensively used in military, health and policing.
Senior management	In this thesis senior management refer to the management class that oversee the project manager and project worker. I define this as including the CEO and any other C levels that emerge, further Executive General Managers, General Managers and Heads of. In the government context this could include the Senior Executive Service levels 1-4.
Systematic Review	A type of literature review that collects data and critically appraises the findings and research methods to build an enhanced knowledge of the extant literature. Systematic reviews are methodical, comprehensive, transparent and replicable.
Systems thinking	A holistic approach of understanding how constituent parts interrelate and influence one another as part of a system.

CHAPTER 1 INTRODUCTION

The extended title of this thesis is:

Absurdity amidst Project Work:
Recognizing the impotence of projectmanagerialism and rebelling against it

Understandably, this begs an explanation, as some may consider it a little strong. However, disciples of Albert Camus will notice that it subtly inculcates elements of his philosophy of the Absurd by using terms such as Absurdity, impotence, recognising (though he used consciousness) and rebelling. His philosophy focuses on concrete existence, real life situations, on the relationships between human beings, and how we elucidate 'truths' out of our individual experiences. To begin, for Camus, the Absurd exists in our relationship to the world. That is to say that we as human beings have a yearning for unity, we have a deep desire for rational explanations as to how the world works and for comprehending our part in it, and for knowing how we fit in to this explanation. Put more simply, we not only desire meaning in terms of an understanding of the world and our place in it, we also ascribe meaning to it. We create the meaning out of the experience we have. Camus notices that we live with Absurdity, though we might not consciously notice it all the time. For Camus, Absurdity is a way of describing the feeling that arises when we have a sense that 'the meaning of things' is on the horizon, but we never actually resolve this meaning. To be clear, for Absurdity to manifest we need to feel or experience discordance. For that to happen you need an intrinsically irrational world, together with a person who is looking at this world, and trying to make sense of it. Absurdity is therefore the tension between our yearning for unity (a rational explanation) and the indifference the world has to this yearning. The world cares nothing for our theories. Moreover, if the world does provide an answer, perhaps in terms of an ideology, then Camus would say this is a delusion. It is on these terms that projectmanagerialism will enter my thesis, as an ideology that provides a rationalised explanation for how project work 'ought' to function.

In the Myth of Sisyphus, Camus prescribes three ways of dealing with Absurdity. Firstly, one can commit physical suicide and die. Secondly, one can commit philosophical suicide. An

example of this would be to embrace an ideology that offers a rationalised explanation of the world and reasons one's place in it. Thirdly, one should rebel, but in a particular way, not completely aligned with other existentialists. Camus dismissed the way that Sartre and others said we should rebel. Their way was to create your own meaning, craft your own identity. But for Camus this was to deny the absurd, which is another form of delusion. He argues that we should take on the absurd, embrace it, realise it is there and that it pervades all of our existence, and that we can never get past it and never come to terms with it. We should rebel by 'holding it' by staying alive and enjoy living despite it. Yes, we should appreciate the world is meaningless, but it can be a meaningless beauty. His philosophy of the absurd is therefore to embrace our experiences as our own, and by doing so we give them significance and consequently imbue them with importance and ascribe them with value. The values we extract or elucidate from our individual experiences are the 'truths' mentioned earlier. Our experiences are our own individual meaningless experiences, which are uniquely yours and mine. While none of this might appear very practical at the moment or related to project work directly, Sections 7.6.2 and 7.6.3 ties our experiences to the importance of occupational values and how these contribute to worker identity and authenticity.

To return to the title directly, there is *absurdity amidst project work* in that there are many situations where a 'theory' or 'methodology' is levied on the project workforce, and that theory or methodology creates more problems than it solves. The project management profession have a view on how project work should be managed, and senior management have a view on how project managers should manage it. At the core of these theories or methodologies are a set of mutually supporting beliefs and values, which I have designated as an ideology called projectmanagerialism (see Section 7.9.2). Put briefly, projectmanagerialism is an ideological movement that has the effect of sustaining the privileges of the senior management and project management classes, and quells their yearning for a sense of unity. As I argue in this thesis, projectmanagerialism creates Absurd working conditions in that they are replete with ambiguity, superfluous processes, unethical activities, illogical decision-making, and disregard for project workers' occupational values. In a sense these conditions are impotent, in that they do not result in satisfaction. Ultimately, this situation can prove detrimental to the physical/mental health and well-being of project workers, and to an organisation's aspirations for originality, agility, innovation, and adaptation.

Potency is the capacity to direct one's will (will power) towards a goal, and to sustain this will until the goal is reached. Impotency is therefore an inability to act or corral one's attention towards a goal through to completion. In the final discussion (Section 8) I argue how projectmanagerialism can be considered to be an impotent ideology, as it immerses organisations and individuals in vagaries, and provides a 'one way' approach rather than how to rescue and turnaround a situation from failure or disaster. It also holds back innovation and places individuals in ethically questionable and unproductive conditions.

We must therefore save ourselves from succumbing to the delusion of impotent ideologies such as projectmanagerialism by rebelling! For Camus, to rebel means to stand for something, to run towards something rather than run away from something. Perhaps put differently, to rebel is to assert one's values and derive an identity from that. Applying this to project work is to accept that work at the task or project level is inherently meaningless but refuse to let it remain, as one can craft authentic meaning out of it that is not bound by any ideological construction of the situation. As a project worker, a person 'on the tools' so to speak, one must be enabled by management processes to embrace the work and assert one's own occupational values, and through this create what the work means and create what the work is worth. This is a central point of my thesis. Senior management and the project management class such as those in a Project Management Office (PMO) should not allow projectmanagerialism to influence a situation, but rather by accepting the reality of the work, enabling the occupational values to play out, and consequentially disclose the identity of the individuals and organization involved. Put more simply as a Camusian application of absurdity in the workplace, it is not that individuals and organisations complete work, but rather by rebelling (rejecting normative ideas and ideological constructs and embracing the values embodied in the action of the work) it is the work that shapes and creates the identity and authenticity of the individual or the organization that 'rebellingly' performs it. While section 1.2 explains the structure of the thesis, it is worth briefly emphasizing how the four papers in this thesis relate to each other to achieve the aims of the thesis captured in the title.

Paper 1 (Chapter 4) charts the historical development of what we now call the Project Management Office. I emphasise how its evolution is a function of the various internal and external environmental pressures over the years. I present the case that today the PMO suffers from an identity crisis in terms of a confusion of purpose, as it is now more than ever

evolving under complex pressures to meet all sorts of organisational and human requirements. There is a narrative about today's organizational environmental conditions that did not make it into the paper, which is nevertheless pertinent to the findings. This is that organizations are no longer like they were in the late 1800s or early 1900s. Just from a physical perspective, one was able to see all that the organization was, literally. One could stand in a vantage point in a factory and see all the parts and appreciate how they related and relied on each other. All the parts of the factory and the manufacturing and assembly process were more often than not owned by one person. But today conditions are different. It is largely impossible to find a vantage point to see all the parts of the factory process which now more frequently dispersed around the country or across continents, and owned by various corporations. It is not easy to be a senior manager and know how all parts of the organization related to each other, or how they function, or why they function the way they do. Senior management have largely given up trying to know such things, or don't even wish to know. But to return to the state of the PMO for a moment, we can in this way consider the state of the PMO as an indicator or sign of the struggle all levels of management are having with conceiving how to direct and control work.

Paper 2 (Chapter 5) uses a confessional tale from inside a modern PMO of how a PMO employee was coerced by PMO management into performing and establishing an act of fake compliance. On the face of it, one might say that this was a deceitful act with malevolent intent, and those involved should be punished in some way. However, the project was hailed as a success. Moreover, had the PMO managed the project as Senior Management had actually wished them to, the project workforce would have undoubtedly suffered financial problems. So actually, this study brought to light how senior management, because of their facile understanding or their little regard for the actuality of the requirements of project work, had constructed an unworkable project governance framework. In a way, that had subconsciously sanctioned the dramaturgical behaviour of the PMO to mask the reality of work from themselves. So perhaps one could take the position that it is senior management who were the villains in this situation, and situations like it, because their ignorance of managing work ultimately put great mental and moral stress on those individuals specifically involved in the PMO and those in the world of the project more generally.

Paper 3 (Chapter 6) presents a holistic view of the overwhelming negative impacts of project work on the health and physical / mental well-being of the project workforce. Perhaps project work should be outed and considered hazardous to health or organisations should be obliged to warn personnel and provide support. Perhaps organisations should govern project work better to safeguard health matters or perhaps the project management profession should design project management methodologies and systems to consider the human dimension, say to help them better deal with ambiguity.

Paper 4 (Chapter 7) argues a different approach. It makes the case that trying to do better and more of what we're currently doing is actually making the problem worse. In fact, what we're doing is making the conditions around managing project work more and more absurd, by forcing generic ideas about controlling and directing project work onto a workforce that intrinsically knows that these generic ideas do not help them with completing the work. They are impotent ideas, which resonate with the training of a management class that have little insight or experience with the work they are managing. By identifying that project management is experiencing an ideological crisis, I am able to suggest a solution, which is that senior management countenance the development of management methodologies that are sympathetic to the work at hand and the environment they take place in. Practically, this means that senior management and entities like the PMO should allow and enable the methodology to emerge from the work. If institutions that educate managers, such as Universities, embrace the lived experience research in their curriculum, then the management classes would begin to recognize the impotency of ideologies such as projectmanagerialism, and join forces with their project workers to rebel against it.

In the spirit of philosophical inquiry on matters of project management, let me conduct a short thought experiment. Imagine we woke in the morning to find that what we know as classical or traditional project management, as well as the project management professional associations and the various project management methodologies, were all gone. Would their vanishing make any difference? Would the world be worse or better for it? Answers to these questions are beyond the scope of my thesis. However, what my thesis does is direct attention to many of the absurdities for those wishing to preserve project management as we know it.

Through my four papers (Chapters 4 to 7) I outline four absurd situations, which are also summarised in Figure 1. The first is that of the absurd relationship between the PMO and their organisation, as the PMO believes that it is the bastion of 'best-practice' project management, but at most can only claim to give advice on 'common-practice' project management, and assist with presenting a positive impression about the organisation's project management maturity. Second is the absurd relationship between the project management office (PMO) and senior management. The PMO is largely aware of senior management's ignorance or disinterest in the realities of work, yet the PMO feels powerless to campaign for change in the methods dictated by senior management, and would rather pass on the burden of superfluous work to the project workforce and mask how they actually go about managing the project work. Third is the absurdity of the relationship between senior management and their project-based organisation. Senior management asserts that they provide structure and control, realising a promise that productivity and efficiency can be brought to work that appears disorganised and chaotic. However, senior management actually favour ambiguity which leads to uncertainty, which further leads to stressful working condition that imposes very real burdens on the physical and mental wellbeing of project workers.

Finally, absurdity can be found in senior management's relationship with themselves, as they exemplify our culture's quest for ideal project management practices. The fact that we find project management methodologies in our contemporary organisations is sign to our culture's rationalistic thinking. The rationalist believes in the power of reason, in a grounding set of beliefs, which through these beliefs they can make sense of the world and control it. Practically, the rationalist's position may be that we cannot completely understand it all that we need to understand right now, but the rationalist positions themselves *as though this goal is achievable*, one day! In this way we can consider senior management's absurd or discordant relationship with themselves to be a sign to rationalist thinking, with their belief in scientific management and managerialism, and now more recently as I show, projectmanagerialism. Consequentially, senior management are stewarded to create organisational policy and processes that make 'no sense' to the worker in the project-based organisation, because these processes ignore the craftsmanship or occupational values, which necessarily are a real feature of their work. These 'off-the-shelf' project management methodologies are as a result impotent, in that they do not propel the project workforce to

create the project output, but rather they reify the role of project manager and burden the project workforce further. I submit these are the absurdities amidst project work.

1.1 Background

The practice of project management has been widely adopted by organisations that previously would have developed their own 'indigenous management practices'. These 'indigenous management practices' would have been derived from work taking place in a particular context. The characteristics of this work would be infused by historical, cultural, and political perspectives, as well as distinct ontological forms, such as individual craftsmen or groups, or the various materials/minerals they worked with, or the types of relationships they had with their patrons. An organisation's 'indigenous management practices', which is the means and manner by which they directed and controlled the work, would emerge as an aspect of the work itself. Put another way, conducting the work would consequentially bring the 'indigenous management practices' into being.

However, the rise of globalisation and information availability through the internet has created a situation where ideas are shared more rapidly than at any time in history. The answer to organisational problems of how to manage their non-operational initiatives has been project management, without regard to validity.

Normative ideas have emerged in project management and business practice for over a century and the rapid proliferation of 'best practice' often proposed by the management consulting sector are in scientific terms obsolete claims. The dominant literature on project management has related to tools, processes and practices often with overtones of scientific management. Acknowledgement of the human side to project management has been made by the practitioner community but often in fleeting statements, and they lack the critical lens to analyse phenomena. The academic community has made significant advancement in critical studies and the lived experience of the project-based workforce, particularly in the last 20 years.

There is a claim that the theoretical foundation in project management that has focussed on traditional methods has reached its limits and that the future of project research is better understanding the human environment fit (Cicmil, Williams, Thomas et al. 2006; Winter,

Smith, Morris et al. 2006; Young & Young 2012; Ansar 2018). A number of practitioner led factions of project management such as ‘complex’ and ‘wicked’ attempt to address scenarios beyond traditional project management, but again they do not have the ‘took-kit’ to fully contemplate the matter.

The scientific management of Taylor (1911) has deeply influenced contemporary project management, as many of Taylor’s concepts have been selectively adopted particularly for their productivity traits. Perhaps due to the appeal of Taylor’s time and motion studies to capitalist ideals, his concepts on people attaining a social benefit while being able to improve their personal position has been overshadowed. Mintzberg (1989) considered Taylor’s work to be preoccupied with efficiency and measurability at the expense of social benefit and social values. While Gramsci (1975) considered that the subordination of workers to management and the instilment of repetitive work may create a situation where workers choose socialist revolution, though it is worth noting Gramsci was an Italian Marxist of the 1930’s.

Interpretations of Taylor’s work often portray an image of time and motion studies being more interested in making factory workers produce more by working harder and faster, but this is a superficial understanding. Scholars of Taylor’s (1911) time and motion studies would be aware his concepts aim to make work more efficient, but this efficiency is directed at eliminating the unnecessary, reducing over-engineering, eliminating redundancy and loss of human energy. Supporting my assertion that Taylor has been misinterpreted, Jones (2000) describes how time and motion studies created a culture of scrutiny and control rather than improvement. However, there is a view that Taylor’s work has been adapted to higher levels than Taylor originally envisaged, and that in some ways behavioural theory has become more sophisticated in response to the misinterpretation and misapplication of Taylor’s work (Stoney 2001). As I further point out in the discussion, though the details of which are certainly beyond the scope of this thesis, the management class could re-engage with a more nuanced understanding of Taylor’s time and motion studies, and appreciate them as a social mechanism to engage the worker, observe the work, understand and appreciate the values inculcated in the work, and consequentially make informed changes. In this way management can engage with the worker to design ‘native management methods’ for work that improve the plight of both the worker and the company through ‘indigenously developed’ approaches.

If we take a step back from the popular portrayal of Taylor's studies and re-imagine them today while considering his underlying philosophy, I think there is a possibility of reconnecting the management class with the worker, which in turn enhances management's appreciation of the practical aspects of work. While it is correct to say that Taylor did not have the tools of organisational anthropology or ethnography to investigate his theories on the sociology of work, it is equally unreasonable to say he did not recognise its existence.

1.2 Thesis Structure

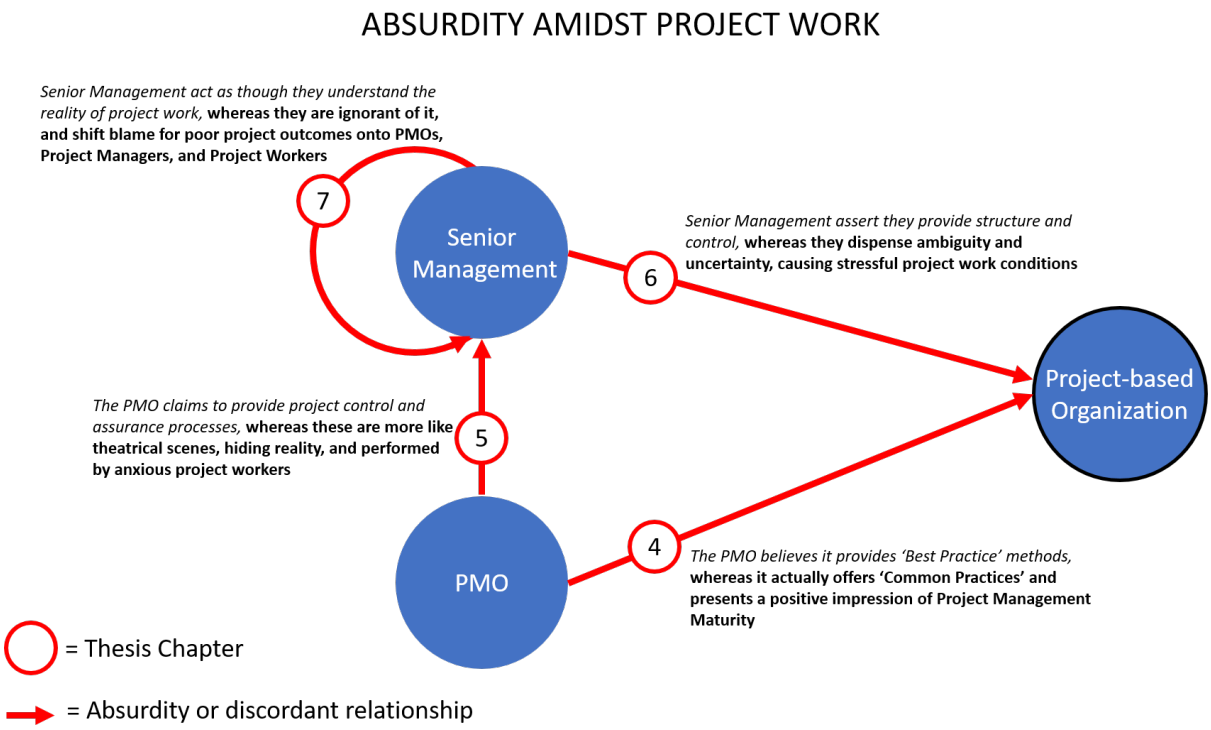

Figure 1: Thesis Structure Diagram – Absurdity amidst Project Work -

This thesis presents research that is directed towards revealing the situation of human beings amongst the construct we know as the project-based organisation, and the effect this is having on them. Figure 1 attempts to represent the structural relationship of some of these issues, and it does so by extricating Senior Management and the Project Management Office (PMO) from the construct of the Project-based Organisation so that various discordant (absurd) relationships can be examined, analysed, and the consequences and possible solutions can be discussed.

Ontologically, the entity in Figure 1 labelled Project-based Organisation comprises Senior Management, the PMO, and the Project Workers, who are the occupation staff that actually compete the work that ultimately is recognised as the project output.

My research began with paper 1 (Chapter 4) as I attempted to understand the PMO and reconcile its relationship to the organisation. Drawing on my many years in project management practice (see sec. 3.1.1) I saw the PMO as the 'canary in a coal mine' for examining the changing working conditions in the various project-based organisations I had experience of. Figure 1 aspires to act as a visual aid to help convey my thought process from identifying the problems of the PMO construct, to the individual groups and cultures that enable and need constructs like these to exist, to the various physiological and psychological impacts upon the project worker, and finally what could be done about this.

1.3 Research Contributions

The research developed through my candidacy has resulted in a number of contributions to the project management research and practitioner communities. These contributions are:

1.3.1 Chapter 4

- Identification of where the concept of the PMO and thus 'enterprise project management' came from and how it evolved; and
- Identification of the missing aspects of project knowledge, particularly the overreliance on normative literature and the focus on tools and techniques above the anthropology of project organisations.

1.3.2 Chapter 5

- Establishing dramaturgical methodology in the project management literature; and
- Reporting of an ethnographic case study of the culture and behaviour of a PMO.

1.3.3 Chapter 6

- Establishing a model of occupational stress in project management;
- Revealing the impact of the occupational stress on project workers;

- Proposing positive coping mechanisms and competencies to counter occupational stress; and
- Identifying the interaction of projectmanagerialism and its effects on humans.

1.3.4 Chapter 7

- Reveals how projectmanagerialism causes an absurdity loop in that it becomes a self-fulfilling prophecy creating a high stress impost on those who practice it and disappointment by those who enforce it;
- Developing an appreciation of the ideology of projectmanagerialism;
- Identifying how projectmanagerialism entices senior management and project workforce to engage in the act, thus perpetuating the scenario; and
- Highlight the need to teach 'lived experience' knowledge to senior management and project workers.

CHAPTER 2 RESEARCH DESIGN AND METHODOLOGY

This section of the thesis intends to provide further context of the research framework of this thesis. This thesis is the culmination of four research papers that have either been published or are under review as part of my PhD research program. These papers comprise Chapters 4 through to 7. Due to constraints of the journal publications the papers were often distilled to fit within the limitations imposed, this meant the full explanation of the research methodology was not always presented in the publications.

2.1 Research Aim

The overall aim of this thesis is to develop an understanding of the situation of the project workforce and their quest for connection to their work, as understanding this has the potential to lead to the fulfilment of their occupational values and a healthier and more productive workplace.

My research aim is driven by two key experiences. Firstly, my long history of work in the field of projects and my broad exposure to managerialism. Secondly, my master's degree studies, which exposed me to scientific management, yet left me trying to answer questions regarding the sociological aspect of management, which existing knowledge neither appears to be able to answer, nor particularly interested in answering. Essentially, I wanted to investigate how organisational culture intersects with individual behaviour, and how this affects people which then impacts on business outcomes. There is a vicious cycle occurring in many projects and further understanding of this may aid in turning it into a virtuous cycle. To further extrapolate, in the world of project management we have practices that have become somewhat standardised and expected to universally solve the problems that we face in project work. In my early career we were encouraged to develop management systems that would specifically address the problem we faced in our specific context, this approach was bespoke and innovative. Many project management practices have become 'expected' as part of a standardised project management methodology, the nature has changed from one of practically fixing a problem to one of compliance with the 'standard' for project management. If I can use an analogy from cooking, a chef knows how flavours and cooking techniques converge to create delicious meals where as someone following a recipe book is unlikely to

have a deeper understanding of how ingredients affect each other and how to adjust temperatures or cook times to create a different effect. Just as commercial kitchens could be considered high stress environment so too can the project workplace, this research aims to develop an understanding of how the practices of project management are actually used and how these impact upon the project workers view, sense of self and values.

Prior to this thesis, there has been very little phenomenological research relating to the cultural aspect of project work and even less taking a systems perspective to understand how organisational culture impacts on occupational values, which in turn influences the health and wellbeing of the workforce. However, there is a personal toll individuals are paying in terms of occupational stress, and this is a recurring theme that practitioners describe as persistent in the workplace but they lack the mechanisms to articulate this. Chapters 5, 6 and 7 make an attempt to develop methodological tools to assist with this articulation, such as the illustration of dramaturgical scenes, identifying known project work sub-stressors, and using influence diagrams to illustrate the nature of relationships of entities in the project-based organisation.

2.2 Overarching Theoretical Framework

2.2.1 Philosophical Positioning

The overarching philosophical positioning of this thesis is Phenomenological, in that it is concerned with the lived experience and 'being in world'. In the context of this thesis, a phenomenological perspective of work appreciates work 'as it appears' to the worker. It is an authentic attitude towards life that embraces our human condition. Perhaps more specifically, it is an authentic attitude towards things, towards activities, towards work. It deals with how our tasks and the familiarity of our occupations, if considered from their structure, can solicit from us feelings of beauty, meaning, and purpose, as well as turn us away from these things or put them out of reach. Therefore, it is not that 'the world' makes sense on a grand scale, it is that 'what I'm doing, and why I'm doing it' makes sense to me. Amongst phenomenology, a philosophy of the Absurd recognises that there is no intrinsic meaning in the world and there never will be, as creating meaning is what human brains do. As Camus put it, embracing the Absurd is living without hope, which is like sailing a ship without a keel. However, a philosophy of the Absurd advises that we can create passion, joy, gratitude, meaning, purpose, and beauty from the tasks we experience in the day-to-day.

Authenticity is not a term to be considered lightly in phenomenological studies. To be inauthentic is to consider oneself, one's work, and one's state of being according to the value and definition which others place on it (Smith 2017). Being authentic means rejecting the definition imposed by others and choosing one's own path in life and enacting one's own values (Smith 2017). While humans are social animals they are more political than any other and as a way of social organising they create inauthentic labels to arrange people (Anowai & Chukwujekwu 2019). There is an important aspect of being authentic, as the inauthentic state is capable of causing injury to the inner harmony and stability of a person (Sanchez 2007). In seeking authenticity of the self and thus clarity of 'what is' we must practice phenomenological research as it relates to the authentic being (van Breda 1977; Sanchez 2007). Phenomenological research in project management is gaining interest with van der Hoorn (2017), Usher (2018) and Bell (2020) being recent examples of doctoral theses in the field. My effort to align with the Making Projects Critical movement as described by Hodgson and Cicmil (2006b) in developing 'lived experience' knowledge is through the philosophical positioning of phenomenology.

2.3 Research Methods

This section informs the reader of the research methods used in the individual papers that make up this thesis by publication.

2.3.1 Chapter 4

2.3.1.1 Theoretical Framework

The theoretical framework of the systematic review is to collate the findings and the research methods of studies on a chosen theme, this ensures that all relevant knowledge on a topic is critically reviewed and synthesized to develop an understanding beyond any individual study (Campbell, Pound, Pope et al. 2003; Tranfield, Denyer & Smart 2003).

2.3.1.2 Research Aims

The intent of this chapter was to review the literature on the project management office and identify gaps in the extant literature. Much of the literature on the PMO is normative and

there is a need to further knowledge that is empirical and related to the study of humans and their interactions.

2.3.1.3 Research Methodology

The research methodology of this systematic review is based on Tranfield, Denyer and Smart (2003) and Cook, Mulrow and Haynes (1997). In this study we aimed to understand how the PMO has developed and what its purpose has been from the earliest examples to current times. We examine all instances of PMO's from early 'conservative, high-church' journals to released government documentation to normative and professional literature and finally the academic literature that has been prevalent since the late 1990's. The research methodology was selected as it ensures scientific rigour in the examination of all relevant knowledge within the subject area.

2.3.2 Chapter 5

2.3.2.1 Theoretical Framework

The theoretical framework of this chapter is Goffman's (1959) dramaturgy. People present themselves in society as an act, there is a back stage where they prepare and a front stage where representations are given off to form impressions in the mind of the audience.

2.3.2.2 Research Aims

The second paper builds upon the discussion from the first, which is to investigate how project staff interact with their temporary project organisation and more broadly how this fits within the host organisation. The key theme observed is people present themselves through a process of dramaturgy, we use impression management to make our work and ourselves appealing to others, senior management are vulnerable to such dramatic acts and lastly there is an ethical consideration to this persuasion.

2.3.2.3 Research Methodology

The research method of this ethnography takes influence from a number of qualitative research examples and guides including: Fetterman (2010), Emerson, Fretz and Shaw (2011), Van Maanen (2011), Sergi (2012), Creswell (2013) and Garsten and Nyqvist (2013). In this ethnography we employ a series of vignettes rich in narrative detail to describe the social

interactions of developing a project management tool in a PMO environment. The research methodology was selected as a validated lens through to examine the sociological interactions of a PMO and how they fit within the broader organisation.

2.3.3 Chapter 6

2.3.3.1 Theoretical Framework

The theoretical framework of this chapter is based upon Cooper and Marshall (1976) *model of stress at work*. Cooper and Marshall (1976) model is highly cited and accepted as authoritative on the subject of occupational stress.

2.3.3.2 Research Aims

This chapter aims to address a hidden and insidious account identified in the ethnographic study of paper two. The theme of stressful situations was observed when the project workers professional values were compromised. This paper aims to apply an established model of occupational stress to the extant literature in project management for stressors and the symptoms.

2.3.3.3 Research Methodology

The research methodology of this study was also by systematic review, as this has been discussed in Chapter 4 I will not reiterate other than to highlight the key difference was the addition of the Cooper and Marshall (1976) *model of stress at work* as an established model to base this research upon. The research methodology was selected as it ensures scientific rigour in the examination of all relevant knowledge within this specific topic.

2.3.4 Chapter 7

2.3.4.1 Theoretical Framework

The theoretical framework of this chapter is a systems thinking approach taking into account how interrelated aspects of the organisation affect each other.

2.3.4.2 Research Aims

The final study of this thesis consolidates findings of the previous studies while exposing projectmanagerialism. We argue that projectmanagerialism is a doctrine amongst the management class, which has senior management and their project workforce trapped in a Camusian Absurdity loop that reinforces projectification behaviour through the application of simplistic methodologies and tools, and validates constructs such as the Project Management Office (PMO).

2.3.4.3 Research Methodology

The research methodology of this study was influence diagrams as a graphical representation from the systems thinking field. This study draws on the work of Senge (2011). The research methodology was selected as it ensures scientific rigour in the development of understand how seemingly disparate matters combine and the effect this has on the worker.

CHAPTER 3 BACKGROUND AND CONTIGUOUS LITERATURE

3.1 Background

This thesis presents my research toward better understanding project management from a human perspective and how the project construct fits within the sociological and political structure of organisations. My intention is to add to the knowledge of the 'Making Projects Critical' movement and go beyond the tools and techniques discourse which has dominated project management literature since the 1950's (Hodgson & Cicmil 2006a). In essence this thesis makes contributions in methodology and knowledge to the literature on organizational project management.

3.1.1 Why I needed to undertake this research

My experience as a project manager spans 20 years across air traffic control, defence, energy and telecommunications. At one point I managed 15% of the state of Queensland's electricity infrastructure $billion capital works programme. I have a master's degree from Sydney University, a Certificate IV in Project Management from Technical and Further Education (TAFE) - prior to the unfortunate neutering of the TAFE system, a Certified Practicing Project Director (CPPD) with The Australian Institute of Project Management and hold several professional certifications such as PRINCE2, MSP, AgilePgM etc. This broad experience across industries and organisations provided me with an opportunity to witness project management being applied in the hope of better outcomes at the expense of ignoring the less understood aspect of behaviours, organizational culture and professional values that inextricably connect people in the workplace. I knew that there was a political and a human dimension and that system thinking and anthropology/sociology could help describe these phenomena, however a number of studies needed to be conducted. Therefore, I set out to examine specific instances, describe overt and clandestine factors and apply rigorous research methods such as the systematic review and ethnography a technique used by organisational anthropologists, finally I developed influence diagrams. This thesis builds upon the call for research of Hodgson and Cicmil (2006b) who consider mainstream project management research to be reliant upon functionalism and that most project management text books and professional associations promote the normative construct consisting of knowledge, skills,

tools and techniques.

A pertinent aspect of my research relates to developing my understanding of Management Science (not to be confused with Scientific Management), I have come to view myself as a social scientist. The PhD programme was an opportunity as a social scientist to develop and apply a research lens to the problems we face in the project management field. My research clearly demonstrates sociological aspects cannot be divided between 'project management' and other rationale organisational departments, they are interconnected through the organisation, particularly to the senior management group. The period during which I am compiling this thesis has been extremely unusual. My city of Canberra has experienced seven months of lockdown type conditions due to a combination of the 2019/20 Australian bushfires and COVID-19. For close to a month Canberra had the world's worst air quality due to bushfire smoke, it's usually amongst the best and health experts have serious concerns for the population who endured this. COVID-19 has affected all nations in many ways and although Australia at least to date has been less impacted on a health level. I raise these as examples of where better evidence-based planning could have prevented global crisis. From climate science to public health to business and the management of projects, as a society we need to appreciate what constitutes knowledge and give less credence to populist belief.

The Ottoman Empire was among the worlds most advanced societies. In the 16th century positions held by the educated and gifted were supplanted by those in favour with the Sultan, nepotism and favouritism surpassed the scientific and learned minds of the day (Çarıkçı, Özkul, Oksay et al. 2009). It has been argued the change to promotion of the less competent was a critical factor in the fall of the Ottoman Empire (Çarıkçı, Özkul, Oksay et al. 2009). I feel this situation is repeating and if allowed to go unchecked will result in a poorer society, a depleted earth and the further loss of societal knowledge. My concerns are not without basis or allies, Kavanagh and Rich (2018) describes the diminishing trust and respect for facts, data and authoritative sources particularly from a United States perspective. In my privileged career, I have met with a number of world leaders, two in particular were memorable, Sir John Sawers former Chief of MI6 and General Peter van Uhm retired Chief of Defence Netherlands. Both men articulated the need for a fairer more equal society, with less disparity between the very wealthy and those on the lower echelons. Further, they both warned of the dangers of populism and how this results in a decline of knowledge. A fairer more democratic society inherently enhances national security and although the debate on democracies being

less war prone is mixed, the wars they do experience are certainly far less severe than other regimes (Rummel 1995; Benoit 1996; Graffin 2015). In biology, greater diversity in genetics results in a population more able to adapt and survive in a changing environment (Jacobs, Haig, Talbot et al. 2006; Dawkins 2009). The sentiment of Sawers and van Uhm reminded me of the work of Professor Sir Michael Marmot such as Marmot (2004) on how evidence-based health policy creates better societal health outcomes and how workplaces can have long lasting impacts upon our health. Further, Hodson (2001) describes how a sense of self-worth, self-respect and the integration with society is a necessity to live a fully realised life and how the importance of respectful employment is central to this. While I am forward in my criticism of capitalist values in contemporary organisations this should not be confused with a bias toward socialism, rather I see myself as balanced. Selected principles of Taylorism certainly established the United States as a formidable economy however new ideas augmenting the established came along such as quality systems by Dr William Edwards Deming and Dr Joseph Juran. The story of Deming's rejection in the US and acceptance in Japan is well known and regarded as a major factor in the rise of Japanese manufacturing. As projectification has become a dominant system of management it would be negligent to continue the normative narrative at the expense of critical thought. Appreciating the decline of the organisation is unlikely to occur within the period of the next quarterly report, an investment in critical, evidence-based practice is a longer-term proposition. This thesis is influenced by the Making Projects Critical movement in that it goes beyond the functional discourse of 'iron triangle-esque' topics instead focusing on people and their environment. I argue better training, education, leadership of people and a senior management group who understand their role in projects is what will lead to better project outcomes, not more iron-triangle. Ultimately my PhD is about better understanding the project workplace as an environment and identifying an evidence-base to make it a fairer and healthier place to work, and better still – flourish.

3.2 Contiguous Literature

Chapters 4 to 7 within this thesis presents three papers that have been published and one that is currently under peer-review. Each chapter contains its own literature review specific to the chapter. However, as each chapter has been developed as part of a research series each paper contains thematic connections to the previous as the research has evolved. These themes include:

i. Project Management Office as an enterprise approach to project management;
ii. The culture of project organisations;
iii. The effect of projectmanagerialism on the worker; and
iv. The acknowledgement that senior management have a considerable role to play in project work beyond what is currently enacted.

3.2.1 A explanation of terms

This thesis attempts to be precise about its use of terms, as all too often vagaries and silent qualifiers cause problems in understanding and can misdirect our attention from the nuance of an explanation of a phenomenon. In this section I want to be clear about my use of the following terms.

3.2.1.1 Management: When used without a qualifier such as stakeholder or environmental, management is generally considered to be an activity that takes place in an organisational setting. It comprises forecasting and planning, organising, commanding or directing, coordinating and controlling the use of organisational resources to accomplish organisational performance goals (Schermerhorn, Davidson, Factor et al. 2016). These are still based on Henri Fayol's principles of management, except that he does not relate them to a subject (i.e. 'use of resources') or refer to an intention (i.e. 'satisfying organisational goals'). More broadly, management is the act or activity of taking charge of something (McGrath 2018).

3.2.1.2 Managementism: The –ism suffix forms a noun that is used to identify distinctive practices, which generally has ideological or philosophical underpinning, in the sense that these practices are rationalized by a set of interconnected or self-referential beliefs, rather than empirical evidence. In this way, Managementism is used to denote the expression within a community of a biased commitment to assumptions about the central role of management in contemporary society (Dubnick 2005). Management is therefore seen as essential, particularly with regards to figuring out what appropriate action is required, when there is ambiguity in directives, and when there are concomitant rule and standards judgements required concerning actions (Lynn Jr, Heinrich & Hill 2000). It is distinguished from managerialism (defined shortly) in that it makes no overt normative claims (Dubnick 2005) about the nature and application of management practices.

3.2.1.3 Managementization: This embraces the agenda, promotion, and extension of Managementism as a practical force into all spheres of life, including the metamorphosis of Management into the concept of self-management, the idealization of the individual as a particular type of self-managing entrepreneur, and the hope that a manager's role is to manage these entrepreneurial individuals (Maravelias 2011).

3.2.1.4 Managerialism: This describes the system of interconnected and sympathetic beliefs and their concomitant social structures, which support and enforce the notion that organizations have more similarities than differences, and the aspirational belief that organisation performance and problems are optimized and solved by the application of generic management skills and theory, and that the application can only be enacted by a manager (Klikauer 2015). Therefore, 'the manager' is central to the concept of managerialism (Locke & Spender 2011). The –ial suffix denotes 'of or relating to', while the –ism suffix denotes the state or characteristics of things that manifest because of underlying principles. Succinctly, managerialism is a way of describing how all the elements of an organisation exist and relate to each other in a way that reifies the existence and power of the 'manager'.

3.2.1.5 Project: The practitioner community generally accepts their project management association definition, which is a project is "a temporary endeavour undertaken to create a unique product, service, or result" (PMI 2017, s.1.1). However, the lived experience literature considers the concept of 'a project' and 'project work' differently. For example, a project is not an objective 'thing' with universal features, but rather it is a type of work that manifests to an individual or organisation, such that it is an experience moderated by the inherent capability to manage and perform the work (van der Hoorn & Whitty 2016).

3.2.1.6 Project Management: As with the definition of project, the practitioner community generally accepts project management to be "the application of knowledge, skills, tools and techniques to project activities to meet the project requirements" (PMI 2017, s.1.1). Alternatively, the lived experience literature considers the concept of 'project managing' differently to 'project management', in that the former comprises a far broader set of practices than the latter (van der Hoorn & Whitty 2017), including structures of tacit knowledge (van der Hoorn & Whitty 2019)

3.2.1.7 Projectisation: This describes *the act* of extending the project construct into the organization or workplace. A projectised workplace is considered to produce customized products and can be conceptualised as having high production complexity and low levels of routine operations (Arenius, Artto, Lahti et al. 2002; Chiocchio, Beaulieu, Boudrias et al. 2010).

3.2.1.8 Projectification: This embraces not only *the act* of projectising the workplace but also the *consequential reliance* individuals and organisations have on both the project construct and project management techniques to structure activities (Midler 1995; Packendorff & Lindgren 2014). It is also used to describe the phenomenon of how the projectised workplace presents itself to individuals (Grabher 2002; Maylor, Brady, Cooke-Davies et al. 2006; Lundin, Arvidsson, Brady et al. 2015; Godenhjelm 2016) and how this phenomenon occurs across society (Munck af Rosenschöld, Honkela & Hukkinen 2014; Kuokkanen 2016; Murray Li 2016; Sanderson & Winch 2017).

3.2.1.9 Projectmanagerialism: (projectmana·′gerialism) A term derived from the work in this thesis that describes the system of interconnected and sympathetic beliefs and their concomitant social structures, which support the notion that projects have more similarities than differences, that consequently the performance of all projects can be optimized by the application of generic 'project management' skills and theory, and that the application can only be enacted by a project manager or a PMO, which can take on the persona of 'super project manager' (Jalote 2003) as it purports to embed project management excellence in the organization's routines and processes (Walker & Christenson 2005; Aubry, Sicotte, Drouin et al. 2012).

3.2.2 Senior management

Throughout this thesis there is an observation that senior management are inextricably linked to the work of projects. The first instance of the Project Office construct identified was an early 1800's scheme to enhance national agriculture production for international trade and increased tax revenue (Bell 1805b). Interest in a strategic initiative such as enhanced economic output and tax revenue could be considered the domain of senior management and senior government figures. Therefore, from the earliest instances of project work there has

been a connection to senior management, however over time their involvement with the work of projects has become weak.
Senior management have risen to their ranks through a variety of paths, and don't always possess advanced management education or training. Senior project sponsors, who are in effect top level management, have for many decades displayed little knowledge of project day-to-day activities and relied mostly on monthly project status reports (Kerzner 2003b; Walker & Christenson 2005).

Senior management seek increased profit margins, though there is an overlap and interconnectedness between all priorities, whereas project staff desire better processes and consider quality and service to be a trade-off problem. (McKenna & Baume 2015). Part of attaining a senior management position is observed as successfully 'surviving' in the corporate world, with skills in identifying enemies and pre-emptively striking before being struck are success factors (Bourne 2011). Power, politics and organisational culture are of central importance to creating successful outcomes (Bourne 2011), whereas traditional project management has focussed more so on the hard skills. The question arises do senior management have the education and skills to effectively function and is the aggressive culture a camouflage symptomatic of their lack of knowledge and ability.

Experience and education of management staff has taken many forms, including organisationally led and universities. In the 1990's the British utilities sector attempted to 'professionalise' their project and program management staff, as PRINCE2 was selected as the formal training development path (Elkington & Smallman 2002). Much of the senior management had begun as engineers, originally joining in non-managerial roles, and they encouraged a culture of thinking as technical engineers rather than as business managers (Elkington & Smallman 2002). Many of the functions of project roles such as risk management were conducted informally, if at all (Elkington & Smallman 2002). The actuality of 'professionalised methods' was mixed, although there was a strong link between active risk management and enhanced outcomes, the PRINCE2 method was deemed weak in this field (Elkington & Smallman 2002). Professional development is more involved than providing a certification program and hoping for the best, an individual's work ethic and world view is also intrinsically linked to their application.

The techniques of PM are applied not necessarily as designed or intended, they're applied as interpreted, and this may have ethical considerations. Aristotelian ethics relates to how people should best live and is about doing what is right (Bredillet 2014). Bredillet (2014) describe the application of ethics as practical knowledge, as it is 'good action' applied based on experience rather than theoretical knowledge. Although the professional project management associations have codes of conduct, it could be argued they are limited by normative classical deontology and should evolve to asking the question "why should I undertake my duty?" (Bredillet 2014). Bredillet (2014) also argues for a shift to values-based ethics rather than on regulations, means and sanctions. Organisations enact policies in order to create change and ultimately better outcomes, however there is an element open to interpretation subject to the ethics of the individual.

Management education has focussed on solutions rather than understanding 'why', scientific management has provided a convenient solution to enable productivity, a narrow aspect of business. Kaplan (2014) identified that senior management education, particularly the MBA program has been influenced by scientific management, and originally the US universities adopted this approach which then spread to the UK, Spain and beyond. As scientific management has become ingrained in the education of senior management there has been a normalisation accepting the approach is best. Senior management are susceptible to impressions 'given off' (Cunha 2013). Examples such as Cunha (2013) demonstrate specifically that senior management are particularly susceptible to performance reporting a function that has strong foundations in scientific management. Susceptibility to scientific management and in general pseudo-science is a vicious cycle, the universal belief in a system of knowledge without the understanding of what constitutes knowledge or evidence-based practice will continue to plague the management field.

As evidence-based practice in the project management field is lacking, hope in scientific management becomes the predominate action even above rational consideration. The US MBA education programs have influenced global ideas on management and these ideas have predominantly contained concepts of scientific management at the exclusion of sociology, geography and languages (Kaplan 2014). Governments have invested in the hope that scientific management will deliver better outcomes even in non-business areas such as education (Fountain 2008). In UK businesses aspects of scientific management were slowly adopted over many decades albeit in a selective way (Smith & Boyns 2005). Therefore, given

the investment senior management have made in adopting scientific management to their organisations they have placed hope in its promise.

Given the lack of deep experience and missing education in project work by the senior management cohort it is reasonable to say projects are an ambiguous and somewhat unknown field for this level of management. Often the actions and concepts instigated by senior management lack efficacy. Answering the normative question frequently requested of this group, how we improve project outcomes may best be responded to by firstly reflecting within.

3.2.3 The PMO

This thesis focuses on the organisational entity the PMO as a means to observe an enterprise approach to project management. Prior to my research, the literature on PMO's was mixed and ranged from an early 1800's idea for improving agricultural performance and trading between nation states (Bell 1802), to the post 1950's concept of the PMO which is often as we see this entity in current times, to the more contemporary organisational research approach to the PMO (Dai 2001). Although a cluster of US Defence Acquisition University officer development reports were published in the 1970's including Arnette (1973), Massem (1973), Smith (1973), Hodder (1974), Green (1975), Schmidt (1975), Cooksey (1976), Davis (1976) it has only been in the last 20 years that peer-reviewed research on the PMO has been pursued in earnest.

The US Defence Acquisition University publications of the 1970s almost entirely focus on the human side of the PMO, frequently they were authored by military officers undertaking post-graduate qualifications. Development of Defence capabilities lead through a PMO are typically staffed by civilians, the military officers posted to these positions need to transition from an authoritarian environment to one where subordinates are involved in decision making (Cooksey 1976). The change in leadership style from military to civilian while still being in a military organisation is likely to be confusing and result in the loss of positional power for the officer (Cooksey 1976). Appearance management and creating the right impression in PMO's was a problem articulated by Green (1975) who considered negative media attention on Defence projects particularly from a cost overrun perspective to be problematic. The scenarios described by the US military literature of the 1970's contain themes of ambiguity and ineffective management training for the scenarios faced by practitioners.

In contemporary times the PMO has become part of the organisations power structure (Aubry, Müller, Hobbs et al. 2010), and a commodity that is used by individuals to further their own agendas by advocating 'best practices' based upon normative ideas. The PMO is seen as a locus of coordination for the total individual workload and has a mandate for balancing efforts (Aubry, Hobbs, Müller et al. 2010). When project delivery problems are encountered, changes to the PMO are expected, but changes to PMOs don't make improvements (Aubry, Hobbs, Müller et al. 2010), as despite the promise of 'best practice' the establishment of PMOs often leads to further disappointment by senior management (Ward 2013). Changes or evolutions of the PMO could be considered as a way to keep the value (project management routines and process) that has been created previously. However, there is no evidence that any such value created is sustained from one configuration to the next (Aubry, Hobbs, Müller et al. 2010) . This begs the question, what is driving the change and evolution of the PMO? Perhaps one hypothesis not yet considered is that it is part of the projectification agenda, as it can take on the persona of 'super project manager' (Jalote 2003) simply because it purports to embed project management excellence in the organization's routines and processes (Walker & Christenson 2005; Aubry, Sicotte, Drouin et al. 2012).

3.2.4 Projectification

Projectification is a term with little appreciation in the practitioner community though wide acceptance is observed in the academic community. The state of projectification is a scenario where the organisation relies on the construct of project management to enable business operations (Midler 1995; Packendorff & Lindgren 2014; Midler 2019). The government sector particularly has been targeted as desiring reform to break free from the perceived shackles of bureaucracy, inflexibility and unresponsiveness (Young, Young, Jordan et al. 2012). Responding to this movement, the New Public Governance concept has been established to make public agencies more 'business-like' (Carter, Danford, Howcroft et al. 2011; Young, Young, Jordan et al. 2012). A feature of New Public Governance is the promotion of temporary project organisations to areas that traditionally would have been managed as more permanent business units (Clegg & McAuley 2005). Therefore, New Public Governance in a sense 'is' the projectification of government organisations, and it is undertaken with little scrutiny other than being prescribed as 'best practice'. Midler (1995) observed a process of projectification by conducting a longitudinal study of the French automobile manufacturer Renault and their transition from a classical functional organisation

to project-based organisation. The instigators of the projectification initiative inside Renault were north American 'management experts' (Midler 1995). However, this scenario of American management projectifying a French firm is perhaps to be expected, as these management experts are simply perpetuating the management approach they have been taught in US management schools (Kaplan 2014).

While Gareis (2006) describes the project-oriented or projectified organisation in terms of 7 characteristics of the organisational environment, I recast some of these to draw out the underlying values and silent qualifiers to illustrate how each of these can make a statement about what is regarded as important or worthy inside a projectified organisation, and how power is shared or transferred, not that it can't be revoked, to the project management professional or to their proxy the project management office.

- Management by projects is an explicit organizational strategy *(original)*
- Projects and programmes are *to be treated* as temporary organisations *(recast)*
- Networks of projects, chains of projects and project portfolios are object of consideration for the management *(original – but what does consideration mean)*
- Project management, programme management, and project portfolio management are *the dominant* business processes *(recast – they must be given the first 3 points)*
- *Only the project management experts have the* know-how provision and assurance *ability to enact said project management process (recast)*
- Project management competence *can only be* ensured *(aka enforced)* by a project management office and a project portfolio group *(recast)*
- A new *project* management paradigm is applied, characterized by teamwork, *project* process orientation and empowerment *of the project management office (recast)*

Considering these 7 points, the relevance of projectification to this thesis is that management by projects has become a dominant approach to work. That tasks are all goal orientated and being seen as one who can progress these tasks, is made highly visible in the projectified environment, and this structure lends itself well to the underlying philosophy of the US management approach. Perhaps what can also be appreciated form this 7 point description and analysis is the agenda of the project management professional, and how they shape the organisation and its decision making processes to reify their role by the implantation of the project management office. Through this thesis I hope it becomes comfortable to sit with the idea that today, the operational structure and business processes inside a project organisation

have been diverted (projectified) to the agenda of preserving the role of project manager, rather than the successful delivery of the project work. In a nutshell, this is projectmanagerialism.

3.2.5 Project-based organisations

A discovery of this thesis was that normative ideas are dominant in much of the practitioner literature and practice of project staff. Projectmanagerialism needs the right conditions to 'live' and these exist in project-based organisations. Turner and Keegan (2000) describe the transition from mass production to bespoke design with unique requirements as a challenge of late 20th century business. The classical management concepts of the 19th and early 20th centuries were based upon a strong theoretical base, however the project based-organisation has evolved from practice and is lacking an evidence base (Mintzberg 1979; Huczynski 1996). The project-based organisation could be described as an organisation type where the majority of its product or services offering is developed by bespoke design (Turner & Keegan 2000). A project-based organisation could be a single company or a consortium combining their expertise to deliver a product (Hobday 2000), Joint Strike Fighter, Channel Tunnel and US Defence General Purpose Cloud are examples from diverse sectors. Hobday (2000) found the project-based organisation is better equipped than a matrix organisation to respond to the emergent properties of a complex, high value product, systems, networks, capital goods and construct development. However, Hobday (2000) also noted the dialectic aspect that a project-based organisation was inherently weaker in the coordination processes, they are inefficient, struggle with mass production and large-scale rollouts, essentially they are different organisations solving different problems. If we look at the Italian design firm Pininfarina who create timeless design in industrial products they limit their work purely to design. The engineering and manufacturing aspect is handled by partner firms such as Ferrari automobiles and Princess Yachts, these firms form consortiums to co-develop products.

3.2.6 Lived experience in project management

The lived experience research relates to understanding phenomena through appreciating social constructs. It is therefore a sub-genre of phenomenology. In project management, Hodgson and Cicmil (2006a) suggest lived experience research is an essential avenue for a better understanding, as current trends in the project management literature focus on the idealised

concept of the project. Despite the proliferation of formalized project management in recent decades, projects continue to disappoint (Geraldi, Maylor & Williams 2011; van der Hoorn 2015). The discipline of project management as we know it today has developed from positivist roots, and it is this outlook that hinders our ability to create a fundamental change (Bredillet 2004). Alternatively, there is a research movement of the lived phenomena of managing project work, such as van der Hoorn (2015) who uses the xylophone and glockenspiel to have project managers interpret their lived experiences of managing projects through music, or Che Ibrahim, Costello and Wilkinson (2018) in-depth interviews seeking to understand the reality of project alliance teams, their integration and collaboration. In addition, and perhaps a good example of lived experience research in project management, is that of Usher (2018) who reveals that the lived experiences of the client-side project manager do not reflect what we traditionally understand as project management, rather what they actually do is more akin to Design Thinking. In essence, the lived experience research on project management is underpinned by a continental mode of enquiry, which seeks to holistically understand that which falls into the subjective reality of someone managing project work, while taking into account the physiological and psychological dispositions of those involved, their histories, and a historical appreciation of the work environment (van der Hoorn 2016).

3.2.7 Summary

In order to follow the development of the themes and concepts discussed by this thesis, some highlights from the contiguous literature should be kept in mind:

- Senior management do not actually have an evidence-based craft skill to learn and this makes them susceptible to ideologies like scientific management and managementism. As their operating environment has become more complex, they have embraced the projectification of the workplace as a solution. But this has not brought the satisfaction hoped for and further detached them from the realities of work.
- The PMO is regarded as a ‘super project manager’ and firmly part of the organisation power structure. But senior management continue to be disappointed with project outcomes, and so PMOs make changes, but there is no evidence that any reconfiguration makes any difference. Perhaps PMOs are actually vehicles to drive the projectification agenda?
- Projectification and ‘best practice’ still appear to be synonymous. In some settings, projectification might be just the excuse an oppressed bureaucratic workforce needs to

help them cut through red tape. But there is still no evidence that brining in project management methodologies leads to improved productivity. In fact, there is evidence it increases a workload burden on the organisation and the worker.

- Project-based organisations do achieve results, as they combine expertise and resources in novel ways. But who or what is actually responsible for this? Is it actual senior management and the projectification of the organisations that produces these amalgamative results, or is it the achievement of the occupational workforce who are managing their work in some way despite the noise of projectification?
- Lived experience research in project management is stacking up evidence that the stories we tell about how projects unfold doesn't actually match with how we experience project work. And while these stories perpetuate unhelpful ways of working, one has to pose the question, what if stories about the reality of project work prove to be more beneficial, both to organisations and the occupational workforce?

CHAPTER 4 THE PROJECT MANAGEMENT OFFICE: IT'S JUST NOT WHAT IT USED TO BE

4.1 Preface

This chapter provides the full accepted manuscript from the first peer-reviewed paper developed as part of this doctoral research. This paper titled *The Project Management Office: it's just not what it used to be* is published in the *International Journal of Managing Projects in Business*. This paper served as a literature review in that it identified the initial gaps in the literature on PMO's. In terms of my overall thesis the PMO is an absurd entity. The paper investigates the social origins of the PMO and reveals it to be something of a 'canary in a coal mine' for the working conditions in project-based organisations. While initially created for practical production management reasons, over the years it has been seized by various individuals and groups for alternative reasons, including the project management associations and their membership, for the betterment of their individual circumstances and the perpetuation of projectmanagerialism. Its existence is absurd because it purports to be the custodian of 'best-practice', yet its practices are inextricable from the knowledge base of its staff, which is constitutively and inexorably related to a project management body of knowledge that is normative. PMOs regard common practice as best practice.

4.2 Key point of this chapter relevant to this thesis

- PMO's have evolved out of a practical need to run complicated government schemes.
- The engineering projects of the 19th and 20th centuries shaped expectations on PMOs.
- The PMO entity has become a commodity for the organisation to trade upon.
- In the 1970's, the US Defence sector saw a significant body of human factors research in projects, noting PMOs are akin to a wartime operations group and this brings a uniquely stressful environment.
- There are many myths about PMOs, particularly about them being a source of best-practice, though there is very little if no evidence of this.
- There is a distinct anthropological/sociological element missing from the literature on project work.

- PMOs no longer provide pragmatic ways of managing non-operational work, and are more concerned with 'best practice' appearance in a general sense, rather than the individual pragmatic practices.

4.3 Citation and co-author details

Table 2: Citation details of original publication

Citation details	Darling, E.J. and Whitty, S.J. (2016), "The Project Management Office: it's just not what it used to be", *International Journal of Managing Projects in Business*, Vol. 9 No. 2, pp. 282-308. https://doi.org/10.1108/IJMPB-08-2015-0083
# of times cited	55 (citation details from Google Scholar, as at 9 July 2020)
Writing	Eric Darling (90%); Dr S. Jon Whitty (10%)
Data collection and analysis	Eric Darling (100%)
Quality Review	Eric Darling (90%); Dr S. Jon Whitty (10%)

4.4 Abstract

Purpose

The Project Management Office (PMO) phenomenon is a dynamic and regularly evolving feature of the project landscape. The functions and practices expected of the PMO differ as widely as the industries and organisations, which host them. By uncovering the documented and undocumented history of the PMO and its practices we see how PMO's have developed to current times, how PMO's develop their ideas, how useful PMO's are, and what associated activities they partake in.

Design/methodology/approach

In this paper, the authors conduct an extensive literature review of the academic and non-academic literature. The first phase involved searching academic journals and published theses. The second, deep searches with Google Scholar and Books using a variety of parameters to capture the changing nomenclature of the PMO over many years. These searches discovered lost academic literature within university libraries, examples of very early essays on the project office and numerous government reports on PMO and project office undertakings.

Findings

This research reveals how the form and use of the structure we now call the PMO has evolved and adapted over time. In recent history the PMO has evolved to be the central repository for tools and methodologies for this non-operational work. The PMO has become an asset, a commodity to be traded upon, and a badge to be worn to attain certain privileges.

Research limitations/implications

This research identifies a number of deficiencies in existing literature. Particularly highlighting that many practices, methods and PMO typologies exist, frequently their custodians tout these as 'best practice'. Although some research has been conducted by academics on PMO's vast gaps exist in PMO literature.

Practical implications

This research identifies a number of assumptions in practitioner literature and professional practice. Organisations both private and public are investing enormous resources in the pursuit of enhancing project management outcomes often turning to the PMO concept to resolve their problems. However there is limited evidence to suggest PMO's create a favourable return. If we were to use medicine as an example, prior to a scientific approach in medicine the field relied on potions and magic, however medicine changed to evidence-based practice, this has led to enhanced life prospects. An evolution in project management doctrine may enhance outcomes.

Originality/value

This review of the PMO which possesses archaeological attributes in its historical context adds a rich understanding to organisational knowledge by considering the history of the PMO and the dramatic shifts in its purpose over a prolonged period of time. The discussion draws out the critical PMO topics to be addressed and includes a critique of practitioner and academic knowledge.

Keywords: Project management office, best practice, organisational knowledge, standardization

4.5 Introduction

The organisational entity known as the Project Management Office (PMO) is a relatively recent addition to the project landscape. The functions and practices expected of the PMO differ as widely as the industries and organisations which host them. This paper, aims to highlight the function and practices of the PMO and its evolution through time. The research focuses on the English written literature only.

The PMO and its various forms have been described from a historical to contemporary perspective to highlight its evolution, its changing function, and how it now presents itself to the corporate world. The various underpinning philosophies of the PMO are also explored. Key themes of perceptions of the PMO as observed in the practitioner and academic literature are examined to understand what PMO's are and what they do.

4.6 Defining the PMO

The definitions used to describe the PMO have evolved over time. Early examples appear to discuss the PMO in relation to a functional application.

The earliest reference to a Project Office pertains to the improvement of agriculture in the United Kingdom. This 1800's view of a Project Office although not defined appears to be a proposal for a type of national governance and strategy in relation to agriculture, such as a Project Office for the Board of Agriculture (Bell 1805a).

A 1950's style definition of the PMO is consistent with how we view the PMO in contemporary times suggesting that it is; 'A group of project management staff assigned to bring about the development of an asset on behalf of the project sponsor' in other words an organisation dedicated to achieving a specific goal (Gaddis 1959; Kerzner 1979, 2003a). In this setting PMO's were an organisation within an organisation to establish closer relationships with the client further the PMO supports the project manager in carrying out his or her duties therefore the PMO is a pragmatic customer focused entity (Kerzner 2000b, 2003a). Departing from the traditional iron triangle concept Kerzner (1979) introduces a human element in the project office of how individuals professional training affects their preferred work style, further suggesting approaches to Project Office staff engagement.

Today the PMO is an organisational business unit. It is claimed that it is established from the necessity to enhance the ability of the organisation in the delivery of projects (Aubry, Hobbs & Thuillier 2007; Project Management Institute 2013). The PMBoK Guide (Project Management Institute 2013) page 11 describes the PMO as a management structure that; 'standardizes [sic] the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques.'

The PMO is seen as a dynamic entity 'to solve specific issues within dynamic organizations' (Aubry, Hobbs, Müller et al. 2010). Further functionally diverse PMO's have been observed to act as advisors to project teams and as direct managers of project teams (Ward 2013).

The PMI's PMBoK guide discussion on the PMO matures over time, neither the 1987 or 1996 1st edition PMBoK Guide mentions the PMO (Wideman 1987; Project Management Institute 1996). The 2nd edition was the first PMBoK Guide to discuss the Project Office, this was provided in two sentences stating Project Offices come in a variety of forms and have a variety of functions (Project Management Institute 2000). The 3rd edition states PMO's are varied but they may be used to coordinate the organisations business objectives though projects, further description of key PMO features is listed (Project Management Institute 2004). The 4th edition of the PMBoK Guide has a similar description to previous editions (Project Management Institute 2008). The 5th edition of the PMBoK Guide included new material including a general description of three PMO typologies being Supportive, Controlling and Directive, however it does say several typologies are observed (Project Management Institute 2013).

Table 3: PMO Synonyms

A number of synonyms are used to describe the PMO	
Project Office Project Management Office Program Management Office	Project or Programme Management Centre of Excellence Project Portfolio Office, and Project Performance Office

The PMO may be known by other titles within organisations who have not adopted the Project Management Institutes concept of 'best practice' PMO's.

4.7 The problem

There is a claim of PMO practice, frequently referred to as ‘best practice’ in enhancing organisational project outcomes. PMO’s have been in existence since the early 1800’s (Bell 1805a). The early 1900’s saw the term Project Office regularly used particularly in aligned with civil infrastructure projects. In the 1950’s the PMO evolved to become somewhat recognisable to a modern PMO, often this typology of PMO’s were seen in the apex industries of the time such as space and aerospace (Larman & Basili 2003). PMO’s were certainly seen in commercial and government sectors in the 1960’s and developing through to current times, however it was in the late 1990s that the PMO concept proliferated in commercial and government sectors (Binder 2007). There is a need to understand PMO practices, what makes them ‘best’ if indeed they are; what enables them to add benefit; if they do add benefit then to whom are these appropriated; and primarily where do PMO best practices come from?

4.8 Methodology

This study intends to develop an understanding of how the PMO has developed over an extended period of time, highlighting practices and their respective effectiveness, essentially how have PMO’s developed to their current status. Through this historical context the questions of where PMO practices come from, are they best and do they add benefit can be asked. The literature review study is by means of a systematic review. Tranfield, Denyer and Smart (2003) describe the systematic review as being transparent, scientific, replicable, and an evidence-based methodology which minimises bias. The aim of systematic review in management literature is to ensure developing theory is valid and relevant essentially adding scientific process to a field often dominated by qualitative research, as this is a literature review the research is considered secondary (Cook, Mulrow & Haynes 1997). Additionally, it is highlighted that this research on PMO’s intends to be an explorative in nature leading to future primary research and further development of knowledge. The purpose of a literature review is to examine existing knowledge of the subject, the methodology of how existing knowledge was developed and identify gaps in the existing knowledge.

4.8.1 Method

The research method has focused on a systematic literature review of the academic and non-academic literature. A comprehensive search of the literature was conducted with a particular emphasis on three project management journals (Project Management Journal, International Journal of Project Management and International Journal of Managing Projects in Business), although not limited to the three the study also targeted the various project management associations and their publications concerning PMO's over a longitudinal period. The second source of literature was found by manipulating Google Scholar and Books search terms, this was particularly useful locating non-academic literature and early essays, which are not contained within the academic libraries. The search terms were based on the variety of names given to the PMO over many years. Individual consideration of each published article was taken to ensure relevancy and that the literature took a specific interest in the PMO rather than a fleeting glimpse.

4.9 A Historical perspective of the Project Management Office

A history of the PMO has not been collaborated or described in the literature. Historical documentation of the PMO is deficient. Yet through the many examples of human endeavour to create civil states including, spiritual temples, societal housing, territorial structures, and agriculture, a form of PMO must have existed as either a singular or group of key actors. The reason for the lack of documentation may be placed with language differences, the verbal traditions of past civilisations, and the destruction of paper evidence, due to man-made or natural disasters. Certainly the previous isolation of governments and organisations due to primitive local and global communications, as well as intellectual property protection, may have contributed to these limitations. A timeline of PMO literature is displayed in Table 4.

4.10 From 1800 – 1930: The Project Office

4.10.1 1800s: for running Government schemes

The concept of the PMO has been recorded as early 1805 in Britain (Bell 1805a). Originally the project office was a collective for running government strategy, particularly in the

agricultural sector. However, this also had implications in taxation due to agriculture subsidies and international trade as produce was to be exported in order to enhance the nation's wealth.

During the 19th century, European nations were engaged in competition for resources, this took form by military means and strategic governance. Additionally war, famines, epidemic disease and poor sanitation were commonplace. Therefore many countries established social services such as water and sanitation, and improving agriculture, thereby improving the mortality rate and the countries prosperity.

Bell's (1805a) discussion broadly considers productivity enhancements for Britain's agriculture and taxation system. He was against having large national debt and considered it a hindrance in times of peace and war. The project itself was a national tax scheme designed to encourage productivity with the refinement and implementation of taxes, promotion of agriculture, and the importation and exportation of goods. The project office was the pragmatic group who would run such a scheme. In short, its function was to handle delivery when no other operational structure had the capability.

4.10.2 1900 – 1910: for controlling costs and demonstrating transparency

In the United States of America government audit and accountability documents mentioning the project office can be traced to as early as 1905 (Slichter 1905). Persistent themes of US project offices focus on cost control, originally in civil engineering endeavours and later in defence, technology and foreign aid to name a few. The methods of cost control do not appear to be particularly elaborate rather they gather costs incurred in a reactive fashion. Cost control was a point raised in the UK's House of Commons concerning a Royal Air Force PMO's ineffective budget control and insufficiently trained accounting staff (Great Britain Parliment House of Commons 1971).

The USA had seen government corruption in the form of Tammany Hall, which embezzled large amounts of government funds intended for social services and development projects (Kilroe 1913). The 1900-1910 periods was the peak of the Progressive Era, which was a movement for social and political reform against corruption. As a result of this corruption the

USA government became focused on transparency and published numerous senate enquires, congress documents and accountability audits of project offices. This transparency continues to current times (Fleischman & Marquette 1986).

4.10.3 1910-1930 – the Quango

The US government expands their publication of senate enquires which mention the project office with the establishment of the U.S. Government Accountability Office (GAO) which on behalf of congress investigates how federal government agencies appropriate public funds, specifically of interest are government programs and projects (U.S. Government Accountability Office 2015). However the term project office is not defined. Often the project office is considered to be the group of actors that manage an initiative, control materials, equipment and human resources. Published projects appear to relate to water supply, irrigation and agriculture. In the case of the Tumalo irrigation project the project office was responsible for records keeping, contract negotiation and communication with stakeholders. It is noteworthy the Tumalo project commenced commercially then became controversial due to dealings of its management and was taken over by the state. Largely it did not meet its purpose (Laurgaard 1914). The Flathead Irrigation project commenced in 1904 but was not completed until the mid 1960's. It also had a project office which was responsible for the project in its entirety including overseeing run-off and storage studies, cost estimating, land acquisition, construction, labour supply and reporting (US Congress Committee on Indian Affairs 1919). Given Flathead Irrigation project ran for over 50 years it would be reasonable to say the project office went through many changes during this time, although the functions are not described. Civil engineering projects feature regularly during this pre-war era.

Additionally featuring prominently in the project office literature is the concept of the project office relating to public housing and government employee accommodation (McCarl 1926). This type of Project Office resembles more of a landlord style function rather than the contemporary consensus of a Project Office. When mentioning the Project Office it is often in fleeting comments, the focus of the literature is not the Project Office itself. It appears the Project Office is simply a vehicle through which pragmatic result are achieved. An example of an early Project Office matter is included.

Posting rates – When the rates as above provided for have been approved they should be posted at some point where they can be observed by all employees. Applications to rent buildings or tents should be signed by employees occupying Government buildings and tents, only one copy being taken, this to be filed in the project office (McCarl 1926).

4.11 From 1930-1950: the Project Management Office

4.11.1 1930-1950 – a change in naming convention

The US Government publications continue with civil infrastructure projects and expand into other government sponsored initiatives such as the Hoover Dam and atomic energy. In the case of Hoover Dam, scant description of the Project Office is given. However, reference is given that the Project Office collects and collates the aerial photography mosaic which had been outsourced to Brock & Weymouth Co. Further there is description that the contact for outsourcing contained a requirement specification detailing the photography required by the Project Office (Wilbur & Mead 1933; US Congress Joint Committee on Atomic Energy 1949).

1939 appears to the earliest instance of the term Project Management Office being published (US Housing Authority 1939). The Bulletin on Policy and Procedure was written by the US Housing Authority and relates to public housing which is often referred to as ‘the projects’. The term Project Management Office focuses on the administration of residential accommodation on behalf of the state. The article suggests the PMO should perform maintenance tasks of the building that it is responsible for (US Housing Authority 1939).

4.12 From 1950 – 1995: the Project and Program Management Office

4.12.1 1950 – a means of accountability

During the 1950’s the term Project Management Office surpasses the use of Project Office. There was no mandate or guiding project management body which selected this terminology as they did not appear until the 1960’s (McKenna & Whitty 2012). The term Project Management Office appears to have been preferentially selected. However, it wasn’t to be

until the 1990's that the PMO became a widely adapted organisational entity (McKenna & Whitty 2012).

In the 1950's the US Government continued to publish PMO accountability articles relating to agriculture research, defence, government housing, geology, highway design, water management, large engineering endeavours, various federal projects and programs.

The battle between bureaucratic organisations with their time, quality, cost constraints and the innovative nature of science and engineering has been highlighted almost as early as these project management techniques have been applied (Gaddis 1959).

The earliest military PMO observed in the literature was formed in 1954 as the US Navy Civil Engineers Eleventh Naval District Public Works Office had a PMO since 30th December of that year (US Navy Civil Engineer Corps 1957). The literature does not discuss the features of the PMO other to say it is a 'standard organisation'.

4.12.2 1960 – a pragmatic way to manage non-operational work

The term PMO becomes widely observed in US Government accountability articles of the 1960's. The US Government publishes PMO articles relating to all themes of their 1950's articles with particular emphasis on NASA, US Coastguard, US Defence, US National Science Foundation Division of Polar Research and Education (Barker & Gump 1964; US Congress 1965; US Division of the Federal Register 1965; US Congress Committee on Appropriations 1969).

In the 1960's numerous organisations appear to have a PMO or a PO. However, their form, function and purpose had not yet been defined or described in the literature. From Agriculture and taxation to housing, civil infrastructure, military acquisition, scientific exploration (in space, deep sea and polar) education, numerous government entities and for-profit organisations mention they have a PMO. It is possible these PMO's and PO's evolved naturally from pragmatic beginnings and with the interference of other management concepts were selectively chosen which features to keep.

4.12.3 1970 – the beginnings of a humanistic description

Researchers have pursued scholarly interest on the entity of the PMO since at least the 1970's. Often the research focussed on human interactions, behavioural science and reputation management (Arnette 1973; Massem 1973; Smith 1973; Hodder 1974; Green 1975). All fields are severely lacking in the practitioner-authored literature. Also it is noteworthy that it was the US military which first considered the human dimension in PMO's, therefore the US military considered humanistic research to be useful in achieving their pursuit of improving project outcomes.

The Canadian government commissioned management forum Optimum, does not define a PMO. However they did describe some human elements seen in PMO's. There is a very real team development and maintenance problem with project management teams. The project teams are made up of specialists whose purpose is to achieve project objectives under a team leader. This human relations environment is described as akin to a wartime operations group (Public Work and Government Services Canada 1977).

Diverging from previous publications of the PMO is the body of literature published by the Defence Systems Management College of the US Defence Acquisition University. The series of PMO papers published in the 1970's is the first instance of PMO specific organisational research. These Defence Systems Management College publications Arnette (1973), Massem (1973), Smith (1973), Hodder (1974), Green (1975), Schmidt (1975), Cooksey (1976), Davis (1976) differ from previous generations of literature, which largely consist of government accountability documents or in the example Bell (1805a) a complicated financial strategy enacted at the national level. Instead the 1970s was the period when organisational researchers started to observe what is happening inside PMO's.

Of concern was how an army officer transitions from a military role into a PMO environment. Human traits of personality, interpersonal relationships, as well as job description factors were considered. The findings include officers go from the highly authoritarian military leadership style to a more democratic environment where subordinates are more involved in decision-making. The officer in transition is likely to experience a loss of positional derived power and would need to utilise personal power developed by human skills and technical expertise (Cooksey 1976).

Credibility weakness was investigated in relation to the managerial behaviour and credibility or believability of the PMO staff. Smith (1973) notes that complete credibility is never truly achievable however a number of behaviours can be utilised to maximise the credibility of PMO staff.

Adding to the PMO literature of appearance management, negative media attention to Defence projects are largely based on negative perceptions of inadequate equipment or financial overruns (Green 1975). Successes in Defence projects should be shared with the media, but the public information practice must be considered. A PMO which successfully creates its end product is a must have as a positive media message requires a product which is tangible. The PMO should be candid on security matters. As costs are a heated topic with Defence projects attention should be focussed on the delivery of communication concerning finances (Green 1975).

Staffing projects with appropriate people has been a concern. Massem (1973) enquires what adequate PMO staff are and should personnel problems be as much of a concern as cost, schedule and technical uncertainty (Massem 1973). Massem's work is possibly the earliest human resources consideration for project management.

Interpersonal relations were clearly a pertinent topic at the Defence Systems Management College. A case study examined the relations between a military officer and the civilian colleague within the PMO. Factors highlighted include perception, management styles, communication, and individuals needs and self-awareness of how one's own goals effect relations with the project management team (Hodder 1974). Additionally engineering trained staff ambitious to transition to project management need to developed skills in business, psychology and sociology (Kerzner 1979).

Continuing with the human aspect of the PMO, US military officers as part of their management training are exposed to substantial behavioural science theories such as the work of Herzberg (1959) and Argyris (1957). However Arnette (1973) notes the theory taught to staff does not appear in their practice. Arnette (1973) intended to provide pragmatic advice on how to apply management theory as useable tools. In contemporary times behavioural science is not addressed in depth by key project management publications such as the PMBoK Guide

(Project Management Institute 2013). However the PMBoK Guide since 1987 has contained a brief section on Human Resource Management though largely describing the process mechanics of Human Resources matters as opposed behavioural science (Wideman 1987; Project Management Institute 1996, 2000, 2004, 2008, 2013).

One of the first articles relating to the PMO and using computers to provide automatic data processing support was conceived by the US Defence Department. Schmidt (1975) investigated both feasibility and regulations to utilise the emerging resource of computing. Innovative data processing applications were available at the time, but US Defence Department procurement regulations were seen as a hindrance (Schmidt 1975).

As mentioned previously, costs have been a major factor in PMO literature from both a functional perspective and a matter of perception. Investigating project costs at the initial cost estimating stage was the topic of Davis (1976) research into a US Army PMO. The primary problems with estimates were found to be unforeseen high level changes, inflation, inaccurate cost estimating, technical problems and lack of information (Davis 1976). Davis (1976) concludes the PMO would benefit from learning to deal with uncertainty and improve estimating capability.

It appears the human side of the PMO was an area of interest to the US Defence services during the 1970's, the nature of enquiry is significantly different to all other PMO literature except that of the academic community largely published from the early 2000's to current. Additionally the Defence Systems Management College PMO literature is almost unheard of outside US Defence circles and very little has been circulated since the 1970's, which reinforces the assumption PMO knowledge, may have existed in many different cultures but has been lost (Parise, Cross & Davenport 2006).

4.12.4 1980 – the project managers' tool shed

The decade of 1980's continues to see US government accountability articles published, this is in the same manner as through previous decades.

Numerous PMO literature transformations take place in the 1980's. PMO's are now included in discussions relating to software development. However, the PMO is neither defined nor described. What is known is the US Agency for International Development sponsored an Information and Decision Support System software development, which assists scientists with organising their research. The software project F/FRED is run by a PMO based in Arlington, Virginia, USA (Cady, Pak & Tabora 1988).

In the early 1980's the Project Management Institute began publishing practitioner literature including A Guide to the Project Management Body of Knowledge (PMBoK Guide) (Project Management Institute 2013). In one instance Stuckenbruck (1981) advises everybody who works on a project should know what the PMO does and is responsible for, however neither early versions of the PMBoK Guide or Stuckenbruck (1981) define a PMO. Business books containing the idea of a PMO are published more regularly than any previous time. Business books published during this time contain an essence of engineering focus and the concepts of project management appear to be expected of the reader. Similar to the PMI there was no attempt to define the PMO (Gilmore 1986). However, the increased sharing of the PMO concept may be a factor in why we see a large increase in PMO's during the 1990's.

With the accessibility of personal computing during the 1980's and 1990's computer based technology drove a revival in organisational based project management research, creating expert systems for project planning, control and risk analysis (Hodgson & Cicmil 2006a). Although sophisticated tools and techniques were developed, only the most basic were selected for use by the practitioner community, and often not utilised as they were intended (Packendorff 1995). Tool selection by project managers were not often based on the best for the job, but rather because they were the easiest to use or just good enough (Whitty 2011). There appears to be an emerging theme in the 1980's PMO literature that the PMO selects tools, processes and methodologies, which must be used by project managers.

The World Bank and governments of Asian countries including Indonesia, Philippines and Sri Lanka begin to publish their own articles which briefly mention the PMO, these are similar to the accountability articles the United States has published for eight decades (University of the Philippines 1985; Indonesia Direktorat Jenderal Perikanan Project Management Office 1988; Ekanayake, Navaratne & Groenfeldt 1990; Walker 1990). In the case of a Cameroon PMO it is stated the PMO is responsible for overall guidance, channelling of external funds and the ongoing monitoring and evaluation of project activities. However implementation was left to the 'executing agencies'. Further it is outlined the organisation had a financial control group and a planning group which were separate from the PMO (Walker 1990).

During the 80's and 90's very few scholarly papers on the PMO were published. Alternatively this was the period which saw a large transition from academic and defence related research to professional associations and corporations publishing their view of the PMO.

4.12.5 1990 – a role of benchmarking best practice

The transformation of PMO literature increases pace during the 1990s. The US government continues to publish audits of all traditional PMO's. However, now they specifically audit software and technology PMO's of US government agencies. This shift in PMO's reflects the changes in technological endeavours.

Asian countries increase publishing their own audits of their PMO's. Telecommunications and software development gain a niche in PMO literature (Chua & Scura 1992; World Bank Staff 1997; Cicin-Sain & Knecht 1998; Dube 1998; Middendorp, Thompson & Pomeroy 1999). The water management themes of the earlier part of the century re-emerge in the literature (Spurgeon 1995). And PMI authored PMO articles become more prevalent (Wells 1999).

The 1990's see a pronounced level of business books referring to the PMO entity increase. In addition, these books mentioning the PMO are business focused instead of engineering management books (Toney & Powers 1997; Block & Frame 1998; Cleland & Ireland 1999).

Educational institutions of the US military continue to show the PMO some interest as original research continues to be published in the early 1990's. A Master of Science thesis by

Carol A. Roetzler investigated the dimensions of team performance in a military PMO. Roetzler (1994) identifies 16 characteristics of positive project performance. The characteristics are: Information, Material Resources, Competence, Organisation Support, Mission Clarity, Team Coordination, Commitment, Team Unity, Individual Goals, Team Assessment, Feedback, Empowerment, Leadership, Rewards and Satisfaction.

Additionally Teamwork was highlighted as a critical factor in PMO's and more effort expended here would deliver better outcomes (Roetzler 1994). The research method involved a mixed method approach. The qualitative method consisted of a literature review and open-ended interviews with a range of project staff. The quantitative approach was by the Campbell-Hallam Team Development Survey (Roetzler 1994).

The mid 90's appears to be the period immediately prior to commoditisation of the PMO. During this time numerous business books featuring the PMO are published (Bodunde-Badiru 1996; Kerzner 1998; deGuzman 1999; Dinsmore 1999).

A key theme of business books mentioning PMO's is they are regularly based on the Tayloristic Scientific Management model. The model manifests in project management as the Iron Triangle perceived constraint and certainly is a pre-1960's concept (Morris. 1997 and Engwall. 1995). It visualises the three points of time, cost and quality which the project manager is often bound to in delivering products (Whitty 2010; Project Management Institute 2013). Similar to project perceptions, PMO perceptions have developed without rigour and become the accepted principal. Kerzner (2003a) demonstrates that PMO's are responsible for the development of processes and benchmarking amongst other practices in order to establish best practice. These activities are deemed to have a pronounced effect on the company's bottom line (Johnson, Joyner & Jr 2002; Kerzner 2003a; Rad & Levin 2007). United States of America based consultants are influenced by the American application of the Iron Triangle model and go as far as to suggest a timeline for the implementation of a PMO should be:

- Project level PMO 3 months – 1 year;
- Division level PMO 1 - 3 years; and
- Corporate PMO 3 - 7 years. (Rad & Levin 2002)

The practitioner community continues to publish ‘how to’ guides, with main reasons why PMO’s work or don’t work, the key list of things a PMO should do which in reality is often a list of opinions Kerzner (2003a) amongst others Bodunde-Badiru (1996); deGuzman (1999); Dinsmore (1999) do not substantiate their views with research. Proponents of the Iron Triangle are bound by its influence that they appear to be their own genre of project managers. In this paper the Iron Triangle model is highlighted as a type of thought process and practice, replicated in projects organisations. The practitioner community trend of writing papers and books without substantiated research risks enshrining opinions as fact. Hodgson and Cicmil (2006a) observed that PMO literature pre 1960’s consisted of quantitative method research. Since then the focus on the Iron Triangle model as a paramount theme began to change, influenced by broader matters of organisational research and influencing its application. Even in the 1990s there appears that little evidence or learned thought has been adopted in the mainstream literature concerning PMO’s.

However, the PMO concept is prevalent. Many papers mention the PMO in a sentence or small paragraph, advocating the value of PMO’s in managing projects, or presenting ‘how to’ models for best practice, quoting the PMBoK Guide (Hill 2004; Valle, Silvia & Soares 2008). The PMO ‘how to’ models are similar, advocating a mechanical approach to project management and do not portray contemporary management knowledge (Hill 2004; Valle, Silvia & Soares 2008). Academic research and peer review often has not been applied.

The PMO as a research topic re-emerged in the late 1990’s. It should be noted that numerous university lectures and PhD graduates albeit in other fields began writing opinion pieces or practitioner focussed articles initially during this time, examples include Wells (1999); Kerzner (2000a); Rad (2001). Also at the time, globally there was a rise in post-graduate university courses specialising in project management. Given the environment at the time consisting of a rise in projectification of work, academic authors such as Packendorff (1995); Hodgson and Cicmil (2006a); Maylor, Brady, Cooke-Davies et al. (2006); Aubry and Hobbs (2007) writing catalytic papers, business books mentioning the PMO, the market for university courses and the always looming subject of project failure, the era was primed for a more thorough level of scrutiny by management researchers.

4.12.6 2000's – a commodity to be traded - and traded on

The naming of PMO's or centres of excellence, is a recent phenomenon although one of the first earnest centers of excellence was by IBM in 1996 (Project Management Institute 2011). The contemporary development and refinement of PM text, and the academic descriptions, have rendered PMO's as a distinct discipline. The result is in the acceptance, development and description of the project management office in contemporary literature.

The literature often describes the historical development of project management with little description of the PMO. The descriptions offered regularly repeat each other on the topics of PMO models, best practice, PM maturity development etc. (Binder 2007). Due to the nature and urgency of developing infrastructure in the twentieth century, precedence of tacit knowledge may have superseded academic knowledge. However it is reasonable to deduce that the role of the project manager and the PMO have somewhat co-evolved as a department or group within an organisation.

From around 2000 the PMO becomes a commodity within itself. Numerous study guides on how to pass project management association certifications highlight the PMO. The novel the McClellan Legacy is published which references a PMO, and this is an example of how the PMO has now entered entertainment culture (Doherty 2000).

In 2001 a significant event occurs for PMO's, Christine Dai of George Washington University publishes her PhD thesis: The role of the project management office in achieving project success (Dai 2001). This is believed to be the first PhD thesis focussing on a PMO. The research focussed on three core questions: (1) the impact of a PMO on reported project success; (2) develop an index of functions and services observed in PMO practice; and (3) whether having a PMO impacts on critical success factors (Dai 2001). The research consisted of a mixed method approach, findings include: (1) The impact of a PMO on project success can be described as mixed, organisations were found to experience both enhanced and degraded outcomes with the introduction of a PMO. Dai (2001) did conclude having a PMO is not a supportive factor in better project success. (2) The most frequent PMO service as identified by respondents was 'PM standards and methods' followed by 'consulting and mentoring' additional functions were observed including support and administration (Dai 2001). (3) The presence of a PMO does not impact on a successful project however some of

the PMO functions impact on project success (Dai 2001). Dai (2001) notes research findings are not always neatly packaged and obvious, there may be over variables which are difficult to identify or isolate.

Lastly, Dai (2001) highlights that well-developed and structured literature on PMO's is lacking . Much of the existing PMO information seems to be based on anecdotes, personal experiences and consultants advice (Dai 2001). It's worthy to note that Dai (2001) often refers to the PMI for defining PMO aspects and project management literature, which is not referenced.

Initially commencing this renaissance of PMO research a swell of papers were published by US authors, in particular Rad and Levin (2007), Kerzner (2003b), Kerzner (1998) and (Dai & Wells 2004). The academic backgrounds of these authors was not necessarily aligned to organisational research with the exception of Dai and Wells (Kerzner 1998, 2003a; Dai & Wells 2004; Root 2006; Rad & Levin 2007).

In the case of Kerzner a former engineer, publications are solutions focussed and based on management concepts pre-1960. The literature is heavily based on the scientific centric model and appeals to the practitioner community through the simple step-by-step approach, which at first appears to be pragmatic to the Newtonian-Tayloristic mindset. However, from an organisational research perspective lacks elements such as behavioural science or knowledge management among others (Kerzner 1998, 2003a). As described whilst engineering projects have been one application of PMO's, certainly many more fields have also utilised the PMO concept.

Although the scientific management approach espouses to provide a guide to achieving uniform outcomes in PMO's and project management, with Iron Triangle tools of time, cost and quality referred to as the hard side; the soft side of human considerations are not addressed as well as they could be.

There is an element of PMBoK centricity in some academic published material. Valle, Silvia and Soares (2008) discusses PMO principals as suggested by the PMBoK and in concluding suggest that success between corporate governance and project management is all about the

result. Therefore the PMO facilitates goals into results. However, this key conclusion has not been substantiated, merely suggested. What the study did highlight was the research approach of a South American culture, the cult mentality of adhering to the PMBoK without rational debate and its influence by societal ideals (Whitty 2011).

Rad and Levin (2007) also adheres to the triple constraint of project management stating success is based on any or all of the three elements. Arguing for improved success rate in projects and suggesting the PMO is well positioned to define and implement competency standards for project managers. The first step is to identify characteristics of those project managers who are successful, it is advised to consider a quantitative measure to ensure those selected are successful (Rad & Levin 2007). However selection by characteristics presents its own inherent risk of selection based on familiarity, instead of rational thought (Whitty 2005; Hallgren, Nilsson & Blomquist 2012). Arguing the benefit of a PMO Rad (2001) highlights formal and consistent project management, better cost, schedule, scope and people performance is possible.

There are some exceptions to the scientific project management based research such as Dai and Wells, which investigated the environmental conditions that PMO's operate within, their functions and the related performance differential on projects (Dai & Wells 2004). Although this concept maintains interest of capitalist ideals it also carries themes of Scandinavian and British researchers which take a broader anthropological perspective when attempting to understand organisations.

Distinct in approach to US based project management research is a group of management researchers who come from various countries of the Scandinavian region. Scandinavian and European countries have a strongly ingrained socialist outlook evident in their history of village culture (Barth 1995; Lin 2005). Contemporary political and social outlook continue to reflect the historical social integration and has further embedded these principals into Scandinavian management culture. The contrast between Scandinavian and scientific management approaches are akin to the differences between sociological and functionalism (Hodgson & Cicmil 2006a).

Packendorff is an Industrial Management researcher and one of the earlier Scandinavian authors of PMO centric research. The global literature shows three fundamental deficiencies ingrained in the research of project management and project management office (Packendorff 1995; Hodgson & Cicmil 2006a).
(1) 'the assumed universality of project management theory;
(2) the lack of empirical studies of projects; and
(3) the lack of alternative representations of 'projects'.' (Packendorff 1995)

Packendorff (1995) raises a pertinent point, throughout history much of the practitioner authored PMO papers are not grounded in management science. Neither are many academic papers, Kerzner (2003a) and Rad and Levin (2007) have published PMO articles without referencing or description of how primary data was collected or analysed.

As great varieties of PMO exists in organisations and typology setting may not be complete, Jerbrant (2013) has taken a liberal definition of the PMO when understanding how PMO managers deal with uncertainty and improvisation of multiple projects (Hobbs & Aubry 2008). Improvisation in a multi-project setting has found to be based on creating 'action spaces'. This involved moving away from the scientific and project management concept of time constraints and rigid formal structures. Additionally there are differences between how project managers and PMO managers approach uncertainty. While the project manager exclude non critical matters in a reductionist approach, the PMO manager take a holistic view widening the 'action space' at the program level and formalising project level structure (Jerbrant 2013). The research highlights that multiple approaches to a problem are practised and an area for future research could be how the human cognition interacts with an emerging social decision point.

4.13 Discussion

In this discussion we want to explore the significance of the historical development of the PMO and the various perspectives that can be taken on it. In short, the PMO is perceived as somewhat troublesome as it has become wired into the organizational power structure in complex ways. What's more, its functions, both perceived and actual, are multiple and varied and this does not help with senior management satisfaction or confidence levels. We see that PMO's have been studied by the scholarly community but not much detail is known about

them other than their various types or forms. It is perhaps odd that there is not a large program of research directed towards the PMO as they are having a significant influence on the organization at a structural and strategic level. Because the PMO is so varied both in form and function its performance in necessarily difficult to measure, and this impacts on how it manages to justify and promote its value. Unfortunately, this situation creates many myths associated with the PMO. These myths are about its power, capability, and implementation of practices that are based on substantial evidence.

A historical perspective of the project management office does show how its function and form has been moulded by various environmental pressures over the years. Early on its function and form was relatively clear. Then overtime it has stepped in to shore up operational structures, and even be the forerunner or prototype for them. More recently, and with the prevalence of technology and the project management professional, it has become less clear what a PMO does as it has in a way tried to do everything. And in a sense it has had to justify (protect its staff) and therefore reinvent itself. It is also an organisational structure that has been used by project management practitioners to enhance their professional standing in terms of career progression and promotion.

4.13.1 The Trouble with PMOs

A significant theme in PMO literature is the perceived failure of PMO's. Findings are multiple and the catalyst for PMO change is driven largely by internal events and tensions. Tensions arise from the necessity for the PMO to evolve in order to meet organisation requirements. The structures including the PMO is part of a political system designed to manage and sustain projects over a period of time (Aubry, Hobbs, Müller et al. 2010). It has been suggested that the PMO is not a silo within organisations. The modern organisations consider the PMO as a key aspect linking complex relationships of strategy, projects and structures. Concepts of sociology are critical to the understanding of contemporary PMO's (Aubry, Hobbs & Thuillier 2007). It is apparent PMO's continually evolve in order to fulfil their changing function as required by the organisations strategy. Individual PMO's have been observed changing distinctively, often as a result of inter-organisation political tensions (Aubry, Hobbs & Thuillier 2008; Hobbs, Aubry & Thuillier 2008).

4.13.2 What PMOs are used for

Historically the use of PMO's has been observed with distinct functions initially for running government schemes, which evolved into controlling cost and demonstrating transparency, which evolved into a pragmatic way to manage non-operational work, which evolved into benchmarking and best practice, to the PMO as a commodity. As Hobbs, Aubry and Thuillier (2008) observed the change of PMO's inside organisations, it is clear the use of PMO's across organisations has adapted to ensure relevancy with the wider government administration and business conditions.

Organisational knowledge in PMO's is shared through a variety of formal and informal mediums (Aubry, Müller & Glückler 2011). Tacit knowledge of the art of 'how to' is shared and further developed within PMO's through decentralised networks or groups of individuals. Another key finding is that the PMO is integral to the power and politics of an organisation (Aubry, Müller & Glückler 2011). Furthermore PMO managers believe they are responsible for the custody of 'lessons learnt' post project (Julian 2008).

Observations have been made of numerous types of PMO's including administrative support, centres of excellence and full delivery teams (Hill 2004; Hodgson & Cicmil 2006a; Hobbs & Aubry 2008; Hurt & Thomas 2009). The PMO also undergoes regular change, and this change ensures the PMO continues to add value to the organisation by enabling it to adapt to the changing environment (Hurt & Thomas 2009).

There is a complexity of interconnections in the project management offices intellectual capital. One reason for the establishment of PMO's is to enhance stakeholder satisfaction (Turner & Lee-Kelley 2012). Senior management have significant dissatisfaction with projects post the establishment of PMO's (Ward 2013). This is somewhat counterintuitive to the promise of a PMO.

There is however benefit of deploying a project management office and the associated function conducting project reviews (Liu & Yetton 2007). Liu and Yetton (2007) quantitative research found that both utilising PMO's and conducting project reviews results in enhanced project performance. The limitations of this research highlighted by Liu and Yetton (2007) include construct validity threat due to differences in industry surveyed. Findings may be

effected by the practices of particular organisations, in this case Liu and Yetton (2007) specifies high performing organisations. Lastly the data was taken specifically from Australian construction and Information Systems industries, this does not represent a cross section of how all PMO's operate (Liu & Yetton 2007).

Standardisation is a common theme found in PMO literature. Compliance with best practice standards is considered to lead to project success and enhance project performance (Toney & Powers 1997; Dai & Wells 2004).

Hill (2004) offers a mechanical approach to an organisational entity and defines the basic Project Management Office maturity level – 'as the ability to provide a standard and repeatable PM methodology for use across all projects'. It should be noted that compliance with a standard does not mean project success; it means conformation to group think (Ward 2013).

Suggested practices of the project management associations and non-peer reviewed literature is often not supported by evidence of the academic community (O'Leary and Williams 2008). The initiation of Centres of Excellence standard practices, which is a suggested practice replicated in PMO practitioner books does not enhance project performance (O'Leary and Williams 2008). Furthermore, no significant increase in project success is connected to the presence of a PMO. What's more, a negative opinion of projects by senior management is linked to the presence of a PMO (Ward 2013). Further still, project management office driven methodology selection does not demonstrate a positive outcome (O'Leary and Williams 2008). It is top management support which is considered to significantly correlated with project success (Zwikael 2008).

Many practitioners believed that PMOs perform particular roles or functions which attempt to standardise project management methodology, and 75% of those surveyed utilise the standardised practice regularly (Aubry & Hobbs 2007). Attempts to discover a standardised model of PMO has proved to be impossible due to the many different functions and mandates within the very different organisations (Aubry & Hobbs 2007; Hobbs & Aubry 2008). Currently it appears as though PMO change is driven through the need to provide different PMO processes as specified by the practitioner community. However, the academic

community has found through a scientific research approach that a great deal of these practices, promoted by the practitioner community do not contribute positively.

PMO's are an organisational entity which regularly transitions, and an organisational change management approach could provide a more optimal outcome during such transitions (Aubry, Müller, Hobbs et al. 2010). The PMO can be considered to be a structure which forms part of the organisation's political system (Aubry, Hobbs & Thuillier 2009). The practitioner literature is almost completely void of entertaining this socio-political concept. Instead it enforces the concepts of 'best practice' amongst other mechanical means of championing project management. Ward (2013) found senior management are less tolerant of perceived poor project performance when a PMO is in place. Potential causes of this intolerance could be due to increased awareness. Alternatively negative opinion of projects was the original catalyst for creation of a PMO (Ward 2013).

4.13.3 Scientific study of PMO's

The results of Hobbs and Aubrys multi-year, multi-method research program on PMO's have been published as a book, *The Project Management Office (PMO): A Quest for Understanding.*

The research attempts to provide a theoretical basis of PMO's, which can provide pragmatic advice desired by the practitioner community.

The practitioner community has focussed on the need for guidelines, best practice and a standard on PMO's. Much of the existing literature on PMO's is published by the practitioner community, which specify models often based on a limited number of PMO's.

The research is still quite limited thus currently it is not possible to answer some question of the practitioner community such as what is best practice for a PMO. Observing the well-established organisational concept of contingency theory accepts there is no one best way, it may be worthwhile for PMO practitioners to consider contingency theory when attempting to standardise PMO's.

However a number of scientific research methods have been applied in the search of understanding PMO's. Hobbs & Aubry present empirical findings on matters of the PMO previously not addressed (Hobbs & Aubry 2010).

4.13.4 On PMO Typology

The practitioner community regularly discusses PMO models; often these models are a very small sample of the types of PMO's observed (Hobbs & Aubry 2010). Early research suggested it would probably be impossible to group PMO models into types as significant structural differences exist (Aubry, Hobbs & Thuillier 2008). Observations of PMO types were analysed by the Pearson correlation coefficient and multiple regression analysis , this typology may provide guidance as they are not strongly associated to form prescriptive statements of PMO's (Hobbs & Aubry 2010).

Type 1: A small percentage of the organization's projects and project managers

Type 2: A small percentage of the organization's projects and a large percentage of its project managers

Type 3: A large percentage of the organization's projects and a small percentage of its project managers

Type 4: A large percentage of the organization's projects and a large percentage of its project managers (Hobbs & Aubry 2010).

4.13.5 On PMO Performance

Current literature on project management performance is narrow in view and limited to financial terms, it does not provide a theoretical foundation for PMO performance (Hobbs & Aubry 2010). Hobbs and Aubry (2010) propose adapting Quinn & Rohrbaughs Competing Values framework to understand PMO performance. The Competing Values approach was developed from a research program, which aimed to evaluate public sector performance. The public sector is highly complex and it is pertinent to make best possible use of public funds in addressing conflicting priorities (Hobbs & Aubry 2010). Hobbs and Aubry (2010) found the strongest factors in PMO performance are:

(1) Having competent staff who's expertise is recognised by the organisation;
(2) Being embedded and engaged by the organisation; and
(3) Advertising the PMO's mission.

The key theme of these factors is perception of the PMOs purpose, its staff and their interactions with the organisation.

4.13.6 On PMO Myths

Hobbs and Aubry (2010) observe PMO myths have circulated since at least the mid 2000's. Two consistently reoccurring myths of PMO's include that there is one best practice for PMO's, this best practice had not been identified but is widely believed to exist (Hobbs & Aubry 2010). Secondly and more recently it is often said that PMO's are varied and regularly change, with the change they consistently in linear fashion become more mature. While it has been observed PMO's regularly change no evidence is available which confirms they become more mature (Hobbs & Aubry 2010).

These myths perhaps were reinforced by the practitioner literature of PMO's such as Hill (2004), which often reference four or five PMO types, insinuating each type is a more mature version of the previous. However the limitation of this practitioner literature is often not evidence-based (Hobbs & Aubry 2010). Hobbs and Aubry (2010) specify these observations lack scientific process. As these are questions, which receive some attention from the practitioner community albeit without scientific rigor, they may benefit from future research.

4.13.7 PMO practitioner practices

Generally there are many opinions and guides providing solutions to practices some say PMO's must fulfil. The PMBoK Guide 5th edition includes almost a page and a half dedicated to the PMO. Listed are three types of PMO structures; being Supportive, Controlling and Directive (Project Management Institute 2013). The research on PMO's show many PMO typologies (Hobbs & Aubry 2008). It has been said that it may be impossible to categorise all PMO's as they are vast (Hobbs & Aubry 2008). Reducing PMO typologies to three excludes vast diversity of PMO's. Additionally six functions are briefly described in the Project Management Institute (2013) which is less than the 27 distinct functions identified (Hobbs & Aubry 2010). However it is worthy to note some of these functions namely coaching and mentoring by the PMO has been found to not correlate to enhanced project performance (Hobbs & Aubry 2010). Further the function of identifying and developing 'best practice' may also prove fruitless, as currently not enough research has been undertaken to establish 'best practice' (Hobbs & Aubry 2010). With so many contradictions of the PMO

concept contained within the PMBoK Guide and recent available PMO literature, it raises the question of where do the practitioner community and the Project Management Institute get their ideas about what a PMO should do and what determines its best practices?

Since the 1990's popular business text books focussing on the PMO have rapidly increased in publication. In developing many of these books the authors do not appear to base their findings on a scientific research approach. Often these publications mimic each other, thus reinforcing their ideas and presenting to the audience these opinions as fact. The publication of opinions without scientific basis in the field of science, medicine or law would not be tolerated, and it is equally important for justification to be presented in the management field.

4.13.8 Where PMO's get ideas of best practice from

When PMO's are looking for practices or functions they generally describe a search for 'best practice'. While 'best practice' in PMO's has been observed as requiring significantly more research in order to establish (Hobbs & Aubry 2010), the current 'best practices' could be considered to be a list of functions that have been selected due to particular traits (Whitty 2011). 'Best practices' as considered by the practitioner community are found in the plethora of business books featuring PMO's, blogs, and certification and documentation of the professional associations as well as UK's Office of Government Commerce. The Australian Institute of Project Management offers a PMO certification (Australian Institute of Project Management 2014), and the Office of Government Commerce offer P3O certification (Office of Government Commerce 2014). Regularly the Capability Maturity Model Integration (CMMI) program is adapted to process improvement of PMO's (Crawford 2006). And the British organisation Axelos is aiming to be the worlds 'Best Management Practice' advisor (AXELOS 2014).

Themes of PMO 'best practice' are apparent in the conversations with members of professional associations and practitioners in the workplace setting. Anecdotally while conducting an exploratory stage of this study it was found that PMO practitioners refer to anybody who writes a book either commercial or professional association as the academic community. The books, which are being read by the practitioner community, are generally the most basic, solutions focussed. There appears to be no understanding of the difference between scientific research of the management field and a business book. Very few project

managers ever read peer-reviewed research papers. Practitioners say they are following best practice and this practice comes from business books and professional association guides.

4.13.9 Is best practice necessary?

Traditionally project managers have developed from the technical realm, originally engineering and since the mid 1990's many from Information Technology (IT). In the case of IT many of these staff come from the background of not actually creating a new product, often they configure or administer packages. Operating systems such as Microsoft Windows, or network devices such as Cisco IOS are often the domain of such highly skilled technical staff. The administration of these devices can be considered a 'best practice' both these vendors have their own certifications at various levels. While working with a particular vendor's product there may be one way or a limited amount of ways of administering the product. Working with people or PMO's adds tremendous variability; some would say complexity, which makes 'best practice' an inappropriate term. Similarly to IT, engineers no longer operate solely in the research & design capability. Often engineers focus on compliance with standards, thus 'best practice' also becomes one of the engineers 'constants' and when applying compliance mind-set to PMO practice staff with an engineering background seeks standards or 'best practice' in a field which does not have 'best practice'.

4.14 Concluding remarks

This historical perspective, perhaps even one could say in Foucauldian terms 'an archaeological review of the PMO', has revealed how the form and use of the structure we now call the PMO has evolved and adapted over time. Initially it was a very pragmatic and transparent way of managing non-operational work. Then it took on the responsibility of managing the human resources associated with this type of work. It acted as a central repository for tools and methodologies that could be applied to this non-operational work, and claimed in many instances that these tools and methodologies were 'best', although there is very little if no evidence to show that they are. Nevertheless, an organisational unit that is in charge or responsible for these 'best practices' gains a certain power from this, and with this power comes the ability to shape its environment for its own ends, and ultimately the ends of those who are involved in. Finally the PMO became an asset, a commodity to be traded upon, and a badge to be worn to attain certain privileges, such as the ability to tender for

government contracts or hold a special office within the project community. But as we have seen through the discussion there are problems with this situation. The PMO could perhaps be seen as inauthentic, in that they are not actually providing pragmatic ways of managing non-operational work anymore. They are more concerned with the appearance of ‘best practice’ in a general sense, rather than the individual pragmatic practices that would be beneficial to the individual or organisation.

This paper contributes to the academic discourse by taking a longitudinal view of discovering where PMO’s have come from and how they have adapted to their environment over two centuries; from pragmatic origins, to facilitation of government initiatives, to academic interest in evidence-based practice. The contribution to the professional literature by this paper includes the rediscovery of rarely circulated literature on the human dimension of PMO practices. Furthermore, this paper highlights in the contemporary literature and that not all PMO practices which are assumed to be ‘best practice’ make a valid return on their claim. This last point is especially important to the practitioner community to consider when implementing PMO practice.

This literature review is limited by the inherent methodology of a literature review being to collate and review existing knowledge rather than create new. Secondly as this literature review broadly considers PMO literature it does not intend to provide a deep analysis of specific PMO practices, but rather instead focusing on the range of prior knowledge, which closely examines practice. There is opportunity for further research on PMO practice as much of the existing knowledge could be classified as either normative or professional and has yet to be tested by an objective scientific process. PMO research could be enriched by examination with an anthropological research method as deep understanding of the human interactions would provide new knowledge, which currently is under represented in the literature and would provide pragmatic outcomes for the practitioner community.

Table 4: Timeline of PMO Literature

Timeline of PMO Literature		
Period	Observation	Typology
1805	The British Critic mentions the Project Office, this article was based on an 1802 essay on a combination of agricultural land improvement and international trade of agricultural products including a favourable taxation scheme.	Scholarly given the era, in contemporary times Normative
1900 – 1930	US Government publish articles concerning water supply, irrigation and agriculture discussions include sponsors need for the Project Office to control project costs.	Normative
1930 - 1950	US Government publish articles pertaining to Project Office of various heavy civil engineering projects of the day. Including Hoover Dam, Atomic Energy.	Normative
1939	Appears to be first instance of the term Project Management Office being published. The article was written by the US Housing Authority, however they are not considering the PMO to be the same as the modern PMO. This 1939 example of a PMO is considered to the caretaker office of residential public housing, often referred to as 'the projects'.	Normative
1950	The PMO is considered the group which delivers the project.	Normative
1950's	Appear to be the decade where Project Management Office became more widely used. US Government audit documents relate to: Agriculture research; Defence; Government Housing; Geology; Highway Design; Water Management; Large Engineering endevours; and Various Federal projects or programs.	Normative
1960's	The term PMO becomes widely observed in articles published by the US Government. US Government publish numerous articles relating to: All themes of the 1950's; NASA; Coastguard; Education; Foreign Aid (Asia) US Commission on Marine Science and Resources; and US National Science Foundation Division of Polar Research.	Normative
1970's	A continuation of the previous two decades. The US Government publishes articles of a similar theme and the term PMO appears to be reinforced. US Government publish numerous articles relating to: All themes of the 1950's & 60's; Energy – Oil, Gas, Nuclear, national fuel reserves; Foreign Aid particularly water & agriculture of the Philippines; and World Bank initiatives in Asia Major change with US Defence Acquisition University publishing specific research articles on the PMO.	Normative Academic
1971	UK Parliament House of Commons mention a PMO of the Royal Airforce, the discussion pertains to ineffective cost control and accountancy training.	Normative

1980's	The PMO continues to be discussed by US Government documents however the PMO is now seen in new fields. US Government publish numerous articles relating to: All themes of the 1950's, 60's & 70's; Commercial Construction; Polar Research gains momentum; World Bank in China; Environmental Protection Agency; National Parks; Rail.	
1981	Software Development PMO is discussed	Normative
	British Standards Institute mention the PMO	Professional
	1985 onward we observe structural changes in the types of PMO literature. PMI articles mention the PMO Software development; Governments of Asia publish articles which mention PMO's, Indonesia, Philippines, Sri Lanka. Engineering projects in South Africa US Government continues to publish articles relating to the same discussions of 1950 onward. Aqua Culture Conducting Super Collider	Professional Normative
1986	The first business books containing the idea of a PMO appear	Professional
1987	Project Management Body Of Knowledge by Max Widerman	Professional
1990	Changes in PMO literature of the 1980's gain pace. The US Government senate committees and audits remain a common theme. In addition evidence suggests investigations into the National Security Agencies software PMO. Foreign Aid to Asia from US Government and Europe features throughout the published articles Changes observed: Asia particularly Philippines, Sri Lanka, Brunei, Indonesia see's widespread use of the PMO and now they are publishing their own reports; Africa begins to document PMO's; Telecommunications and Software Development PMO's become a topic of publication; Water management and agriculture re-emerge; National Parks PMO's gather pace; PMI discussions are more frequent; Canadian Government audits Defence PMO; and Business books on PMO's gain popularity.	Professional Normative
1995	Period preceding the PMO becoming a commodity. Numerous business books featuring the PMO are published, Amacom. The more reputable Wiley also publish books mentioning PMO's; UK OGC ITIL mention PMO's; World Bank concerning Asia; Bangladesh Government Fisheries have a PMO; Asian Development Bank; Hong Kong infrastructure mention PMO's; and US Government continues to mention PMO, Energy, Water, Health, Defence, Construction, Ocean.	Professional Normative
1995	Inquiring into the temporary organisation: New directions for project management research by Johann Packendorff	Academic
1995	Computer World discusses PMO's should standardise PM	Professional
1996	A Guide To The Project Management Body of Knowledge 1st Edition	Professional

2000	The PMO becomes a commodity. Proliferation of business books on PMO discussion; Study guides on how to pass project management association certificates observe PMO's; First novel mentioning a PMO appears The McClellan Legacy, 2000. Commercialised books on NASA's PMO appear; China and Brazil are observed with PMO's Hong Kong's Infrastructure development use PMO's; Foreign Aid in Asia features regularly with PMO's Software Development and PMO's become more widespread The usual themes of US Government PMO's continue	Professional Normative
2000	A Guide To The Project Management Body of Knowledge 2nd Edition	Professional
2002	Christine Dai of George Washington University publishes her PhD thesis: The role of the project management office in achieving project success.	Academic
2004	A Guide To The Project Management Body of Knowledge 3rd Edition	Professional
2005	2005, The PMO as a commodity becomes solidified. PMO guru's with 5 years experience in PMO's and have read all the books appear; Business books and study guides on PMO's takeover as the dominate literature on PMO's; Agile emerges with some discussion on PMO; Concept of Global PM emerges; CMMI mentions PMO's; US Government Accountability Office discuss the Cost of War PMO and Re-establishment of Iraq PMO; Software Development and broader IT field adopt PMO's; World Bank Asia; Polar Research still features; Literature out of Germany appears on PMO's	Professional Normative
	Proliferation of Academic Research on PMO's	Academic
2005	Knowledge wisdom and networks: a project management centre of excellence example by Derek Walker and Dale Christenson	Academic
2007	A Multi-Phase Research Program Investigating Project Management Offices (PMOs): The Results of Phase 1 by Monique Aubry Brian Hobbs	Academic
2007	The Contingent Effects on Project Performance of Conducting Project Reviews and Deploying Project Management Offices by Li Liu Phillip Yetton	Academic
2008	How project management office leaders facilitate cross-project learning and continuous improvement by Jerry Julian	Academic
2008	A Guide To The Project Management Body of Knowledge 4th Edition	Professional
2008	Making a difference? Evaluating an innovative approach to the project management Centre of Excellence in a UK government department by Tim O'Leary Terry Williams	Academic
2009	Building value through sustainable project management offices by Mimi Hurt Janice Thomas	Academic
2013	A Guide To The Project Management Body of Knowledge 5th Edition	Professional

CHAPTER 5 SHAM PROJECT COMPLIANCE BEHAVIOUR: NECESSARILY MASKING THE REALITY OF PROJECT WORK FROM SENIOR MANAGEMENT

5.1 Preface

This chapter provides the full accepted manuscript from an empirical, peer-reviewed paper developed as part of this doctoral research. This paper titled *Sham project compliance behaviour: Necessarily asking the reality of project work from senior management*, is published in the *International Journal of Managing Projects in Business*. This paper combines the study of organisational culture through ethnography with a dramaturgy lens. What goes on inside a PMO can be both described and experienced as absurd. In this instance, senior management were largely ignorant of what was required to undertake the work ahead, but nevertheless were responsible for creating the various control and contractual requirements used to manage the work. Those who were responsible for administering the work, namely the PMO staff, knew that the management requirements were unfit-for-purpose and chose to implement more practical methods that had a sympathy with the nature of the work, while masking their breach of complying with senior management requests. The project was hailed as a success, some members of the PMO staff suffered enormous amounts of stress and disconnect from their professional identity, and senior management were possibly left feeling that their attempts to govern the work were successful.

5.2 Key points of this chapter relevant to this thesis

- Sham compliance occurs when an individual or a group are required to meet a target this is either impossible or difficult due to some type of imposition.
- Senior management plays a major role in sham compliance by creating impositions; unworkable binds that staff are unable to meet.
- There is an organisational culture element that enables sham compliance to take place, which is that senior management are largely ignorant of what is required to undertake work, and they are therefore vulnerable to false impression.
- Dramaturgical acts are expressed between actors that minimise questioning of the status quo though induce stress and anxiety for those who must express them.

5.3 Citation and co-author details

Table 5: Citation details of original publication

Citation details	Darling, E.J. and Whitty, S.J. (2019), "Sham project compliance behaviour: Necessarily masking the reality of project work from senior management", *International Journal of Managing Projects in Business*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/IJMPB-05-2019-0118
# of times cited	0 (citation details from Google Scholar, as at 06 June 2020)
Writing	Eric Darling (80%); Dr S. Jon Whitty (20%)
Data collection and analysis	Eric Darling (100%)
Quality Review	Eric Darling (80%); Dr S. Jon Whitty (20%)

5.4 Abstract

Purpose – The purpose of this paper is to examine a case of sham compliance performance reporting through the lens of Goffman's Dramaturgy to reveal its dramaturgical structure. It makes a methodological contribution to comprehending 'lived experience' accounts of project work, and adds knowledge concerning the behind-the-scenes motivators to sham behaviour in project work.

Design/methodology/approach – Using an ethnographic lived experience account, an aspect of project work is reconceptualised as a collection of dramaturgical scenes. These scenes disclose issues beyond the bounds of the traditional project management discourse, and increase knowledge and appreciation of sham and performative behaviour in project work.

Findings – Sham progress reporting can emerge in an environment where senior management's ignorance of project work creates unworkable binds for project staff. Moreover, the sham behaviour succeeds at its objective because senior management are vulnerable to false impressions. This situation raises ethical issues for those involved, and creates an overhead in dealing with the reality of project work.

Research limitations/implications – Limitations to this study are due to the inherent nature of the ethnographic method, where it is difficult to recruit willing participants, particularly in

terms of sham behaviour cases. This study has implications for research on sham and performativity behaviour in project work, as studies can benefit from the Dramaturgical Analysis and Goffmanesque Scene Illustration techniques that help give focus to particular aspects of social performance, and remove complexity from the narrative.

Practical implications – The research provides practitioners with a way of discussing superfluous compliance process using additional lived experience vocabulary. This could reduce the undue pressure to behave unethically, and reduce the burden to create the extra impression management work.

Originality/value – This study brings a voice to sham behaviour in project work. Continued ignorance of sham behaviour results in unnecessary work and unprofitable projects. Individuals could pay a price in terms of stress and wellbeing, not discussed.

Keywords: project organisation culture, sham compliance, dramaturgy, impression management, ethics

5.5 Introduction

The topic of ‘sham reporting’ or ‘sham compliance’ receives little attention in the academic literature. However, it is a topic that anecdotally many managers and project managers would be familiar with, as the reporting of project cost and schedule performance is central to the practice of project management and any Project Management Office (PMO) (Darling & Whitty 2016). There is a field of literature on performativity in organisations that deliver projects and employ project management techniques (Hodgson 2005b), and this study makes both a methodological and theoretical contribution to this literature.

In this study, we employ the theory of Goffman’s dramaturgy model to analyse a performative aspect of project work. We use ethnographic vignettes as a data set, and dramaturgical analysis to illustrate scenes that answer why and how a sham project progress reporting used a fake Earned Value Management (EVM) report to mask the reality of project work, whilst appearing to report on actual project progress and so comply with contractual obligations. It appears that senior management, through their ignorance of the nature of project work and what is required to deliver it, setup expectations about project work that

were unrealistic that triggered this sham compliance. Furthermore, the sham was successful as a convincing 'social act' because senior managers had a superficial understanding of EVM. It is important to note that this study is not a critique of EVM, neither are we concerned with its efficacy. However, we would argue that perhaps uninformed senior management are vulnerable to a peculiarity of EVM.

Our study of a performative act, takes a 'lived experience' approach to project work, which is concerned with developing an understanding and theory of the actuality of experiences individuals have in organisations with regard to the projects they initiate (Cicmil, Williams, Thomas et al. 2006; van der Hoorn 2015). In this way, we enhance the lived experience vocabulary and develop our understanding of the social interactions a project practitioner experiences in this sham situation, how they convey their social act (both linguistic and non-linguistic modes), and how this social act is informed by a broader social setting, which further impacts themselves and the organisation. From our analysis, we have been able to illustrate this performative case of sham compliance in the form of three scenes, namely, Scene 1: The Reality of Compliance (Figure 2), Scene 2: The Confidence Trick (Figure 3), and Scene 3: The Sham Compliance (Figure 4). In this way, using Goffman's dramaturgy model, we reveal that the PMO was in the position of having to mask the reality of project work from senior management, and they achieved this by exploiting the vulnerabilities of senior management. Both these matters raise ethical issues, and highlight the overhead in dealing with the reality of project work. Table 6 outlines our methodological phases and the rationale for using it, and summarises the lived experience insights gleaned from each of these.

The sham compliance process took place on a major infrastructure project that is financially and strategically important. An individual, hereafter referred to as the Project Controller, has provided evidence for this sham compliance. This person considers himself or herself to have had a key role in creating and performing the sham compliance, although this part of their role was not conceivable to them when they started. As a form of insurance against shouldering the entirety of any possible blame, the Project Controller kept a record of comments and interactions in a personal journal of their participation in the project. The Project Controller felt that their behaviour in this matter compromised their integrity as a professional manager, and as time went on, they became more and more complicit in the sham compliance.

However, this was not enough of a challenge for the Project Controller to speak out or to resign from their role, as they would argue that in their experience these acts of sham compliance are common in major projects.

The literature often treats fake compliance and sham compliance synonymously, although there are important differences. For the purpose of our study, and for the advancement of theory in sham performances in project work, we need to be explicit about what we mean by fake and sham, and how these meanings apply to our study. When speaking about sham compliance, it is first important to be able to differentiate ‘sham’ from ‘genuine’ compliance, which broadly speaking is an organisational state, where the organisation is actively operating according to its prescribed/agreed policies, guidelines, standards, industry regulations, government legislation, or general rules of practice (Leszak, Perry & Stoll 2002; Sadiq & Governatori 2015). Fake compliance often refers to a product, outcome, or even faking a method (Vanayan 2008; McBride 2010; Morsing & Spence 2015). Whereas sham compliance is aligned with the act of creating appearances (Vestal 2002; Vanayan 2008). More specifically, as a legal concept, a fake refers to the false identity of an object or artefact “that is not genuine and is intended to deceive” (Law 2018). For example, a Cezanne painting was bought as such in good faith, but later found to be fake (Fairfax Media Australia 2004). However, sham is a different concept and is defined as "good in form but false in fact and interposed for some unworthy purpose such as delay" (Buckley 1982). Another example, in accounting, a sham transaction has the appearance of a transaction, yet it creates different rights and obligations to those which the parties intended (Law 2016). A sham marriage is a marriage, but it is a marriage “entered into for some ulterior motive” (Gooch & Williams 2015).

Considering the definitions and uses of the terms fake and sham, we interpret the compliance process of this case to be a sham compliance that used a fake reporting tool, namely a fake EVM Report. As the case will show, the PMO Lead intentionally created a process of reporting that ‘appeared’ as though it provided actual project progress information, but it did not provide this information, as the EVM Report was a fake report. In the opinion of the Project Controller, the PMO Lead created the sham compliance process because the PMO had to satisfy senior management that the PMO complied with its contractual obligations. However, as our analysis reveals, had the PMO actually complied, it would have placed sub-

contractors in an unsustainable working situation, which senior management had brought about by creating contractual rules based on deliverable payments that were inappropriate for this type of work. Therefore, to mask from senior management that the PMO was non-compliant in this regard, and enable the project to proceed, the PMO Lead directed the Project Controller to create fake EVM Reports, which functioned as a prop in a sham compliance process.

We make no claims or judgment as to whether the documented and illustrated practices were intrinsically right or wrong, or if they are ethical in the corporate world. Today the project is still regarded as a success. We simply attempt to develop a dramaturgical method of reporting the lived experience of this performative project management situation, and thereby expand the vocabulary of lived experience research. The organisation and Project Controller's identity is not disclosed so as to protect them from any form of rebuke or reprimand, and to ensure that in the future other individuals will feel safeguarded to participate in this form of experiential and confessional reporting.

To begin we review current knowledge on sham compliance and dramaturgy, with particular attention to management practice, and provide an overview EVM as it plays a role in this case. We then explain and justify our research methodology, and present the results of applying Goffman's dramaturgy model to the Project Controller's vignettes in the form of illustrated Goffmanesque scenes. The discussion postulates on the implications for theory and practice, particularly organisations and individuals.

5.6 Literature review

5.6.1 Sham and deception in projects

In all areas of business, various forms of dramaturgical and sham acts of compliance has hindered performance auditing and the subsequent improvement resulting from review (Leeuw 2009). Sham compliance is an extreme and deliberate act, where an entity 'appears to comply' with the expectation (Vanayan 2008).

Sham compliance is a topic discussed across a range of domains including business law, education, and humanitarian efforts (Huff 1996; Alimo-Metcalfe 2002; Vanayan 2008;

McBride 2010). Alimo-Metcalfe (2002) highlights that sham compliance presents itself in organisations where extrinsic factors such as the exchange principle of trade-offs, avoiding disciplinary action, and making commitments, are self-serving, and are highly valued. For fear of conflict, criticism, and job loss, staff may partake in sham compliance. Sham compliance, with regard to company law, is certainly not a victimless crime, as it is very much the acquisition of prosperity based on the oppression of others (Huff 1996; Vestal 2002). Complying with project performance reporting regimes is a vitally important principle in managing project work. For organisations and PMOs, a major recurring challenge is the need to monitor and control project budgets and schedules (Darling & Whitty 2016).

There is a significant body of work on the concept of deception in mega projects relating to cost and benefit outcomes (Flyvbjerg 2005, 2007; Flyvbjerg, B. 2009; Flyvbjerg, B. a. G., Massimo and Lovallo, Dan 2009; Flyvbjerg & Molloy 2011; Flyvbjerg 2014). The premise of this body of work is that projects frequently overstate their benefit while underestimating their costs, and that this behaviour has intent. Individuals benefit more so than the organisations they represent. In the case of mega projects financed by either state or institutional investors such as superannuation funds, the public suffer the cost (Flyvbjerg 2005; Flyvbjerg, B. 2009; Flyvbjerg 2013b). Flyvbjerg (2013b) goes as far as recommending prison sentences for those who knowingly deceive organisations.

5.6.2 Goffman's Dramaturgy Model and Organisational Performance

A growing body of literature has investigated how organisations attempt to meet their performance targets. An 'act' in the context of project work can be traced back to the application of Program Evaluation and Review Technique (PERT) on the Polaris project, which has been referred to as 'window dressing' and 'as effective technically as rain dancing' (Sapolsky 1972; Yanow 1997; Engwall 2012). Yanow (1997) goes as far as to label the phenomenon a 'protective veneer' where the project management administrative work was 'acted out' to allow the technical staff to proceed with their interests unhindered. Project management reporting techniques are an area wanting for empirical research (Biedenbach & Jacobsson 2016).

The project management literature both academic and normative is fraught with examples of impression management and social acts. However, perhaps through lack of and appropriate

research method the academic literature rarely attempts to examine such scenarios. Goffman (1959) is one of the earliest authors on impression management. He points out that communication takes place through both linguistic and non-linguistic modes (Goffman 1959). It was observed that individuals who over communicate gestures are reinforcing their self, while those who under-communicate detract from their self (Goffman 1959; Leigh 2017). Leigh (2017) investigated organisational performance compliance, the presentation of self, and recalcitrance in a British children's protective services agency. Leigh's (2017) multi-method ethnography research combines Goffman's Dramaturgy Model with Organisational Misbehaviour Theory. Cunha (2013) also conducted ethnographic research combined with the Goffman Dramaturgy Model. The findings include; managers select aspects of employee performance to present the image they want to convey of their own (Cunha 2013). Information systems were found to be manipulated by managers to overstate accomplishments and present a more positive image of leadership (Cunha 2013). Sales managers also produced an 'act' or false image of their staff's results in order to enhance their own standing with leadership (Cunha 2013).

5.6.3 The dramaturgy of compliance

Dramaturgy or 'acting' may occur during the compliance process. Higher education research has documented cases of sham compliance (Scheele 2004; Barrow 2010; van Kemenade, Hardjono & de Vries 2011). In complying with quality standards the sham compliance has been documented as dramaturgical (Barrow 2010). This act of quality compliance ensures the institutions ability to grant certification and receive tuition fees (Barrow 2010). Similarly, dramaturgical compliance in business education provided by professional organisations has been identified as self-serving (Lowrie & Willmott 2009). Instead of enhancing organisations, too much auditing is making them less effective (Lowrie & Willmott 2009). And central to auditing is dramaturgical compliance, which may mask and therefore hinder the reality of work (Leeuw 2009). The architecture of quality systems often results in a bureaucratic response, which is enacted by mechanical procedures (Barrow 2010). Compliance is therefore primarily political, a side effect of the system of management, aiming to appease both technical and bureaucratic needs (Barrow 2010).

There is both a cost and a benefit to genuine compliance. Although when the cost outweighs the perceived benefit frequently corporations either ignore or engage in sham compliance (Garsten & Hernes 2009). The ethical aspect, though present in organisational policy, is rarely

enacted when there is a financial cost (Garsten & Hernes 2009). Enron's collapse has been subject to significant contemporary organisational research on sham compliance and ethical debate (Sims & Brinkmann 2003). Captains of business professing to act in the best interest of the organisation frequently act perhaps more so in the best interest of themselves (Garsten & Hernes 2009). Despite stringent policy development to minimise sham compliance more than a decade later, organisations are still non-compliant with requirements of contracts and statutory law (Garsten & Hernes 2009; Morsing & Spence 2015).

5.6.4 Project work as a form of dramaturgical theatre

Whitty and Schulz (2006) described the theatrical elements in project management and used Goffman's impression management to highlight four key themes: The project stage, project manager clothes, project manager scripts, and project manager props. Organisations are rich in theatrical interaction from role plays in simulated professional development scenarios to executive roadshows (Rosen 1988; Whitty & Schulz 2006). In the sub-culture of project management, the stage is typically a project managers office or board room, decorated with project management artefacts such as Gantt charts (Whitty & Schulz 2006). Gantt charts are an example of a project artefact or prop which *give off* the impression of being in-control (Hodgson 2005a; Whitty & Schulz 2006). A well-presented dramaturgical act can enhance the individual's career and longevity within the organisation (Hekkala, Hellens & Newman 2012). The audience of project work dramaturgy includes project workers, stakeholders, and senior management. To be seen in an appropriate costume of the business environment indicates belonging and is imperative to one's social survival (Saunders & Stead 1986; Anderson, Johnson & Reckers 1994; Fussell 2002; Whitty & Schulz 2006). Similarly, the script of the project manager is rehearsed and refined to *give* the impression of being in-control, organised and professional (Hodgson 2005a; Whitty & Schulz 2006). The subject of professionalism in project work, or in other words 'the appearance of acting professionally', was investigated by Hodgson (2005a). Broadly discussing the façade of project management Cicmil, Hodgson, Lindgren et al. (2009) comment on 'the act' of project failure versus success. Failure is therefore considered as a kind of social labelling of these events that occur, simplifying the story and ignoring the repercussions, trauma, and consequences on all those affected (Cicmil, Hodgson, Lindgren et al. 2009).

5.6.5 EVM in projects

To date there are no ethnographic studies that demonstrate how the cultures of projects and their organisations are influenced by the implementation of EVM. EVM tools are used as a form of sense-making tool for stakeholders during project execution stages (Hunter, Fitzgerald & Barlow 2014). Theoretical studies proclaim to enhance the predictive powers of EVM (Hong Long Chen, Wei Tong Chen & Ying Lien Lin 2015). However, statistical theoretical studies like this, and many others such as Caron, Ruggeri and Pierini (2016), Batselier and Vanhoucke (2017), Kerkhove and Vanhoucke (2017) and Warburton and Cioffi (2016) have not been actually tested in practice. Other simulations have considered EVM, such as Colin and Vanhoucke (2015), but again these are still simulations. Whilst one project that uses EVM claims its usefulness in controlling costs and schedule, another project using the same approach considered the technique limited (Bryde, Unterhitzenberger & Joby 2018). What we do know is that the calculation of earned value within a repeatable manufacturing process is complicated and fraught with difficulties (Gunasekaran, Chandika., Lenny Koh et al. 2007).

In many organisations, there is often a mandate to use particular project progress reporting techniques. Patanakul, Kwak, Zwikael et al. (2016) analysed US, UK and Australian government projects and found that where non-financial benefits are concerned, and where multiple and often conflicting stakeholders are involved, reporting techniques are mandated. EVM is one of these techniques. However, how these techniques are applied, the role they fulfil, and the impact they have, is not discussed in depth by Patanakul, Kwak, Zwikael et al. (2016).

5.7 Research Enquiry

This literature review has established that whilst of interest to broader organisational and management studies, we know little about sham or dramaturgical acts in project work, particularly how to analyse and discuss them. As a source of inside information about a performative act of sham compliance presented itself, the research questions our study asks are;

RQ 1: Why did this sham process take place and what role did it perform?

RQ 2: How was it so successful in persuading senior management throughout the life of the project?
RQ 3: Moreover, what is the impact of sham behaviour?

5.8 Methodology

5.8.1 Research Method

Ethnography is the method of data collection for this study. Ethnography is a relatively new name given to a type of anthropological research method (Calvey 2017). The focus of the research is on the subject or the insider and their subjective view of the world, presenting a unique opportunity to discuss environments difficult to access (Calvey 2017).
The study participant, an experienced project manager and EVM practitioner (the Project Controller), was an active participant in project work, and privately journaled professional experiences. The Project Controller viewed their role as acting to reinforce the delusions of sham progress reporting, and being fiscally unsound.

Table 6 outlines the three methodological phases for this study and their respective rationale. Firstly, there is the creation of vignettes by the participant, which is our data source to be analysed. Secondly and thirdly are the analysis phases, where we apply the language of Dramaturgy to the vignettes in order to create Goffmanesque scene illustrations. Table 6 also shows the lived experience insights gleaned from each of these phase, with particular focus to the insights from the three scene illustrations, which provide answers to our three research question.

With regards to the vignettes, the Project Controller journaled their interactions during the development of implementing an EVM system to a project that was already in progress. The Project Controller described, by way of these self-written vignettes based on their journal entries, how they navigated both the technical aspect of creating a real and fake EVM report, and the socio-political nature of providing sham project performance reporting that senior management consumed. The Project Controller did not make their original journal entries available due to their sensitive nature. Ethnographic studies such as this use vignettes to develop new understandings of the organisation by describing the organisational environment

and its humanistic socio-political characteristics (Fetterman 2010; Emerson, Fretz & Shaw 2011; Van Maanen 2011; Sergi 2012; Creswell 2013; Garsten & Nyqvist 2013; Ansar 2018).

As a means of interpretive analysis, we apply Goffman's dramaturgy to the ethnographic data (vignettes). Applying an interpretivist lens of dramaturgy, provides a framework to systematically theme qualitative data, and analyse against an established theory (Travers 2001). Goffman's dramaturgy model introduces social interaction through theatrical metaphor (Hunt & Benford 1997; Hope & LeCoure 2010). Leigh (2017) and Cunha (2013) are contemporary examples of ethnographic-dramaturgical organisational studies that inspire this study design.

Dramaturgy uses the metaphor and therefore language of theatre to understand and theme social interactions. There are three distinct regions, the Back Stage, the Front Stage and the audience. Back Stage is where one goes to practice the techniques of impression management, where impression management is the work required to manage the meaning of things. Put another way, Back Stage is where performers rehearse for the Front Stage audience. In the Back Stage the performer can relax and not be concerned with his or her image (Goffman 1959; Hope & LeCoure 2010). The Front Stage is where the performer adheres to conventions expected by the audience. Performers are in costume and act in character, as they know an audience is watching. The Front Stage performance is a carefully crafted representation of a situation or someone. Its purpose it to manipulate the audience. It creates an impression, a feeling or opinion about something or someone in the mind of another, without his or her conscious thought (Goffman 1959; Hope & LeCoure 2010). Finally, there is the audience. Though they are external to the act, the performers do interact with the audience members independent of the performance (Goffman 1959; Hope & LeCoure 2010). On the stage expressions can be *given* by what people say directly, and *given off* by how people say it non-verbally, by how they appear and how they gesture (Goffman 1959). We also draw on 'Dark Secrets', which is an element of performance highlighted by (Goffman 1959) that comprise information that contradicts the Front Stage image being presented to the audience.

Table 6: Methodological phases and their lived experience insights

Methodological Phases	Rationale	Lived experience Insights
Vignettes	Vignettes provide nuanced and candid insights into experience and the socio-political aspects of the complex organisational environment. They contain temporal and spatial data concerning individuals and artefacts	Vignettes provided detailed first-hand information that revealed the motivating factor for sham compliance behaviour. The motivating factor for sham behaviour was that senior management would not discover that the PMO was paying sub-contractors regularly, not on milestone. Background insights were that senior management, not appreciating the nature of the work when commissioning the project, considered milestone payments 'best-practice' for all projects. However, sub-contractors required regular payments to ensure cash flow, as infrequent milestone payments would negatively affect cash flow, driving them out of business.
Dramaturgical Analysis	Vignettes are considered as a theatrical performance, where individuals perform specific roles Front-Stage (using Impression Management to influence what the audience sees), and Back-Stage where impression management techniques are considered and rehearsed.	Vignettes provided rich Back Stage information. Dramaturgically speaking, the regular payments behaviour is a 'Dark Secret', which is masked from the audience of senior management by the performance of a sham compliance process. The PMO Lead, in order to protect their own reputation and ensure the project proceeded, authorised the fabrication and use of a fake EVM Report to legitimise the sham compliance. The PMO Lead and Project Controller used Impression Management techniques, centred on a fake EVM Report, to manipulate the meanings senior management derived from the regular monthly progress report. The sham compliance process conveyed the message that 'the project was on schedule and the work complied with contractual requirements'.
Goffmanesque Scene Illustrations	Illustrations enable the performative act to be considered as scenes. Each scene has a direction or purpose in the overall act. Scenes give focus to particular aspects of the performance, and remove complexity from the narrative.	The act of sham compliance comprises three scenes, each having different performance purposes. **Scene 1**: is a dress rehearsal presenting a genuine EVM to PMO officers. This would reveal the 'Dark Secret', and would have ramifications. A 'sham compliance' would be required. **Scene 2**: is a form of mise-en-scène where the PMO Lead and Project Controller con the Project Director into how to interpret the fake EVM Report, exploiting their vulnerabilities. **Scene 3**: is a regular presentation of the fake EVM Report to senior management, which conveyed the message 'that organisational procedures were appropriate and being complied with'.

5.8.2 The case study project

The case study project was part of a large infrastructure development project run by an Anglo construction company. The project represented a major capital investment that required the corporation's board oversight, and progress reporting included the status of cost and schedule. Before the attempt to implement an EVM Reporting process, the project had been running for almost two years. Prior to the implementation of EVM, the project employed a project expenditure accounting approach to manage finances, and scope 'check-lists' to account for schedule tasks based on the original contract schedule, which would flow into reportable milestones. Reporting on the project's performance occurred at multiple layers. Reporting occurred inside the project and covered each construction firm's area of responsibility, to the Project Director, then to the CEO. The organisation attempted to simulate EVM for multiple reasons including to better control project cost and schedules through to at least in appearance following company policy. Importantly, we note that against all usual external markers, such as schedule and budget, and satisfaction, the project was deemed a success, and continues to be regarded as such.

We gained permission for the participant to publish the vignettes as long as the organization and staff are unidentifiable, and that we reveal no financial information of the host organization. The organisation itself has since changed name and many of the sub-contractors no longer exist. So as not to reveal identities, any description of the project and the organisation is minimal.

5.8.3 Data verification method

To embed scientific rigor in this ethnographic research, a model of validation was adopted from Reck (2016), which is based on Walther, Sochacka and Kellam (2013). The five modes of validation originally proposed by Walther, Sochacka and Kellam (2013) are assured by the process of the Project Controller responding to questions within each mode as identified by Reck (2016). This method provided a form of reliability in testing the qualitative enquiry. The five modes are Theoretical Validation, Procedural Validation, Communicative Validation, Pragmatic Validation, and Process Reliability. The structure of the questions in each mode enables the Project Controller to scrutinize the vignettes they wrote. This way the vignettes are more likely to present a complete picture of what occurred, from their perspective, and

that their meaning is not lost. Furthermore, they have written the vignettes in their own terms, their assumptions are considered (using the five modes as mentioned), and documented accounts of the events, such as their journal, are the basis of their statements.

5.8.4 Analysis

The outcome intended from our analysis is to create Goffmanesque illustrated scenes depicting what Goffman referred to as the dramaturgical act. Our analysis employs the dramaturgical methods of Cunha (2013) and Goffman (1959) to develop illustrated scenes depicting the dramaturgical acts of presenting project performance data, using a fake EVM, to senior management.

We base our analysis on Cunha (2013) six-step data analysis procedure that illustrated how managers manipulate sales performance data for impression management purposes. The dramaturgical model was based on the work of Goffman (1959), and the vignette approach is established by Sergi (2012) and Garsten and Nyqvist (2013) who uses ethnographic vignettes to develop knowledge of complex organisational processes. Data collection was by means of the Project Controller's journal. In our study we take a similar approach to that of Sergi (2012) with descriptive vignettes written by the Project Controller, purposely to provide the reader with an appreciation of the culture, nuances and complexity of such an environment which is "filtered out" by the more popular quantitative research methods. The collected data was loaded into the NVivo software package.

Our dramaturgical analysis steps are:

> Step 1: The ethnographic vignettes, in narrative form, provide a rich description of what occurred in the PMO in terms of the preparation and use of a fake EVM Report for project progress and performance reporting.
>
> Step 2: The vignettes were loaded into NVivo and tagged for analysis using Goffman's dramaturgical themes such as actors, props, audience, Front Stage and Back Stage, and representations of both *given* and *given-off*. Essentially step 2 is the indexing of data.

Step 3: The vignettes provide temporal data to identify multiple scenes. This approach helps depict timing of separate scenes of the whole act of sham compliance.

Step 4: Within each scene, there is a Back Stage, a Front Stage, and an audience. The vignettes also provide spatial information that assists with positioning actors in each scene.

Step 5: Each scene contains theatrical props or masks. In our case, these are the project artefacts, such as the EVM Reports and production of fake EVM Reports.

Step 6: Finally, we create Goffmanesque illustration of the scenes and crosschecked the NVivo data with the vignettes for consistency. We also asked the Project Controller to confirm that the illustrated scenes accurately portrayed the vignettes.

5.9 Results

The results comprise eight vignettes (*italicized*) and three associated Goffmanesque illustrated scenes, each of which address our research questions. The Project Controller has composed the vignettes in the first-person tense from their personal journal entries. Some vignettes provide important context to the situation whilst others provide intention, activity, and experience for Goffman style analysis and representations.

5.9.1 Joining the project

Vignette 1

I joined the project midway. It was the company's biggest construction project to date. Prior to my involvement, there had been an attempt to implement EVM. Other staff had created a few PowerPoint presentations. The content was very basic and usually three dot points to a page about the need for EVM. My colleague said they had limited knowledge about running major projects and everything they knew about project management came from Wikipedia. One of the most pertinent project management techniques needed was an EVM system as the company had an imperative to enhance its cost and schedule controls. The company had a defined EVM practice standard based on the Project Management Institutes EVM guide, though few people understood it.

Those who know EVM know that it relies on a project to have been planned in a particular way for it to be implemented properly. It needs a well-defined scope by way of a Work Breakdown Structure (WBS), task estimates in terms of time and cost and a schedule. Essentially, it needs a distinguishable baseline of what we expect the project to be, what it will cost and how long it will take. None of the traditional planning techniques had been completed, as we would expect in an orthodox 'Project Management Institute' view. There was nothing to resemble a WBS. Task costings or the schedule could not be called mature. Instead, this project had been planned by staff with the wrong skill, and were also attempting to manage it. My role was to work out a way to apply EVM to a project that was well underway.

5.9.2 Retrofitting the EVM Method

Vignette 2

Given the textbook way to setup EVM was not possible without major rework to the initial project setup, I started to look at how to leverage existing documents and adapt these to the principles of EVM. There was no formal WBS to define scope. The project was heavily reliant on sub-contractors, with a contract defining scope. These scope items were broken down into work packages that had an associated cost, and were scheduled monthly over a three-year period. I had everything I needed to re-create a baseline scope, cost and schedule, and enough to create an improvised EVM system. Considering someone would have to compile a monthly EVM Report, I designed the process to not be labour intensive, minimise data input errors and leverage on the existing project management systems. The accounting team who controlled the sub-contractors kept a spreadsheet of monthly baseline payments, actual payments, and their own version of forecasted payments. The project scheduler was able to provide percentage complete.

5.9.3 The Reality of Compliance

Vignette 3

Three weeks after commencing work, I had a fully functional EVM system. A meeting was held to demonstrate we could perform EVM on the project. Invitees included the Accounting Team, and a small group from the PMO including The Project Scheduler, PMO lead, and myself as Project Controller. The PMO team sat on one side of the board table and the

Accounting Team on the other side. The Project Scheduler and I led the discussion providing a background of the companies EVM practice standard. We discussed how beneficial EVM would be to such a large and complex multi-year project and the approach to retrofit EVM to an 'in progress' project. The Accounting Team immediately rejected the EVM proposal. In their opinion, the sub-contractors progress measurement of 'ticking off tasks' as they were completed and making payment based on original contract was considered 'best practice'. One of the criticisms of the hybrid EVM approach was that it was not flexible enough to deal with scope changes in the project. I highlighted that this is a critical aspect of EVM, and that it provides an objective cost and schedule control. Nevertheless, this opinion was not accepted by Accounting.

Establishing the initial EVM system was very quick as 12 months of historical data was available. I simply fed this accounting and schedule data into the EVM software. Immediately I could see a trend that eight to nine months into the future there would be a significant delay. I could even identify which sub-contractor would cause this delay. However, as Accounting did not want to 'embarrass' any particular sub-contractor we did not proceed with the model. The Accounting Team then restricted my access as to what information was available to me citing commercial-in-confidence matters. Without support by accounting, this meant the hybrid EVM cost schedule control would not be viable.

The head of accounting candidly confessed to me, that the real reason this model of EVM was not acceptable was due to potentially exposing particular sub-contractors who would not meet their milestones, resulting in increased cost implications for the company. In reality, the contracts with sub-contractors had been setup and run in a way to encourage a 'gentlemen's agreement' for the continuance of the project. Therefore, from the accountant's perspective they were facilitating the project work with the best techniques they knew. The techniques were to contract a firm to provide a service; make regular payment to ensure the contractor has cash flow; and in theory, the contractor will provide a service. If the sub-contractor firms were payed based on measurable earned values milestone payments, their lack of schedule adherence would affect cash flow, and could drive them out of business.

As predicted by the EVM analysis, the future delay occurred. A large schedule variance due to continued non-delivery caused significant delays resulting in the spending of many millions of dollars of contingency and a large schedule extension.

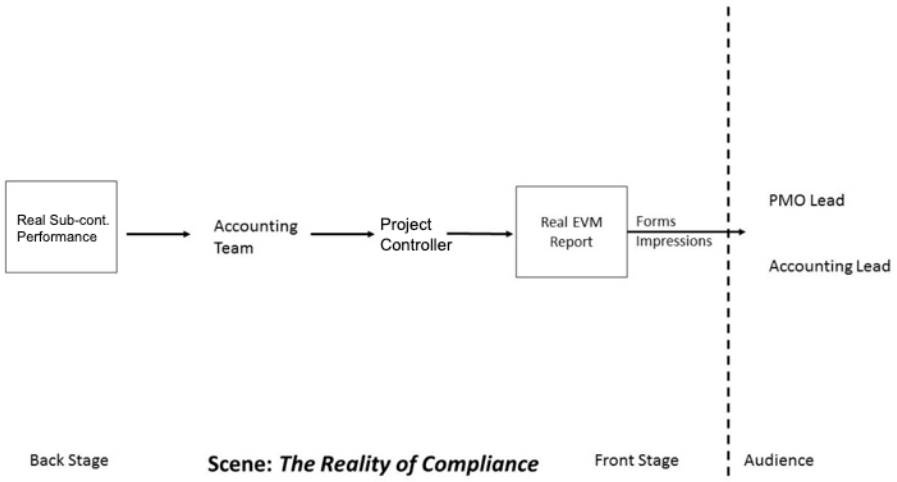

Figure 2: The Reality of Compliance

Using Goffman's dramaturgical model of performance, Figure 2 portrays the performance scene of 'the reality of compliance' (vignette 3). In effect, it was a dress rehearsal, where the Project Controller presents the PMO Lead and the Accounting Lead with what a real EVM Report could disclose to an audience. Although the Project Scheduler was present, they were not an actor or prop in the performance. From the Project Controller's account of the scene, the real EVM Report created an unsatisfactory situation because it would be evident to senior management that the payments to the *sub-contractors* were not in line with any earned value on the project. This would reveal a 'Dark Secret', which was that the PMO was engaging with sub-contractors in a way that breached its contractual obligations.

5.9.4 Back to the drawing board

Vignette 4

I found the rejection of the EVM system and lack of interest, in what EVM could do, rather disappointing. I felt a certain level of intellectual reward in the way I established EVM, on a project devoid of so many basic fundamental project management techniques. The comment about it not being flexible to deal with change was irritating. It seemed both the accounting

team and the PMO Lead did not understand or want to understand, and had the power to stop me from implementing the companies own policy.

5.9.5 Directive to go simple

Vignette 5

The first opportunity to discuss the outcome of the EVM systems presentation with the PMO Lead was during a shared walk to a meeting. The PMO Lead said all they required from EVM was a chart with baseline cost, actual costs, and then Accounting would provide the forecast costs charted over time. I considered this situation in regard to the data I currently had. It would be very easy to develop a chart that looked like EVM, but as for its usefulness, this approach would not nearly be as advanced as my previous EVM model.

I discussed the lack of integrated cost and schedule control with the PMO Lead, and how the Accounting approach provides none of the intelligence of the EVM forecasting formula. In fact, subjective schedule cost forecasting is the exact problem EVM aims to avoid. The PMO Lead said they did not want a lesson in EVM. Neither did they really care how EVM actually worked. As far as they were concerned, they wanted to comply with the companies policy of milestone reporting and project performance, or at least appear too. I had to take a minute to consider what I was being asked to do, and how to carry out the directive while maintaining my professional integrity.

5.9.6 The Confidence Trick

Vignette 6

Under instruction of the PMO Lead to provide a fake EVM chart comprising baseline cost, actual cost, and the accounting team's forecast cost over schedule, I set out to repurpose my previous model. The Accounting team agreed to provide access to their data. I decoupled the schedule percentage complete and instead used forecast dollars taken from the Accounting teams reporting. My EVM model forecasted schedule and cost as well as providing variance against the project baseline. The entire task was quite simple. Given my previous effort at developing an EVM tool, it was a straightforward process to make a fake EVM chart for the Accounting team's figures.

The company now had what looked like a working EVM system that was acceptable to the Accounting team and the PMO Lead. I was personally disappointed, as it provided no real insight to the performance of the project. It was just a chart of baseline, actual, and the Accounting team's politically acceptable, estimate of future project performance. However, the PMO Lead and I presented the fake EVM Report to the Project Director for acceptance as a project management tool for the project. The Project Director reviewed the fake EVM Report, and then contrasted it against EVM figures from a booklet he obtained from a three-day short course on project management. Perhaps out of anxiety, with knowledge the EVM Report was spurious, the PMO Lead stated this was the new way to do EVM. I discussed the advantages and disadvantages of the fake EVM and further improvements. However, this seemed to confuse the Project Director who simply wanted to be compliant with the companies' policy. Despite this, the fake EVM was approved for service in the monthly project progress report.

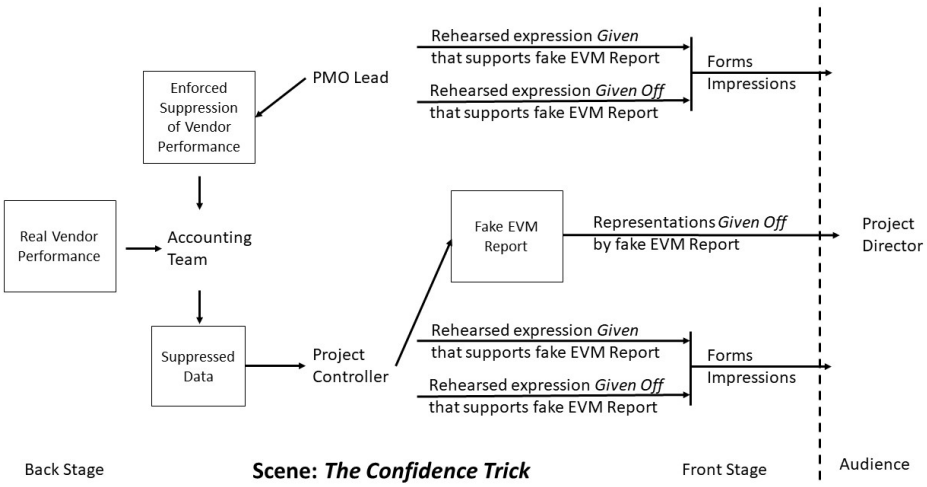

Figure 3: The Confidence Trick

Based on Goffman's dramaturgical model of performance, Figure 3 displays the scene of 'the confidence trick' (vignette 6), where the Project Director is first presented with the fake EVM Report deemed acceptable by the Accounting Lead and the PMO Lead. The fake EVM Report mimicked a real EVM Report, as it appeared to look like an EVM Report though it lacked the objectivity of real forecast data based on earned value. Back Stage depicts how the PMO Lead drove suppressed data, via the Accounting team, to the Project Controller who created the fake EVM Report. In the audience, the Project Director receives a concord of impressions of project progress, performance, and compliance. As they view the fake EVM Report, their

impressions of progress and performance are influenced by the fake representations that are *Given Off* by the report. As they experience the presentation, the supporting verbal commentary *Given* by both the PMO Lead and the Project Controller further influences their impressions. Moreover, the non-verbal gestures *Given Off* by both the PMO Lead and the Project Controller influenced the Project Director.

5.9.7 The Sham Compliance

Vignette 7

The reporting rhythm was once per month, based on the accounting teams monthly reporting. The look-alike or fake EVM Report simply visualized the Accounting team's figures in a fashion that looked technical. Each of the sub-contractor firm's progress and performances could be viewed individually or it could be wrapped up to a whole of project view. The receivers of the report were the Project Director, Accounting Lead, and the PMO Lead. After three months of reporting, I attempted to make the report more useful by adding a narrative as to why some milestones were not completed. I did this in an attempt to explain why we were behind budget and behind schedule. The explanation I used was directly from the notes of the Accounting team. However, I was immediately prevented from doing this. I am aware the head of accounting met with the PMO Lead privately. The PMO lead then gave me the directive that the report is not to contain any extra explanation.

The creation of a fake EVM Report continued. Each month a graph depicting the EV was compiled by me and sent to the Project Director. The PMO Lead was also included on correspondence. The Project Director in turn reported performance of schedule and finance to the CEO, though this was further distilled to the rudimentary form of green, amber, and red traffic lights, which were always green despite a major finance problem forecasted.

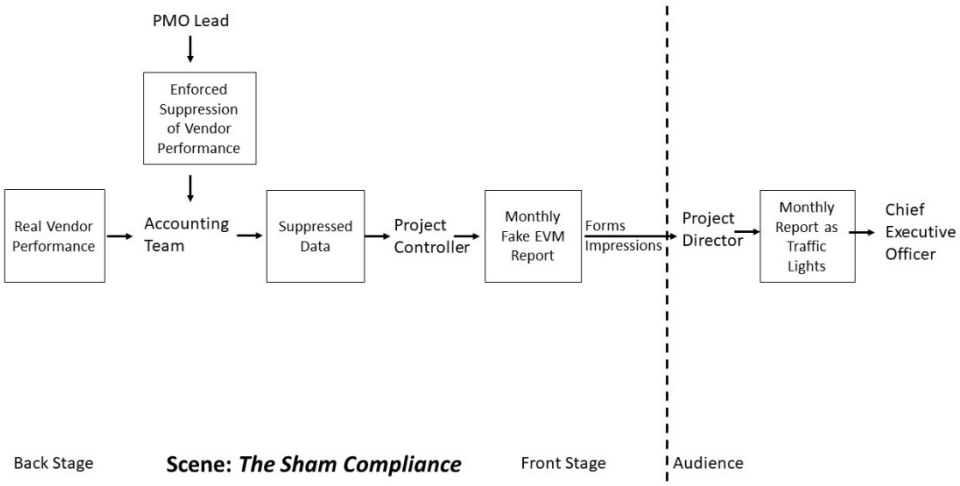

Figure 4: The Sham Compliance

Using Goffman's dramaturgical model of performance, Figure 4 portrays the monthly performance scene of 'the sham compliance' (vignette 7) process, based on the regular reporting cycle. Ultimately, the Chief Executive Officer receives the performance information from the Project Directors office in traffic light format, where significant strategic decisions are finally made based on fake progress, performance, and forecasting advice.

5.9.8 The Project Controller's closing words

Vignette 8

There are standards on project performance management. The final solution would not meet any of these standards. What the fake EVM did was to appear visually similar to an EVM chart. More than a dozen project staff were exposed to what I used to call the EVM look-alike, but not a single person could tell the difference between real EVM and our fake version. What's more disturbing to me is that other PMO staff look at our look-alike version of EVM as some sort of benchmark. The PMO Lead wanted to use fake EVM as the 'best practice' EVM going forward, thus institutionalising the sham compliance process.

5.10 Discussion

We now address the three research questions with consideration to the findings of the study. Our research questions were; 1) Why did this sham process take place and what role did it perform? 2) How was it so successful in persuading senior management? 3) What is the impact of such sham behaviour?

In summary, the answers to these research questions are; 1) the sham process took place because senior management (due to ignorance of project work) created an unworkable bind for project staff, and its role was to mask senior management from the solution the PMO had implemented to make the project workable. 2) the sham succeeded in its persuading objective because senior management were vulnerable to false impressions. 3) in terms of impact, this situation raises ethical issues for those involved and creates an overhead in dealing with the reality of project work. One could even argue, though we do not here pursue this line of argument that the sham process was in a way necessary to deliver the successful project outcome.

To recoin Buckley's (1982) definition of sham to our study; this sham compliance process was "good in form but false in fact" because the performance had the form or appearance of conveying to senior management (the Project Director and beyond) that organisational rules relating to contractual agreements and project progress reporting were being adhered to, while it contained false data. However, dissimilar to Buckley (1982), rather than for an 'unworthy purpose', the PMO Lead 'interposed' or 'placed between' senior management and the sub-contractors, a sham compliance process, for what they believed to be 'worthy purposes'. As the first scene (figure 4) illustrates, a significant motivator for conceiving the sham compliance process was so that senior management would not discover that sub-contractors were receiving regular payments, not milestone payments. The PMO Lead could rationalise this non-compliant behaviour because they believed (and perhaps others in the PMO did too) that the organisational rules devised and mandated by senior management, would drive the sub-contractors out of business and the project would fail. For the managers of the PMO, in their eyes they knew how to manage the project, while senior management had no understanding of the realities of project work. The sham compliance was, in a way, created to 'tell senior management what they wanted to hear', so that the business of managing the project could be attended to. In addition, senior management did not sufficiently understand EVM to discern the sham was occurring.

In this discussion, we explore three topic that emerge from the study that have far reaching consequences and have the potential for further investigation. First, the need for masking the reality of project work from senior management. Second, the matter of exploiting the

vulnerabilities of senior management. The third is consequential of the previous two, and relates to the ethical issues and overhead in dealing with the reality of project work.

It is worth pointing out that this sham compliance process put various individuals in the project, such as the Project Controller and the PMO Lead, under undue work and stress in terms of creating extra impression management behaviour that would be scrutinised, and put them in situations that made it difficult for them to know whether their behaviour was right or wrong.

5.10.1 Masking the reality of work that senior management do not understand

Barrow (2010) considered that there is little practical benefit from what is essentially an 'act' of compliance. However, compliance to quality standards frequently takes on dramaturgical characteristics to appease the politics of the organisation (Barrow 2010). Similarly, as observed in our study, the EVM Reporting process became an act to appease senior management. However, rather than just considering the sham behaviour as questionable and misleading, it is worth considering returning to our research question and considering why such sham compliance is triggered and sustained.

We take the position that there are benefits in such performative acts. As Barrow (2010) observed, the individuals involved in the act benefited through funding stipends through the university. These finances themselves raised from student fees where a dramaturgical act that ensured quality compliance of the course (Barrow 2010). In our study, both the sub-contractors and the individuals involved in the PMO avoided problems through the dramaturgical sham compliance, as they appeared to comply with policy and contractual obligations. The sham compliance also appeared to appease the concerns of the audience (Project Director and their senior management), such that the PMO and the sub-contractors could continue to operate in their previous manner without interruption. Therefore, senior management also benefitted from the sham behaviour.

The image of success is crucially important to senior management, as it is not enough to *be* successful, successful achievements need to be seen and advertised (Baker & Faulkner 2003; Sheridan 2010; Cunha 2013; Turner, Lecoeuvre, Sankaran et al. 2019). Perception of project

success is very important to senior management. They do not necessarily want to hear of problems on projects as this would indicate an unsuccessful project (Davis 2014). Essentially, senior management want projects to be considered successful, and success is judged on adherence to schedule, cost, project performance (scope and quality) and customer satisfaction (Zwikael 2008). However, those in senior management roles may have come from broad business areas and may not understand the nature of project work (Sayles 1993).

This situation where sham compliance was initiated to avoid further project problems appears to be the result of senior management's ignorance of what is required to undertake work (Michael 2004). Managers are renowned for setting vague goals, while others at lower levels of management operationalise these (Quinn 1980; Mintzberg & Lampel 1999; Barnes 2002; Ordóñez, Schweitzer, Galinsky et al. 2009). In this case, management setup the expectations of milestone payments to contractors and the use of EVM without appreciating the need for cash flow for the contracted organisation. This insight regarding management ignorance is not new, as Taylor (1911) had already argued this case. Senior management are not dumb, but they have often entered the organisation through routes other than operations such as finance and marketing, and built their reputations in those areas (Michael 2004). Fundamentally they regard management pursuits as thrilling, and the details of actual work as boring (Michael 2004).

In summary, we framed our discussion to explore why there is a need to mask the reality of work from senior management. However, in a way, this assumes that the need to mask the reality of work pertains to the worker, whereas the situation is perhaps more that senior management set expectations that do not align with the reality of the work, and therefore workers find themselves needing to mask the 'lived experience' from senior management.

5.10.2 Exploiting senior management vulnerability to impressions

A substantial body of literature describes appearance management in the workplace (Saunders & Stead 1986; Rosen 1988; Anderson, Johnson & Reckers 1994; Fussell 2002; Hodgson 2005a; Hodson 2005; Whitty & Schulz 2006). In contemporary times, people no longer spend protracted periods of time to master the craft of management to develop contextual understanding. Instead people learn just enough to do a reasonable job (Whitty & Schulz 2006). In this case study, it seemed there was a lack of contextual understanding of why EVM

is a useful tool in its own right and not just an activity to be compliant with. Those who had previously been responsible for project performance reporting on the project had commented that their knowledge of project management had come from Wikipedia, perhaps implying that they had no formal training, and that the PMO Lead openly admitted that they had no interest in understanding how EVM actually worked. Furthermore, the Project Director's understanding of EVM seemed to come from a short-course training booklet.

In this case, senior management had no idea what they should be looking for in terms of project performance reporting, with the exception that reporting should be on milestone progress, which was their policy embedded in their compliance requirements. Senior management could not see and perhaps did not want to see Back Stage, and therefore could not tell that the PMO was manipulating their view of project work. They were ignorant to EVM, perhaps deliberately, and this helped sustain the sham compliance.

Dramaturgy argues that the meaning of social situations, the 'what a social interaction is', is defined by consensus. Given that, there can be no fixed meaning to any interaction that consensus can change. Our dramaturgical analysis demonstrates how a sham compliance process of project performance reporting was performed by a concord of impressions, which were prepared and conveyed verbally (given) and non-verbally (given-off) by the PMO Lead and the Project Controller, using a fake EVM Report.

Each scene, with its props, has a symbolic nature that conveys meaning. Dramaturgically speaking, the PMO Lead was the director of the monthly performance of sham compliance that conveyed messages to the senior management audience, such as 'work is proceeding as planned' and 'compliance processes are adhered to'. Essentially, the PMO was producing a monthly project progress performance that told senior management exactly what they wanted to hear and enabled them to cope with the unrealistic expectations that had been set by senior management.

In summary, perhaps senior management were indeed vulnerable to a compliance con because of their poor understanding of EVM. Alternatively, perhaps senior management were not actually interested in the details of the project, or in compliance, but rather what they were

looking for in scenes 2 and 3 was assurance that the PMO was doing what needed to be done to deliver the project.

5.10.3 Ethical issues and overhead in dealing with the reality of project work

Our study contributes to the sham and deception body of work (Section 5.7.1) by providing a dramaturgical analysis of an ethnographic description of the culture inside the project management office of a large infrastructure project. However, was the intent in this sham compliance deception, unethical or fraudulent, or just enormously wasteful of time and effort? As time and effort has a cost, then someone pays this, so perhaps it is unethical and fraudulent, but who is culpable? Was senior management's ignorance of what is feasible in project work and their misaligned expectations what drove this act? Perhaps everyone involved is culpable, but no one will speak out.

Employment legislation can prevent individuals at any organisational level from speaking out against what they consider bad practices. The Fair Work Act 2009 may consider an employee guilty of serious misconduct for failing to carry out a lawful and reasonable instruction (Commonwealth of Australia 2009). For example, if the Project Controller behaved in an adversarial way towards the PMO Lead, their working relationship would certainly have deteriorated. Indeed, one could consider disciplinary action via employment legislation to be a form of silent yet coercive 'weapon' used in this case by the PMO Lead to ensure the Project Controller bends to the directives they felt were necessary for all involved.

Jergeas (2008) highlights a lack of managerial courage as a factor in three separate case studies where the project teams should have raised alarms based on EVM trends. Early alerting by management argues Jergeas (2008), would have allowed senior management to make informed decisions. In our study, the Project Controller said their original EVM model accurately forecasted cost and schedule issues, which could have been avoided. However, the PMO Lead was more concerned with maintaining the status-quo and with the appearance of compliance than displaying a form of managerial courage by revealing to the Project Director the true nature of the sub-contractors working situation, which as it turned out was fit for purpose. Similarly, senior management could have displayed a form of managerial courage by

admitting that the PMO was best placed to know how to manage the work appropriately, and that perhaps that would be a ‘better practice’ than ‘best practice’.

To summarise, in organisations, superfluous compliance processes create environments where employees (such as the Project Controller and the PMO Lead) are under undue pressure to behave unethically, as they perceive it. These superfluous processes can create extra impression management work (such as creating and sustaining the sham compliance) beyond that required for the actual management and delivery of the work because senior management do not understand the actual nature of the project work and have established impractical compliance expectations. This extra impression management work masks the reality of the necessary costs and schedule overruns that are yieldingly paid by the project sponsor or owner. Perhaps what is unethical is that project workers and lower levels of management are put in a position by the way these organisations operate, where to speak honestly about the true nature of project work, could leave them exposed to forms of rebuke or reprimand and having their professionalism questioned. Ultimately, frontline managers resort to use sham behaviour as a device to breach policy, process, and standards that they consider superfluous, even wrong, and in this case potentially damaging to the project.

5.11 Conclusion

Socially we present ourselves consciously, and we do this by a process called dramaturgy, which is what Goffman calls our theatrical representation of life. This representation is broken into two regions (Back Stage and Front Stage), and we use impression management as a tool to make ourselves look more appealing to others (the audience) while we are on the Front Stage.

In this study, we took advantage of an opportunity that presented itself, in that a project worker volunteered information about their experience of a case of sham compliance that had taken place. In the spirit of ‘lived experience’ research, we wanted to know what this experience was like for them, from their point of view. What were the motivating factors for this sham behaviour? Moreover, why would this situation occur? What are the implications?

Based on their journal entries, we invited them to write vignettes about their experiences. To help give focus to a particular perspective of the performance and remove complexity from

the narrative, we used dramaturgical analysis to developed dramaturgical scene illustrations of the sham compliance events. This process helped to perceive the performative act as theatrical scenes, each with a distinct direction or purpose in the scheme for the overall act.

In short, the study found that senior management, ignorant (perhaps deliberately so) to the realities of project work, had previously created contractual policy mandating that the progress of all project work be reported using EVM, which in their eyes was 'best practice'. However, those in the PMO actually managing the work, who realised the financial difficulties sub-contractors would face if paid on an earned value basis, chose to break with policy and pay them on a time period basis. After an initial period of 'relaxed' progress reporting on the project, senior management insisted on a strict adherence to their EVM policy. To mask their 'Dark Secret' of time-based payments to sub-contractors, the PMO developed a sham compliance reporting process using a fake EVM report.

Our study provides a window into the 'lived experience' of the Project Controller, on what was considered a successful project. However, this individual found the experience so stressful that they journaled their interactions throughout the project in case there were repercussions. Interesting, they willingly engaged in this research, finding writing the vignettes somewhat cathartic.

We propose that this study has brought to light three important areas for further research. Firstly, to understand the role the contemporary PMO has of masking the reality of work from senior management. Secondly, to grasp and appreciate the underlying motivators and prevalence of sham behaviour in project work, particularly if this behaviour is necessary to deliver successful project outcomes under certain conditions. Lastly, sham compliance is not a victimless act. Our ignorance of sham project reporting behaviour results in unnecessary work and unprofitable projects where cost benefits underperform.

Limitations to this study are due to the inherent nature of the ethnographic method, which in this case focuses on the perspective of one participant. Therefore, a claim could be made that the participant was selected to support our research objective. However, we submit that sham behaviour cases do occur in practice and are underreported, and it is difficult to recruit willing participants. Moreover, we ensured the participant adhered to the data verification method

(Section 5.9.3), and we treated the discussion with a level of impartiality that awarded no blame.

CHAPTER 6 A MODEL OF PROJECTS AS A SOURCE OF STRESS AT WORK: A CASE FOR SCENARIO-BASED EDUCATION AND TRAINING

6.1 Preface

This chapter provides the full accepted manuscript from the third peer-reviewed paper developed as part of this doctoral research. This paper titled *A model of projects as a source of stress at work: A case for scenario-based education and training*, was published in the *International Journal of Managing Projects in Business*. This paper highlights the absurdity inherent in the very notion of project management. Many would argue that its raison d'être was to bring dynamic and complex work under control, to bring a sense of purpose and meaning, a sense of harmony. However, this paper combines a systematic review with Cooper and Marshall's (1976) model of stress at work to establish that project work is in fact very stressful, with negative impacts on the physical and mental health of project workers, as well as poor well-being outcomes. Potential solutions are described that have been adopted in other industries to reduce occupational stress.

6.2 Key points of this chapter relevant to this thesis

- Occupational stress in project management is a reality, it is widely reported in the extant literature over many decades.
- There are multiple health consequences as a result of occupational stress, project workers are not immune.
- Scenario-based training is a proven method in reducing occupational stress, currently the project management literature and certification programs have not adopted this technique.

6.3 Citation and co-author details

Table 7: Citation details of original publication

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# of times cited	1 (citation details from Google Scholar, as at 06 June 2020)
Writing	Eric Darling (80%); Dr S. Jon Whitty (20%)
Data collection and analysis	Eric Darling (100%)
Quality Review	Eric Darling (80%); Dr S. Jon Whitty (20%)

6.4 Abstract

Purpose – The purpose of this paper is to describe the relationship between project work and stress. It examines how the conditions of project work negatively impact on an individual's mental and physical state of well-being, consequentially reducing organisational performance.

Design/methodology/approach – The authors systematically review the project management literature for sources of stress or stressors as it relates to Cooper and Marshall's (1976) model of stress at work. The authors perform a thematic analysis on these stressors to reveal the 'sub-stressor' conditions of project work.

Findings – A 'model of projects as a source of stress at work' is developed. It shows the relationship between the sub-stressors of project work and the ill effects they have on mental and physical well-being of the project workforce.

Research limitations/implications – The findings of this study are constrained by the limits of a literature review process. This study has implications for research on stress in project work, as studies can benefit from the 'model of projects as a source of stress at work', which can be continually advanced to gain insights on the minimisation of physical and mental distress.

Practical implications – Many sectors including health, education, policing, aviation and military, provide scenario-based training. In project management, a greater understanding of stressful scenarios and counter-measures would improve health outcomes for project staff, improve human relations, and improve project outcomes.

Originality/value – The study presents a comprehensive model of projects as a source of stress at work. It draws attention to the burden and cost of anxiety and stress placed on the project workforce. It makes the case for organisations and employees to take responsibility for the well-being of project staff.

Keywords: anxiety, stress, conflict, training, human resources

6.5 Introduction

The project management literature is replete with the sentiment that project work is crucial for organisations to adapt, and furthermore it is essential to the development of society. However, there is also a substantial body of literature (reviewed in this study) that examines the personal cost of project work and how it induces stress, and consequentially negatively impacts on a project worker's mental and physical health, and overall wellbeing. The current conversation gives the impression that while corporate and government organisations appreciate the intrinsic value of projects, they invest in them at the cost of the project worker's health. We are not suggesting that this is an intended situation, however it does appear to be a valid statement of the status quo. If project work was less injurious and more rewarding, then this would necessarily have a positive impact on the health and wellbeing on the project worker, and on the resilience of the organisation.

To pursue this line of enquiry, we propose that the literature on stress in project work holds information about organisational conditions that are the source of stress. Moreover, if analysed, these conditions can be categorised in such a way that they can be acted upon, perhaps with established methods. To this end, our study conducts a systematic review of the project management literature for sources of stress and stressors as they relate to Cooper and Marshall's (1976) renowned model of stress at work. We perform a thematic analysis of

these stressors to reveal the ‘sub-stressor’ of project work, and develop a model of ‘projects as a source of stress at work’.

The model of projects as a source of stress at work (figure 8) contains five stressor categories, each contains multiple sub-stressors that are often present when an organisation performs project work. It is the various combinations of sub-stressors that construct the conditions that induce stress in the project workforce.

With knowledge of project sub-stressors and their consequences, organisations and professional bodies can respond appropriately. Organisations can be made aware of their duty of care to the project workforce (Walker & Lloyd-Walker 2018), and actively address their management practices that produce these sub-stressors; both for the sake of the project workers and the overall benefit of the organisation. Furthermore, we can use these sub-stressors to formulate recommendations to project management professional bodies, educators, and organisations to better design and provide scenario-based training to mitigate the impact of stress.

We begin by outlining the problem of stress in project work. We then discuss the study design, methodology, and method of using the Cooper and Marshall (1976) model of ‘stress at work’. The results are provided in the form of the model of projects as a source of stress at work, and the implications for project organisations are provided in the discussion.

6.6 The problem of stress at work

Occupations and workplaces have natural and unique stresses that contribute to environmental and employee stress. Sectors such as health and policing have specific stressors intrinsic to their occupation, yet only some stressors in the field of project management are acknowledged (Mimura & Griffiths 2003; Pines, Rauschhuber, Rorgan et al. 2012; Adriaenssens, De Gucht & Maes 2015; Andersen, Papazoglou, Koskelainen et al. 2015; Konstantinou 2015; Andersen & Gustafsberg 2016). Stress can be healthy; however, occupational stress can escalate from minor anxiety to post traumatic stress, and physical illness related to anxiety leading to chronic illness such as coronary heart disease (Cooper & Marshall 1976; Ferrie, Shipley, Stansfeld et al. 2002; Michie 2002; Marmot 2004, 2017). A range of domains including policing, aviation, military, education, and nursing discuss the

conditions and impact of occupational stress (Chovanec 1982; Cusack 1982; Botts 1986; Wilson 1988; Allison 1995; Costa 1995; Kuo 2014; Adler, Williams, McGurk et al. 2015; CANSO 2015; Lorello, Hicks, Ahmed et al. 2016). The American Psychiatric Association (2013) state that stress related injuries are as equally debilitating as physical injuries. Organisations more broadly are becoming aware of workplace trauma, as staff health is affected by high stress, anxiety, fearful workplaces, and affected staff become inefficient and accident-prone (Sommerville & Langford 1994; Leka, Griffiths & Cox 2003; Abudayyeh, Fredericks, Butt et al. 2006; Comcare 2008; Pinto, Dawood & Pinto 2014; Yang, Li, Zhu et al. 2017). The negative effects of stress has a direct effect on outcomes, and on an individual's cognitive ability for decision making (Andersen & Gustafsberg 2016). Health incidents have a real economic cost on the workplace, and society suffers this cost, with direct implications to health and life expectancy (Marmot 2004; Abudayyeh, Fredericks, Butt et al. 2006; Marmot 2017). Therefore, an investment in creating a mentally and physically healthy workplace is likely to result in improved outcomes at work.

If we are to develop society, then there is still room for regulatory improvement in creating healthy workplaces. In countries such as Australia, organisations are aware they have a duty of care under legislation to provide safe working environments for all employees (Australian Human Rights Commission 2010; Comcare 2016a; Queensland Government 2018; Safe Work Australia 2018). Employees also have a responsibility to promote a healthy working environment (Comcare 2016b; Government of Western Australia 2017; Worksafe Northern Territory 2018). However, currently, this duty of care is not extended to the ill effects of project work.

The delivery of work by projects has become a significant feature in business, with globally more than 20% of economic activity occurs as projects, and in emerging economies this is estimated to be 30% (Crawford, French & Lloyd-Walker 2013; McKevitt, Carbery & Lyons 2017). However, practitioner focused literature on the well-being of project workers is limited. Whilst the human resources chapter in the PMBOK® Guide 6th edition focusses on ensuring team members perform tasks within time constraints, and acknowledges conflict and stress as a result of workplace culture (PMI 2017), there is limited advice provided on how to manage the matter.

There is an inherent stressful nature to managing projects of substantial value, and delivering to the triple constraint of time, cost and quality. Gallstedt (2003) identified contributors to poor working conditions and stress in a Project Management Office (PMO) environment, which include; office layouts, human interactions and gender issues (Gallstedt 2003; Bowen, Edwards & Cattell 2015). We know that physical workplace injuries have a direct impact on project schedules and cost overruns, not only in terms of project expense but also workers compensation, insurance premiums and regulator fines (Abudayyeh, Fredericks, Butt et al. 2006; Zika-Viktorsson, Sundström & Engwall 2006). However, the well-being of the project workforce is not so well known, but it is a topic gathering interest in the literature (Loosemore 1998; Gray 2001; Veil & Turner 2002; Gallstedt 2003; Love & Edwards 2005; Parker & Skitmore 2005; Cicmil 2006; Pheng & Chuan 2006; Richmond & Skitmore 2006; Turner, Huemann & Keegan 2008; Chiocchio, Beaulieu, Boudrias et al. 2010; Lee-Kelley & Turner 2017; Yang, Li, Zhu et al. 2017; Blomquist, Farashah & Thomas 2018). There is also a resurgence in the humanistic dimension of project management seen by a growing body of literature specifically focused on the concept of stress in projects (Sommerville & Langford 1994; Gallstedt 2003; Richmond & Skitmore 2006; Aitken & Crawford 2007; Dillard & Nissen 2007; Leung, Chan & Olomolaiye 2008; Asquin, Garel & Picq 2010; Chiocchio, Beaulieu, Boudrias et al. 2010; Bowen, Edwards, Lingard et al. 2014; Cattell, Bowen & Edwards 2016). This humanistic research in project management discusses topics such as ambiguity in goals, organisational conflict, and challenging relationships in the workplace as sources of stress (Loosemore 1998; Nordqvist, Hovmark & Zika-Viktorsson 2004; Love & Edwards 2005; Lee-Kelley 2006; Creasy & Anantatmula 2013; Pinto, Dawood & Pinto 2014; Cowen & Hodgson 2015; Wang, Xu, Zhang et al. 2016; Creasy & Carnes 2017; Khedhaouria, Montani & Thurik 2017; McKevitt, Carbery & Lyons 2017; Yang, Li, Zhu et al. 2017; Batistič & Kenda 2018).

Despite the growing acknowledgement of project-based stress found throughout the literature, there is still no model or framework that scholars and practitioners can use to inform policy and practice for reducing stressors in project work, even though this literature also argues that improved staff satisfaction can lead to improved organisational productivity. To address this matter we review this literature and develop ‘a model of projects as a source of stress at work’, and so provide a foundation for organisations to develop more effective management

practice and training for project workers and mitigate the health and safety risks associated with project work.

6.7 Study design

This study is influenced by Finney, Stergiopoulos, Hensel et al. (2013) who adapted a systematic review with Cooper and Marshall's (1976) model. Tranfield, Denyer and Smart (2003) describe the systematic review as a method of minimizing bias while being transparent, scientific and evidence-based. Grant and Booth (2009) highlight the strength of the systematic review as aiming to draw together all knowledge on a topic, particularly those with a range of research methods to ensure a more holistic understanding of the subject matter is established. Recent examples of systematic reviews in project management include: Darling and Whitty (2016) on the evolution of the PMO, von Danwitz (2018) on inter-firm projects, Suhonen and Paasivaara (2011) on human capital in project management and Stingl and Geraldi (2017) on behavioural decision making in projects.

This study aims to establish a model of projects as a source of stress at work through a systematic literature review and a thematic analysis using the established Cooper and Marshall (1976) workplace stress model. The Cooper and Marshall (1976) model of stress at work has been adopted as a form of analysis by many empirical studies (Cusack 1982; Botts 1986; Wilson 1988; Allison 1995; Yu 1996; Irimie, Pricope, Pricope et al. 2015; Lai, Saridakis & Blackburn 2015). Beyond project management other studies have also used the systematic review method when applying the Cooper and Marshall (1976) model of stress at work to their particular domain. Examples include Finney, Stergiopoulos, Hensel et al. (2013) regarding correctional officers, and Stergiopoulos, Cimo, Cheng et al. (2011) in work related Post Traumatic Stress Disorder. The Cooper and Marshall (1976) model of stress at work has attracted significant conferral as a method to further develop understanding of stress in occupational environments. Chen, Wong, Yu et al. (2003), Biron, Brun and Ivers (2008), Kuo (2014) and Bowen, Edwards, Lingard et al. (2014) are further recent examples of studies that have adapted Cooper and Marshall (1976) model to specific industries or organisations.
The education and health sectors particularly invest in research on workplace stress, and discuss implications of stress on practice and its influence of disease (Cusack 1982; Mimura & Griffiths 2003; Biron, Brun & Ivers 2008; Bowen, Edwards, Lingard et al. 2014). Table 8 lists other studies using this model.

Table 8: adaptations of the 'model of stress at work' applied to specific occupational environments

Occupational Environments	Literature
Offshore oil workers in China	Chen, Wong, Yu et al. (2003)
University staff in Canada	Biron, Brun and Ivers (2008)
Correctional officers	Finney, Stergiopoulos, Hensel et al. (2013)
Police officers in Taiwan	Kuo (2014)
Community health workers in China	Bowen, Edwards, Lingard et al. (2014)

In the analysis in this study, a feature or characteristic of project work is associated to each of the Cooper and Marshall (1976) main themes of sources of stress. These themes are, intrinsic to job, role in organisation, career development, relationships at work, organizational structure and climate, and extra-organizational sources of stress. Section 6.8.2 describes our thematic analysis in detail.

A model of stress at work attempts to understand how workplace features result as stress characteristics, and in extreme cases may result in disease. Cooper and Marshall's (1976) model suggests occupational stress has a causal relationship with a range of mental illnesses and coronary heart disease. The premise is that three factors comprising (1) the character of the person and (2) the potential sources of stress in the occupational environment (3) family and friendships beyond work combine affecting the person with physiological and psychological outcomes. Building upon 'a model of stress at work' many studies have examined sources of stress in their specific environments, and some also attempt to discuss symptoms. In this study, we review the project management literature for both sources and symptoms.

6.7.1 Method and methodological quality

We conducted a search of the project management literature using a variety of approaches. The search terms included what Cooper and Marshall (1976) referred to as 'sources of stress at work' and 'symptoms of occupational ill health', noting a combined 31 search terms. In addition, in order to ensure a contemporary fit where necessary, we updated terms to contemporary language to ensure we captured the nuance.

We targeted three main project management journals, namely, International Journal of Project Management (IJPM), Project Management Journal (PMJ), and International Journal of Managing Projects in Business (IJMPB), as they focus their content on project-based work.

The three main journals were also searched for the term “Cooper and Marshall” to identify any previous major project management literature citing Cooper and Marshall (1976).

Beyond the three main journals the databases: EBSCO Megafile Ultimate, Google Scholar, Wiley Online Library, Sage Journals, ScienceDirect and Emerald Insight were searched broadly for a combination of the terms “project management” and the 31 terms previously mentioned. From these searches, we found a number of relevant articles in journals relating to organisational research and engineering management. All citations of Cooper and Marshall (1976) were examined to identify any project management literature referring to this work. The databases were accessed from July to October 2018.

To assess the quality and relevance of the articles found, a checklist was developed based on the models of Finney, Stergiopoulos, Hensel et al. (2013) and Stergiopoulos, Cimo, Cheng et al. (2011). Their models qualified each article selected against a criteria designed to ensure integrity in the research, which in turn represents validity in the research. Criteria includes:

1. Methods of data collection are described.
2. Validated measures are used.
3. The Literature Review method used is appropriate for the outcome studied.
4. The qualitative method used is appropriate for the outcome studied.
5. The statistical method used is appropriate for the outcome studied.
6. The author(s) answered their research question.
7. There is a discussion of study limitations, including biases, and the way in which the study may have been affected as a result.

Of the 77 articles subjected to the quality assessment checklist, almost all articles were highly compliant with the checklist and scored full points. Some papers did not fully comply by failing to explicitly state their limitation or bias, while a small portion of studies surveyed staff from both the operations and projects departments. We examined the articles resulting from the literature search based on:

1. relating to project management literature or project work;
2. discussion on sources of stresses identified in the work of Cooper and Marshall (1976); and
3. application of a validated, empirical measure.

We excluded articles when they were:

1. normative and showed limited empirical evidence or research method, and
2. were loosely aligned to stressors so much as to be of questionable value.

Initially we screened article titles to ensure relevancy, and reviewed the abstracts broadly for stressor themes. The full-text articles were retrieved and examined to ensure relevancy to Cooper and Marshall's (1976) model and to ensure the research methodology was sound.

6.7.2 Thematic analysis and project sub-stressor classification

While the stressor and sub-stressor of the Cooper and Marshall (1976) model can be considered to transcend both industry and profession, this study seeks to elicit specific sub-stressors related to project work. To achieve this, adherence to the research method and stressor definition by Cooper and Marshall (1976) as well as the literature upon which it is based is pivotal (Coch & P. 1948; Kornhauser 1965; French & Caplan 1970, 1972; Marrow 1972; Brook 1973; Shirom, Eden, Silberwasser et al. 1973). The literature pertaining to project management was searched for stress inducing conditions using the Cooper and Marshall (1976) classifications of stressors, sub-stressors, and symptoms of occupational ill health as a guide. Table 9 shows the articles discussing these stress inducing conditions. Each article was entered into NVivo (qualitative data analysis software) and subjected to a process of content analysis where sentences and paragraph discussing the conditions leading to stress were selected and considered as 'thought units' (Ashill, Fredrikson & Davies 2003; Algeo 2012). The use of this method was guided by Braun and Clarke (2006) who notes the variability and nuances inherent within qualitative research. These 'thought units' were subjected to an open process of thematic coding, and 31 themes where finally identified after a final 'axial coding' process where relationships between the theme codes are identified. Finally, these remaining themes now known as 'project work sub-stressor themes', were interpreted through a 'selective coding' process to identify their core meaning so that they could be associated with their respective Cooper and Marshall's (1976) stressor categories and symptoms of occupational ill health. Table 9 shows the association of project work sub-stressor themes and Cooper and Marshall's (1976) categories and symptoms.

6.8 Results

Tables 9 and 10 presents the results of the review and thematic analysis.

Table 9 shows the project work sub-stressors as themes categorised under the Cooper and Marshall's (1976) five stressors. Table 9 also shows the source evidence for each of the sub-stressor themes.

Table 10 shows the symptoms of occupational ill health as they relate to project work. Table 10 also shows the literature source for each symptom.

Figure 5 presents the model of projects as a source of stress at work, which emerges from the systematic literature review and thematic analysis. The model shows the five main stressors, the project work sub-stressors, and their associated symptoms of occupational ill health in project management.

Table 9: Project work sub-stressors as sources of stress at work

Cooper and Marshall's (1976) categories of work stressors	Project work sub-stressor themes	Evidence sources
Intrinsic to job	Lack of resources and processes	(Chatzoglou & Macaulay 1997; Andi & Minato 2003; Gallstedt 2003; Nordqvist, Hovmark & Zika-Viktorsson 2004; Lee-Kelley 2006; Richmond & Skitmore 2006; Zika-Viktorsson, Sundström & Engwall 2006; Blichfeldt & Eskerod 2008; Ling, Liu & Woo 2009; Asquin, Garel & Picq 2010; Hölzle 2010; Legault & Chasserio 2012; Seiler, Lent, Pinkowska et al. 2012; Konstantinou 2015; van der Hoorn & Whitty 2016)
	Lack of authority over resources	(Andi & Minato 2003; Gallstedt 2003; Lee-Kelley 2006; Richmond & Skitmore 2006; Zika-Viktorsson, Sundström & Engwall 2006; Hölzle 2010; Legault & Chasserio 2012; Seiler, Lent, Pinkowska et al. 2012; Konstantinou 2015)
	Ambiguity in goals and roles	(Chatzoglou & Macaulay 1997; Gallstedt 2003; Hällgren & Maanienen-Olsson 2005; Lee-Kelley 2006; Legault & Chasserio 2012; Seiler, Lent, Pinkowska et al. 2012; Cowen & Hodgson 2015; Jugdev, Mathur & Cook 2018)
	Strict unachievable deadlines	(Chatzoglou & Macaulay 1997; Andi & Minato 2003; Gallstedt 2003; Nordqvist, Hovmark & Zika-Viktorsson 2004; Richmond & Skitmore 2006; Zika-Viktorsson, Sundström & Engwall 2006; Blichfeldt & Eskerod 2008; Asquin, Garel & Picq 2010; Legault & Chasserio 2012; Seiler, Lent, Pinkowska et al. 2012; Bowen, Edwards, Lingard et al. 2014; Khedhaouria, Montani & Thurik 2017)
	Job security / personal safety	(Abudayyeh, Fredericks, Butt et al. 2006; Ling, Liu & Woo 2009; Seiler, Lent, Pinkowska et al. 2012; Söderland, Roberts, Kelsey et al. 2012; Bowen, Edwards, Lingard et al. 2014)
	Gender issues	(Gallstedt 2003; Richmond & Skitmore 2006; Aitken & Crawford 2007; Legault & Chasserio 2012; Crawford, French & Lloyd-Walker 2013; Lu, Yuan & Wu 2017)
Role in organization	PMO finds itself having to de-conflict projects with the operational nature of the organisation	(Liu & Yetton 2007; Aubry 2012; Darling & Whitty 2016)
	Constant re-negotiation of roles due to the ambiguity of project work	(Maylor, Brady, Cooke-Davies et al. 2006; Leung, Chan & Olomolaiye 2008; Chiocchio, Beaulieu, Boudrias et al. 2010; Pinto, Dawood & Pinto 2014; Cowen & Hodgson 2015; Aga, Noorderhaven & Vallejo 2016; Cattell, Bowen & Edwards 2016; Henderson, Stackman & Lindekilde 2016; Khedhaouria, Montani & Thurik 2017)

	Attempting to act the 'ideal archetype project manager' but constantly disempowered, hence the opposite outcome	(Gaddis 1959; Cicmil, Hodgson, Lindgren et al. 2009; Paton, Hodgson & Cicmil 2010; Cowen & Hodgson 2015)
	Background of the individual: staff with operational backgrounds struggle more with ambiguity than staff with project background	(Chiocchio, Beaulieu, Boudrias et al. 2010; Pinto, Dawood & Pinto 2014)
Career development	Career satisfaction is very mixed, from purely a job to a 'calling'	(McKevitt, Carbery & Lyons 2017)
	Very limited development opportunities: organisations don't know how to develop project staff. Women face even less opportunities and often social exclusion	(Crawford, French & Lloyd-Walker 2013)
	Organisations don't know how to develop PMOs	(Savelsbergh, Havermans & Storm 2016)
	Project Managers pursue certification for development but evidence on effectiveness is mixed	(Whitty 2009; Blomquist, Farashah & Thomas 2018)
	Promotion can be described as ambiguous	(Cowen & Hodgson 2015; Ekrot, Rank & Gemünden 2016)
Relationships at work	The nature of procurement encourages adversarial relationships	(Sommerville & Langford 1994; Jergeas 2008; Mollaoglu, Sparkling & Thomas 2015; Ekrot, Rank & Gemünden 2016; Lahdenperä 2016; Khedhaouria, Montani & Thurik 2017; Pal, Wang & Liang 2017)
	Negative working relationships is a risk and reduce quality of work	(Ekrot, Rank & Gemünden 2016; Khedhaouria, Montani & Thurik 2017)
	Soured relationships linger for many years	(Hällgren & Maaninen-Olsson 2009; Ekrot, Rank & Gemünden 2016)
	Relationships can be fickle. Examples such as insufficient project budget impact on interpersonal relationships.	(Oyedele 2013; Turner 2013; Mazur & Pisarski 2015; Aga, Noorderhaven & Vallejo 2016; Wang, Xu, Zhang et al. 2016; Lu & Wang 2017)
Organizational structure and climate	Office culture, the ethics as practices, staff behaviour, office favouritism, unequal salaries	(Ryan & Deci 2000; Gray 2001; Lee-Kelley 2006; Crawford, French & Lloyd-Walker 2013; Locatelli, Mariani, Sainati et al. 2017; Yang, Li, Zhu et al. 2017)
	Office politics have been cited as an inhibitor to career progression in projects	(Bosch-Rekveldt, Jongkind, Mooi et al. 2011; Patanakul, Kwak, Zwikael et al. 2016; Savelsbergh, Havermans & Storm 2016; van Marrewijk & Smits 2016)

Table 10: Symptoms of occupational ill health associated with project work

Symptoms of occupational ill health	Evidence sources
Anxiety	(Love & Edwards 2005; Cicmil 2006; Richmond & Skitmore 2006; Hällgren & Maaninen-Olsson 2009; Whitty 2009; Asquin, Garel & Picq 2010; Creasy & Anantatmula 2013; van der Hoorn 2015; van der Hoorn & Whitty 2015; Blomquist, Farashah & Thomas 2016; Ekrot, Rank & Gemünden 2016; Wang, Xu, Zhang et al. 2016; Stingl & Geraldi 2017; Yang, Li, Zhu et al. 2017; Jugdev, Mathur & Cook 2018)
Anger	(van Marrewijk & Smits 2016; Yang, Li, Zhu et al. 2017)
Despair	(Lindgren, Packendorff & Tham 2011; Yang, Li, Zhu et al. 2017)
Learned Helplessness	(Love & Edwards 2005; Lee-Kelley 2006)
Impulsiveness	(Loosemore 1998; Nugapitiya, Healy & Boydell 2011; Wang, Xu, Zhang et al. 2016)
Stress	(Sommerville & Langford 1994; Gallstedt 2003; Aitken & Crawford 2007; Asquin, Garel & Picq 2010; Chiocchio, Beaulieu, Boudrias et al. 2010; Bowen, Edwards, Lingard et al. 2014; Cowen & Hodgson 2015)
Depressive Mood	(Chiocchio, Beaulieu, Boudrias et al. 2010; Oyedele 2013; Bowen, Edwards, Lingard et al. 2014; Wang, Xu, Zhang et al. 2016; Creasy & Carnes 2017)
Substance abuse: tobacco, alcohol, other	(Love & Edwards 2005; Richmond & Skitmore 2006; Aitken & Crawford 2007; Asquin, Garel & Picq 2010; Creasy & Carnes 2017; Yang, Li, Zhu et al. 2017)
Job dissatisfaction	(Huemann, Keegan & Turner 2007; Turner, Huemann & Keegan 2008; Ballesteros-Pérez, González-Cruz & Fernández-Diego 2012; Oyedele 2013)
Reduced aspiration	(Lukas & Lukas 2010; Seiler, Lent, Pinkowska et al. 2012; Crawford, French & Lloyd-Walker 2013; de Araújo, Alencar & de Miranda Mota 2017)

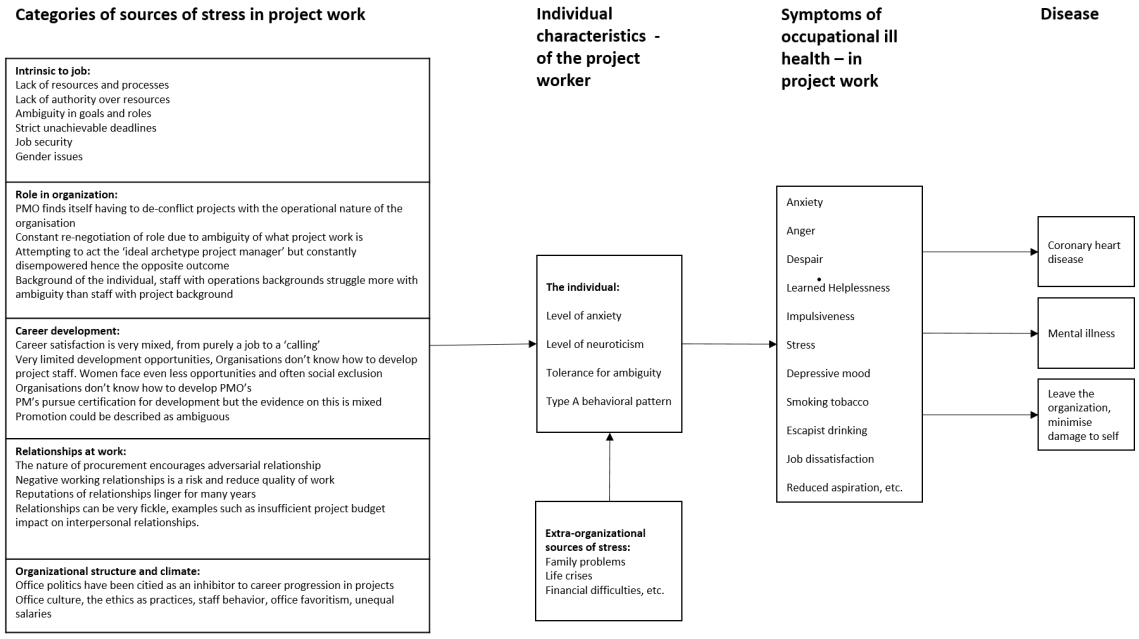

Figure 5: Projects as a source of stress at work

6.9 Discussion

We structure this section in two parts. Firstly, we expand and discuss each of the sources (sub-stressor conditions) of stress in project work. Secondly, we attempt to respond to the sub-stressors in terms of what project workers are already doing to cope; how organisations should adhere to their legal obligations to the health and wellbeing of project workers, as well as their obligations to shareholders and stakeholders to better manage their projects; and what learnings can we take from other 'stressful' industry sectors.

We posit, from the categories of sources of stress in project work, that there is a shared feature to almost all the studies on project work and stress, namely, 'ambiguity'. In fact, project work could be restated as 'ambiguous work'. Currently, ambiguity permeates project work in a myriad of ways, causing all sorts of damage. Metaphorically, ambiguity is the faulty gene of project work. What must be noted is that as a condition of project work, ambiguity is not the same as uncertainty (Einhorn & Hogarth 1985; Camerer & Weber 1992; Hällgren & Maanienen-Olsson 2005; Nachbagauer & Schirl-Boeck 2019). Uncertainty relates to the known unknowns, where one is aware there is an unknown element (Luft & Ingham 1955; Brink 2017; Walker & Lloyd-Walker 2018; Nachbagauer & Schirl-Boeck 2019). Whereas ambiguity relates to the unknown unknowns, where the inherent nature of project work provides a rich environment for unknown unknowns, particularly when insufficient planning has occurred (Luft & Ingham 1955; Brink 2017; Walker & Lloyd-Walker 2018; Nachbagauer & Schirl-Boeck 2019). An 'anxious state of being' is where one is aware of unknown unknowns, whereas an 'ignorant state of being' is where one is unaware of unknown unknowns (Luft & Ingham 1955; Brink 2017; Walker & Lloyd-Walker 2018; Nachbagauer & Schirl-Boeck 2019). As eighteenth-century English poet Thomas Gray put it, "where ignorance is bliss" (Gray 1742). In recent years there has been a rise in project management literature on presenting ambiguity as 'complexity', where this re-framing shifts comprehension from that of the individual to that of the situation of work (Whitty & Maylor 2009; Brink 2017; Walker & Lloyd-Walker 2018; Nachbagauer & Schirl-Boeck 2019).

Therefore ambiguity, as these selected articles describe, could be better explained as vagueness, which is a condition of a situation brought about by a lack of logical thought. As figure 8 shows, characteristics of the individual project worker can leave them vulnerable to

sub-stressors of project work, and this can lead to symptoms of occupational ill health and possibly disease.

Bear in mind the descriptions of ambiguity and uncertainty in the following sections, as ambiguity speaks to the lack of managerial thought organisations have when designing and implementing project controls and delivery methods, and uncertainty speaks to the stressful consequence of ambiguously managed work.

6.9.1 Features of project work that contribute to 'stress in project work'

6.9.1.1 Intrinsic to job

A project worker would consider the sub-stressors in this category as 'par for the course'. However, if an organisation takes its survival seriously, then perhaps it should care and invest in its project delivery methods. This category describes working conditions such as; lack of resources, processes, and proper authority; ambiguous goal and roles; unachievable deadlines; staff feeling insecure and vulnerable to blame, and being selected against based on gender. Grouped together, these conditions would indicate superficial management and project delivery methods.

There is a very high expectation of project work to achieve outcomes, yet connotations of disempowerment are apparent (Jonas 2010; Cowen & Hodgson 2015). Project work inevitably involves multiple people, creating a social aspect in team functioning, similar to membership of a sports team (Nordqvist, Hovmark & Zika-Viktorsson 2004). However, knowing this, organisation appear to put project managers in a unique position where they are responsible for completing a series of tasks with the cooperation of a team, while at the same time they frequently give them no authority over this team (Gallstedt 2003; Maylor, Brady, Cooke-Davies et al. 2006; Pinto, Dawood & Pinto 2014). Furthermore, from a Workplace Health and Safety perspective, project managers find themselves responsible for the safety of project team members (Abudayyeh, Fredericks, Butt et al. 2006; Ling, Liu & Woo 2009; Chi & Han 2013). It appears that project managers are accountable and responsible, despite little or no real authority.

Burnout has been tied to the ambiguity of goals and roles in project work (Pinto, Dawood & Pinto 2014; Cowen & Hodgson 2015). Ambiguous roles generate a renegotiating roles behaviour, and this renegotiation often produces unequal work, which is a source of workplace stress (Henderson, Stackman & Lindekilde 2016). Henderson, Stackman and Lindekilde (2016) describe conditions that lead to role ambiguity, describing multiple-roles and lateral communications channels (such as email) that result in conflict, conflicting information, hence bringing about ambiguity. It appears there is a constant sense of urgency in project work that drowns out the quest for clarity.

Unachievable deadlines are another common condition that has all sorts of different effects that lead to stress. Nordqvist, Hovmark and Zika-Viktorsson (2004) study of time pressures in projects found time constraints reduced goal fulfilment and therefore job satisfaction, while goals with strict schedules are both motivating while also a source of stress (Gallstedt 2003). It is perhaps obvious to say that time pressures combined with work overload contributes to high stress (Andi & Minato 2003). And ultimately, pressure of time constraints results in defective deliverables (Andi & Minato 2003).

Project workers also feel project conditions threaten their sense of personal (mental and physical) safety. If one has insufficient time to complete a job to appropriate quality standards, this is perceived as a type of professional failure, and leads to anxiety and low self-esteem (Andi & Minato 2003). In addition, the cancellation of a project is seen as a personal defeat or an aspect of personal identity (Asquin, Garel & Picq 2010; Killen 2013; Maier & Branzei 2014; Cowen & Hodgson 2015; van der Hoorn 2015). The ramifications of failure from a human perspective has been linked to a high expectation of punishment, which can lead to stress and anxiety, and in worse case scenarios ‘learned helplessness’(Love & Edwards 2005; Lee-Kelley 2006). In extreme cases, workplace health and safety incidents have the potential to create a schedule and budget crisis, and project managers may be held criminally liable (Abudayyeh, Fredericks, Butt et al. 2006; Ling, Liu & Woo 2009; Chi & Han 2013).

With regards to limiting opportunities and diversification, the way organisations structure project work can also select against women, as Crawford, French and Lloyd-Walker (2013) observed fewer opportunities are available for women to network amongst their profession.

Legault and Chasserio (2012) found women more than men; limit their work hours for a better work-life balance. However, working extended hours and being visible, are often seen as commitment, and this is seen as an important factor for promotion (Legault & Chasserio 2012).

6.9.1.2 Role in organisation

Project staff have described role conflict as part of the job (Lee-Kelley 2006). The role of project manager is both attractive yet inherently insecure and fraught with ambiguity (Paton, Hodgson & Cicmil 2010). As well as ambiguity in the definition of the role, there can be conflicting responsibilities (Batistič & Kenda 2018) as the project manager role has been observed to conflict with other management roles of the organisation (Jonas 2010). Unger, Kock, Gemünden et al. (2012) acknowledge the existence of role conflict with project work, particularly at the senior and executive management level. With high accountability with low or no authority, this creates a devaluation of professional success and self-esteem (Jonas 2010), and then when budgets and schedules are challenged, there is a perception or feeling the project is out of control, which in turn affects staff morale (Lu, Yuan & Wu 2017).

Staff transitioning from other organisational roles into the role of project manager experience a deep discomfort and disempowerment in acting the 'idealised identity' (Paton, Hodgson & Cicmil 2010; Cowen & Hodgson 2015). The conflict of roles between internal and external workers is impacted by a perceived locus of control, which results in high levels of anxiety and reduced job satisfaction (Lee-Kelley 2006). Furthermore, a level of adversarial power in the relationship exists between internal and external staff, where disempowered external parties tend to allocate blame, while internal staff share responsibility (Lee-Kelley 2006).

Enduring role conflict is observed as causal to physical and psychological un-wellness and behavioural withdrawal (Huemann, Keegan & Turner 2007). Role conflict results in reduced efficiency, lower levels of organisational commitment, and higher staff attrition (Huemann, Keegan & Turner 2007; Batistič & Kenda 2018). The temporary nature of project work requires constant formation of new roles and teams between staff who are previously unacquainted, and this results in the constant process of assessing and developing professional trust between people (Batistič & Kenda 2018). Conflicting roles can also create a lack of social integration, isolation, and reduced opportunities to learn and share (Lee-Kelley 2006).

Turner, Huemann and Keegan (2008) identify individuals working across a number of projects who experience role conflict, particularly younger employees who are susceptible to role conflict and burnout.

Again, role conflict can be seen as a product of ambiguous and ineffective project controls and a function of the temporary nature of project work, and it can create conditions for workplace bullying (Creasy & Carnes 2017). Human resources have a duty to develop practices for smoothing intra-project demands thereby reducing role conflict (Turner, Huemann & Keegan 2008). Multiple boundaries exist within organisations, such as cultural, communication, legal, and technical (Sun, Mollaoglu, Miller et al. 2015), and these boundaries have limits and constraints that can contribute to stress and conflict (Loosemore 1998; Sun, Mollaoglu, Miller et al. 2015). Whilst collegial relationships (which are hard to foster in project condition) have a positive impact on reducing role conflict and the stress response (Creasy & Carnes 2017), workplace rivalry and bullying degrades team learning and project outcomes (Creasy & Carnes 2017).

6.9.1.3 Career development

Other sectors such as health and policing discuss developing employees for resiliency in complex settings, and support in-house professional development (Mimura & Griffiths 2003; Pines, Rauschhuber, Rorgan et al. 2012; Adriaenssens, De Gucht & Maes 2015; Andersen, Papazoglou, Koskelainen et al. 2015; Andersen & Gustafsberg 2016). However, career satisfaction in project work has mixed results, ranging from a means to provide purely financial benefit, through to a career providing intellectual reward, or even higher level satisfaction some refer to as a ‘calling’ (McKevitt, Carbery & Lyons 2017).

Promotion is somewhat ambiguous and cyclic. A condition of promotion is a happy client and successful project. Savelsbergh, Havermans and Storm (2016) investigated how project managers develop professionally, finding development was generally self-directed because management don’t invest in this, and by learning by mistakes (Savelsbergh, Havermans & Storm 2016). This is something of a ‘groundhog day’ scenario regarding getting promoted, because as project roles are temporary and often short, staff frequently move between clients and between projects, resulting in a continual cycle of justifying proficiency (Cowen & Hodgson 2015).

Generally, career development or progression is considered managing a bigger or more complex project (Crawford, French & Lloyd-Walker 2013). The on-the-job approach is a dominant approach to training within organisations. However, Crawford, French and Lloyd-Walker (2013) found human resources groups are ill equipped to develop project staff, and Savelsbergh, Havermans and Storm (2016) found human resources were almost completely absent from professional development of project staff. Line managers play a minor role in developing project staff, however staff describe that almost every year they report to a different manager and different HR representative (Savelsbergh, Havermans & Storm 2016). As Oyedele (2013) notes, task assignments that are not perceived as prestigious or challenging are a demotivating factor and considered as a career decline. And these reduced opportunity often results in a mid-life career crisis which causes stress (Yang, Li, Zhu et al. 2017). Furthermore, age is a significant factor in promotion of project managers, and discrimination is apparent when staff are in their mid-40's (Yang, Li, Zhu et al. 2017).

Hölzle (2010) does introduce a career path model for project management, commencing with PM, senior PM, project director, and lastly program director. However, Hölzle (2010) rather simplistically assumes a linear model of development. Project managers pursue industry certification under the perception of it enhancing promotion opportunities and giving them status in the eyes of their colleagues and senior management (Blomquist, Farashah & Thomas 2018). A positive career satisfaction has been observed when professional identification is strong, as the identification or belonging to a group harmonises an individual's personal and professional values (McKevitt, Carbery & Lyons 2017). Job identity and security, and the prospect of promotion, and satisfaction with salary, are all factors that reduce burnout (Yang, Li, Zhu et al. 2017).

6.9.1.4 Relationships at work

The PMO is often seen as a customer focussed entity that aims to establish closer relationships between the organisation and client while assisting the project managers deliver projects (Kerzner 2003b; Darling & Whitty 2016). While the demands of senior management are well discussed, less is known about subordinate staff placing blame on the project manager (Gallstedt 2003). Project managers are under pressure from both senior and subordinate staff (Gallstedt 2003). Dysfunctional teams that develop from high stress

workplaces are prone to mistakes and inefficiencies, which is a scenario that creates further stress (Oyedele 2013). Palm and Lindahl (2015) have found project managers feel they are not respected by the core organisation and are treated as temporary employees. Project stressors may result in employee habituation in how they relate to each other. This is a method used by individuals to cope with stress and anxiety, and the negative aspects of this coping strategy often lead to further scrutiny (Jugdev & Wishart 2014).

Poor interpersonal relationships are a central theme to degraded motivation. Megaprojects rely on networks of relationships to cooperatively deliver agreed outcomes, and they differ from other projects by heightened levels of interdependency and ambiguity (van Marrewijk & Smits 2016). The relationships between suppliers is a source of conflict and stress, by the nature of their transactional and often adversarial relationships, which are exacerbated in competitive fixed-price contracts often seen in project work (Sommerville & Langford 1994; Lahdenperä 2016; Pal, Wang & Liang 2017). This adversarial condition in PMOs has been described as similar to a wartime operations group, as problems with team development are apparent (Public Work and Government Services Canada 1977).

Yang, Li, Zhu et al. (2017) investigating burnout in construction project managers in China found stakeholder relationship as the main stressor, as powerful stakeholders create difficult and at times illegal transactional circumstances that impact on the well-being of project workers (Yang, Li, Zhu et al. 2017). And the outcome of staff burnout under these conditions can result in ill health that can be either physical or psychologically challenging, and where staff often resign (Yang, Li, Zhu et al. 2017).

6.9.1.5 Organisational structure and climate

Project workers face many restrictions in contemporary practice, including legislation, workplace health and safety, environment and heritage protection construction codes, and organisational policies and procedures, all of which directly and somewhat invisibly impacting upon project workload (Xu, Bower & Smith 2005; Söderland, Roberts, Kelsey et al. 2012). Critical to the nature of project work is completing a series of tasks within a budget (Flyvbjerg 2013a; Darling & Whitty 2016). However, despite participation in task scoping and budgeting being central to successful outcomes, repeatedly organisations make decisions without project staff involvement (Müller & Jugdev 2012; Oyedele 2013). Low levels of

shared decision-making impacts on staff motivation, inclusion, and stress (Oyedele 2013). Restrictions in terms of what project staff are able to be involved with, may be detrimental to performance as it effects creativity and adapting to the transient form of work in a project (Cowen & Hodgson 2015).

Once again we see that ambiguity is a stressor in project work as it is intertwined with office politics, as hidden information and double standards of behaviour create added complexity in project work (Bosch-Rekveldt, Jongkind, Mooi et al. 2011). PMOs themselves are often shaped by the politics of the organisation, and frequent change to the PMO as a result of politics in the broader organisation is a reoccurring theme (Aubry, Müller, Hobbs et al. 2010). Hodgson and Paton (2016) found that local politics were used as a trap to entangle project staff and delay change delivered by the project. Not only does organisational politics hinder performance and success of project organisations, it is a cause of stress in the workplace (Müller & Jugdev 2012; Oyedele 2013). Further, Savelsbergh, Havermans and Storm (2016) found project workers believe office politics hinders their personal development. In government organisations, politics at a macro level may have a profound and detrimental performance impact on projects and project workers (Patanakul, Kwak, Zwikael et al. 2016). van Marrewijk and Smits (2016) describes governance structure in a mega project office as rich in office politics and akin to a war, describing the conditions “like a battlefield”, “either shoot or you are dead”, and “you need politics in order to back up your action in the field”. Project staff who develop political skills are better able to transcend hierarchal and departmental boundaries (Thomas & Mengel 2008).

6.9.2 On coping, legal obligations, possible solutions and the future

6.9.2.1 How PM’s are coping

Coping skills are a reaction to enduring problem solving or challenging events, and the level of coping ability displayed is a testament to the resilience of our sum life experiences and genetic endowment (Shuttleworth 2004; Vokić 2007; van der Hoorn & Whitty 2016). When project managers do not have efficacious coping strategies or natural support from organisations, they can suffer from a damaged identity that has a domino effect of a large trajectory (Cowen & Hodgson 2015).

Aitken and Crawford (2007) conducted a survey of project managers in an attempt to develop an understanding of how they cope with stressful project work situations. Negative coping strategies are detrimental to productivity, as morale wains, engagement withdraws, absenteeism and apathy develop, and deception and sabotage may become practice (Bourne & Walker 2005). Some project managers discussed excluding interaction with particular superiors as a means to reduce stress (Gallstedt 2003). Furthermore, unhealthy coping strategies observed include working harder and longer hours to complete the work load or blaming others (Lee-Kelley 2006). Many studies on project-based stress include substance use as a negative behaviour (Love & Edwards 2005; Richmond & Skitmore 2006; Aitken & Crawford 2007; Asquin, Garel & Picq 2010; Barboza & Thomas 2016; Creasy & Carnes 2017; Yang, Li, Zhu et al. 2017). Substance use and its negative effects exacerbates stress and dysfunction, thereby effecting both psychological and physical health problems (Love & Edwards 2005). The project management practitioner literature is decisively lacking in theory and pragmatic advise on coping strategies for project-based stress (Jugdev, Mathur & Cook 2018).

Amongst the more positive strategies is social support in the collegial context, which is enhanced by a team focused culture, resulting in enhanced coping (Love & Edwards 2005; Richmond & Skitmore 2006; Barboza & Thomas 2016). Aitken and Crawford (2007) studied how project managers develop active coping and planning strategies. An organisation's maturity of practice plays an important part in stress reduction, as the greater level of project management maturity correlated with both increased planning strategies and a greater degree of control of perceived work stress (Aitken & Crawford 2007). Aitken and Crawford (2007) also found that women are more likely to use emotional and instrumental support approaches, acknowledging both the human dimension and the pragmatic need for action. And tertiary educated staff were most likely to use problem-solving and planning strategies to combat work stress, with social support found to be highly effective (Richmond & Skitmore 2006). Gallstedt (2003) identified mixed coping strategies to project stress, with inclusive communication with key stakeholders, steering committees and shared decision makers as a method to reduce stress. Coping strategies for project induced stress are diverse and based on both the experience of the individual and the organization, and optimal outcomes for both organisations and their staff are based on mutual respect (Gallstedt 2003; Richmond & Skitmore 2006; Barboza & Thomas 2016).

To draw this point to a conclusion, if an organization invests in its project delivery methods (more mature project controls – less vague management) and equally invests in its project workers (further discussed in section 6.10.2.3), then this will reduce the sources of stress in project work.

6.9.2.2 Organisational duty of care

Project organisations need to increase their awareness of their duty of care to staff who endeavour to progress the organisation's goals. In Australia, organisations are legally obligated to ensure the safety of staff including their mental health (Australian Human Rights Commission 2010; Comcare 2016a; Better Health 2018; Safe Work Australia 2018; Workcover Queensland 2018). In 2014-15 it was reported that 91% of workers compensation claims concerning mental health were linked to work related stress (Safe Work Australia 2018). The statistics related to project workers was not reported, however this literature review clearly identifies evidence in the model of projects as a source of stress at work. Organisations have an obligation to protect employees from psychological risks (Safe Work Australia 2018), and breaches of work health and safety law may result in penalties to organisations and their directors including significant fines and in the most serious cases custodial sentences (Queensland Government 2018). In terms of organisational reputation, litigation, safety and well-being of employees, a change is required in how project work is structured.

The Whitehall studies investigated mortality rates amongst the British Civil Service. The key finding was staff at the lower end of employment grade had a mortality rate three times higher than staff in the highest grade (Marmot 2004, 2017). Therefore the lower in the social hierarchy an individual is, the less perceived control they have over their lives, resulting in higher levels of stress, dissociation, and methods of coping (Marmot 2004, 2017). PMO staff frequently report gruelling long hours and that it takes a 'whatever it takes' attitudes to complete tasks and impress the client. Reduced leisure time and low job satisfaction are contributors to coronary and mental illness and ultimately premature death (Marmot 2004, 2017) . In less extreme situations, a high stress workplace leads to high staff turnover, absenteeism and organisational inefficiency. The model of projects as a source of stress at work shows that staff engaged in the delivery of projects indisputably experience a variety of

stressful adverse effects related to their working conditions. Alternative approaches to the management of project work are needed as what we consider rational as the traditional approach, the technical and linear approach to projects, has proven detrimental to individuals who manage projects (Cowen & Hodgson 2015).

6.9.2.3 Scenario based training

Actual stressful situations induce a perceptual distortion in sensory information that can lead to deficits in motor and cognitive abilities and ultimately degraded decision making (Andersen & Gustafsberg 2016). Sectors such as health, education, policing, emergency services, aviation and military provide scenario-based training to their staff in order to mitigate work stress and enable staff to perform well under pressure (Carlson 1979; Jick & Payne 1980; Costa 1995; Biron, Brun & Ivers 2008; Mujumdar 2008; Guthrie, Ciccarelli & Babic 2010; Kuo 2014; Adler, Williams, McGurk et al. 2015; CANSO 2015; Lorello, Hicks, Ahmed et al. 2016). Having considered the stressful conditions of project work, it seems obvious to advocate for project management scenario-based training.

The iPREP resilience training, developed by Police University College of Finland, has been found to enhance sound decision making in stressful situations, thereby reducing adverse events and litigation (Andersen, Papazoglou, Koskelainen et al. 2015; Andersen & Gustafsberg 2016). The training also enhances cardiac responses during stressful events (Andersen & Gustafsberg 2016). Similarly, training to enhance staff performance in emergency care has attracted both practitioner and academic interest (Lauria, Gallo, Rush et al. 2017). Beyond the clinical competency of the health practitioner, the internal state of the person and learning to manage oneself is a significant factor in providing quality critical care (Gibbons, Hickling & Watts 2012; Lauria, Gallo, Rush et al. 2017). Scenario based training has also been effective in preparing military staff, specifically both combat and medical for their work (Gibbons, Hickling & Watts 2012). We suggest that scenario-based training in the project management field may assist all project workers to effectively understand many of the project work sub-stressors, such as role conflicts, relationships, and cultural and political matters, and successfully perform their role in stressful and arduous situations.

6.9.2.4 The future of PM

Walker and Lloyd-Walker (2018) took a reflective review in predicting the direction of project work into the 2030's. As new technologies such as artificial intelligence will replace some roles, others will evolve, particularly those in need of human 'soft skills' (Walker & Lloyd-Walker 2018). This raises many questions for the future of project management research which has traditionally focused on 'hard skills'. There will be positive and negative changes of what has been dubbed the fourth industrial revolution as traditionally middle class jobs become insecure and with this additional anxiety (Kagermann, Wahlster & Helbig 2013; Walker & Lloyd-Walker 2018). The project worker already experiences high levels of job insecurity as the work is dependent upon organisations conducting business beyond operational sustainment (Bowen, Edwards, Lingard et al. 2014). Alternatively, it is through project work that new technologies are integrated with the business landscape, potentially resulting in a surge in project-based work to 'build' the fourth industrial revolution. A dramatic change in role expectation may itself be a cause of further stress. Therefore, in project management, a greater understanding of stressful scenarios and counter-measures to address these will be integral to the future of project work, with the potential to lead to better human centric and project outcome. Moreover, the application of these understandings of stressful scenarios and counter-measures has the potential to bring about a greater levels of autonomy and an emphasis on an individual's innate passions, and so enhance employee engagement and productivity while reducing work stress (Walker & Lloyd-Walker 2018).

6.9.3 Limitations and future research opportunities

The systematic review method has many positive traits as well as some inherent limitations. Reviewing a wide selection of literature on a topic ensures the full range of research on a subject is considered. The limitation of secondary research and this paper is the reliance on quality of previous research. To counter this limitation, we maintained quality of research with an established research method as outlined in section 6.8.1.

There are opportunities for further research based on the developed model. Other industries provide scenario-based training for staff to learn by immersion in a virtual environment and encouraging teamwork. In order to create scenario-based training for project work a description from the individual's perspective as possible in ethnography would be highly valuable as a training tool. In the 43 years since Cooper and Marshall (1976) established a model of occupational stress medical science has continued to evolve and prove there is a

direct correlation between stress and type 2 diabetes (Novak, Bjorck, Giang et al. 2013), future research preferably by the epidemiology community is needed in updating the health outcomes of occupational stress.
There is also a distinct lack of awareness of the nature of project work by human resources. Human resources have been observed as inadequately supporting project workers. Greater contextual understanding of project work by human resources is needed to introduce sustained support for project staff.

6.10 Conclusion

Our 'model of projects as a source of stress' reveals that individual project workers are subjected to organisational working conditions that can, given their sensitivities to these conditions, produce symptoms of occupational ill health, and negative effects on wellbeing. Some sub-stressors appear to be intrinsic to the nature of project work, but many of these conditions develop from a superficial management approach to project delivery that creates ambiguity in roles, goals, lines of authority, proper resourcing, and so on. Organisations create conditions where the project worker feels insecure about their role and purpose, which appears to conflict and be of less value then other organisational roles. This reduces professional self-esteem, job satisfaction and morale. Project sub-stressors also hinder career development and promotion paths, as many HR departments do not know how to deal with the professional development of project workers, and would rather hand this task over to the worker to deal with. Career development and promotion paths are hindered by shifting sands of project work, as 'people turnover' breaks down a social continuity, and project workers have to continually re-establish relationships and re-justify the proficiency they bring to the organisation. In addition, when relationships are established, it is often on transactional and adversarial terms. To add to matters, organisations present the project worker with a task they had little involvement with scoping, so they deal with unrealistic workload and time pressures, and tasks entangled in political matters.

Our research findings has informed our discussion topics, particularly with regard to organisational duty of care and scenario-based training. We should not enact organisational duty of care just to prevent mental and physical ill health. Through investing in project delivery methods, an organisation has the potential to shift its management approach from ambiguity to a cohesive and productive one, thus tapping into the zeal and attachment of the

project worker. Moreover, scenario-based training is also an investment in project delivery capability, as it is based on understanding, analysing, and remediating problem scenarios. It is a form of organisational learning, which we can envisage as a way of evolving the project management profession.

CHAPTER 7 SEDUCED BY THE DARK SIDE: HOW PROJECTMANAGERIALISM COERCES THE PROJECT WORKER TO RENOUNCE THEIR HARD-EARNED OCCUPATIONAL VALUES

7.1 Preface

This chapter provides the full manuscript from the fourth peer-reviewed paper developed as part of this doctoral research, currently under review. This paper titled *Seduced by the Dark Side: How Projectmanagerialism coerces the project worker to renounce their hard-earned occupational values*, is currently under review by the *Project Management Journal* as part of a special edition *The Dark Side of Projects*. This paper reveals the absurdity of our cultural quest for general project management principles, and the damage this quest is inflicting on individual and organisations. The paper applies Senge's (2011) influence diagrams to develop a systems thinking model of how projectmanagerialism corrupts occupational values and professional identity, and how business education is both a root cause for the problem and a possible answer for reducing occupational stress, restoring occupational meaning, and turning around suboptimum project outcomes.

7.2 Key points of this chapter relevant to this thesis

- Projectmanagerialism coerces the project worker to forego their occupational values and replace these with capitalistic values.
- The loss of occupational values and identity is a cause of great stress and this creates a vicious cycle.
- Systems thinking via influence diagrams models the social machinery of projectmanagerialism demonstrating the interconnectedness from business education to senior management decision making to project workers meeting directives.
- There is a Camusian Absurdity loop occurring in project-based organisations.

7.3 Citation and co-author details

Table 11: Citation details of original publication

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Quality Review	Eric Darling (80%); Dr S. Jon Whitty (10%), Dr Bronte van der Hoorn (10%)

7.4 Abstract

Projectmanagerialism is an ideological movement amongst organisational project managers, their professional associations, university business schools, and the senior management class. It coerces the project worker to renounce their hard-earned occupational values and turn to capitalistic values, which proves detrimental to their health and well-being, as well as creating financial and productivity implications for the organisation. Using an influence diagram, we model projectmanagerialism to reveal the dark side of projects, and show how a Camusian absurdity loop cultivates this harmful environment. But all is not lost for projects – with the rise of lived experience research, hope is not far, far away.

Keywords: projectmanagerialism, projectification, critical projects studies, influence diagrams, lived experience, wellbeing

7.5 Introduction

The phrase 'The Dark Side of Projects' infers a hidden side to project work, and conjures anecdotes of aggression, selfishness, trickery, as well as stronger tales of villainy, corruption, and criminality. However, the phrase provokes a series of questions, such as; what is hidden from whom, who is perpetrating the hiding and why, and is the hiding a wicked thing done by wicked people or is this an oversimplified perspective of the situation brought about by a peculiar set of conditions? Perhaps there only *appears* to be a Dark Side, as with the Earth's Moon when one views it from the Earth, and one does not yet have the ability to view it from another point in space or even conceive another view is possible.

In this theory-building paper, we present the case that there is a dark side to the mainstream idea of project management. This idea subtly and silently exercises a tyrannical power over those who are involved in projects, while ingeniously hiding this power from them in plain sight. Briefly put, the term projectmanagerialism describes an ideological doctrine that manipulates the thoughts and behaviours of those involved in project work. Almost imperceptibly, projectmanagerialism has restructured corporate society and turned project workers, project managers and senior managers, to its way of seeing projects. Those who submit to it receive favour, and those who resist suffer consequences. As we explain, projectmanagerialism comprises an ethos and a particular set of beliefs that we humans are physiologically susceptible to. Both senior managers, project managers, and project workers easily fall victim to its influence and the behaviour it drives, as capitalist corporate society masks its presence.

Using an influence diagram, we illustrate projectmanagerialism as a doctrine of the management class. But it has senior management and their project workforce trapped in a Camusian absurdity loop, which reinforces the application of simplistic methodologies and tools, and validates social constructs such as the Project Management Office (PMO). Ominously, this absurdity loop subtly subdues a project worker's internally motivated and quality-driven occupational values and attitudes towards work, and conditions them to accept corporate management's fiscally motivated and profit-driven attitudes and values. Both the project manager and worker senses Camusian absurdity when they comprehend that senior

management's strategy for dealing with project issues is – apply more and more project management!

Projectmanagerialism sets up a false dichotomy that there is either proper project management or chaos, financial failure, and dissatisfaction. The conditions created by this contribute to the poor mental and physical health outcomes of project managers and workers (see a review by Darling and Whitty (2019a)). These conditions are inherently ambiguous and vague, and brought about by a lack of management planning and logical thought when designing and implementing project controls and delivery methods (Darling & Whitty 2019a). They are also consequential of the actions of senior management who create governance structures when they are largely ignorant to the realities of project work and vulnerable to the false impressions of their direct reports (Darling & Whitty 2019b). Project managers also distort the working conditions of projects with a skewed notion of best practice (Darling & Whitty 2016). In the end, the project workforce are unwittingly cast as actors performing in a play of the absurd. They suffer unworkable binds and constraints, where sham behaviour becomes necessary to deal with nonsensical situation that raise ethical issues for those involved, and they participate in many meaningless and repetitive overheads, which management believe are necessary for delivering project work (Hodgson 2004; Darling & Whitty 2019b; Hodgson, Fred, Bailey et al. 2019).

We begin with a review of the background literature that provides a backdrop to our theory-building, such as what is projectification, how do occupational values craft identity, and how do the values of capitalism, management, and project management differ. Then we set out our systems thinking methodology, and explain how we create an influence diagram to 'see' projectmanagerialism. In the results section we illustrate the influence diagrams we draw from the extant literature and examine them in terms of their constellation of nodes. Next, our discussion submits two topics to consider. First, we make our case for projectmanagerialism, and how it should be seriously considered. Second, we examine the absurdity loop, which is a positive feedback or reinforcing loop that exist between senior managers and project managers, and it drives the stressful work conditions of the project environment. We conclude with some suggestions about how project management scholars and practitioners might assist with alleviating the absurdity loop and bring about the beginning of the end of projectmanagerialism.

7.6 Background and contiguous literature

7.6.1 Projectification

According to the Project Management Institute (PMI) it is the "world's leading project management organization with over 500,000 Global Members and over 300 Local Chapters internationally" (PMI 2020b). Therefore, the PMI has a significant influence in defining project management's underpinning terms. A project is "a temporary endeavour undertaken to create a unique product, service, or result" (PMI 2017, s.1.1), and project management is "the application of knowledge, skills, tools and techniques to project activities to meet the project requirements" (PMI 2017, s.1.1). These definitions inculcate a set of values. What is stated – is important. What is not stated – is not. For many years, the cost and scheduling tools such as PERT, CPM, Work Breakdown Structures, Gantt, and Earned Value were seen as the fundamental basis of project management. Söderlund (2005) asked project managers about their concept of project management. Two key concepts arose: it facilitates speed to market in order to beat competitors, which creates time pressures on product development, and it satisfies the need to integrate knowledge about achieving these things. As Morris (2013) put it, despite the number of excellent journal and symposia papers to the contrary, PMI's philosophy and construct of what project management *is* dominates the general perception.

Projectification is the reliance on the project construct and project management techniques to structure activities (Midler 1995; Packendorff & Lindgren 2014; Hodgson, Fred, Bailey et al. 2019), and a phenomenon of the aforementioned (Grabher 2002; Maylor, Brady, Cooke-Davies et al. 2006; Lundin, Arvidsson, Brady et al. 2015; Godenhjelm 2016) that occurs across society (Munck af Rosenschöld, Honkela & Hukkinen 2014; Kuokkanen 2016; Murray Li 2016; Sanderson & Winch 2017). Broadly speaking, there is a projectification of society (Lundin & Söderholm 1998), a projectification of everything (Jensen, Thuesen & Geraldi 2016). As a result, project management is regarded as a toolkit for *everything*, and is therefore universally applicable and action orientated (Packendorff 1995). From a critical perspective, projectification reduces social activity to mere instrumental and rationalised action, and removes any trace of political, social, or ethical element to these activities (Hodgson & Cicmil 2006b; Packendorff & Lindgren 2014; Hodgson, Fred, Bailey et al. 2019).

7.6.2 The importance of occupational values

Living by one's occupational values is important to well-being in many ways. Clearly articulated values foster rational decision-making, whereas values that are not communicated lead to defensive routines (Argyris 1985; Liedtka 1991). Having a sense of shared values is strongly linked to positive work attitudes as well as satisfaction (Posner & Westwood 1995), as values can unite groups to work to a common cause rather than for themselves (Liedtka 1991).

The term 'occupation' refers to more than a job where one performs an activity. The concept arises from our innate urge to explore and master our environment (Kielhofner & Burke 1980). Occupation is a way of describing a person's everyday recurrent or habitual patterns of behaviour and routines, and how they occupy their time in a role that serves society (Kielhofner 2002). These roles and routine behaviours have a necessary order and character to them that make how we occupy our time familiar to us, and this provides us with a sense of who we are through what we do, as our occupation shapes our identity and what we regard as important. The habituation of our occupation is therefore laden with values (Duncan 2011). Over time, as we develop skills and abilities we attribute purpose and meaning to our work, and we become conditions by its practiced activities. Therefore, our occupation shapes our feelings of what is *worth* doing, how we *should* behave, and what is *the right way* to do things. In this way, the essential practices and values of one occupation are not necessarily the same as the essential practices and values of another. Whereas a nurse feels that caregiving is important (Weis & Schank 2000), so a police officer feels that compliance with the law as crucial (Glomseth, Gottschalk & Hole 2011).

To further illustrate how we find meaning and order through how we occupy our time, Camus (1955) uses the mythical story of Sisyphus, where the Gods punish Sisyphus by condemning him to roll a giant rock up a hill, only to have it roll down again, for eternity. However, Camus poses that "one must imagine Sisyphus happy", as even in the ordinary and mundane, even futile experience, one can *find* meaning, reason, and order. Getting the rock to the top of the hill is actually less important than the things we can find wondrous *as* we perform such task, as it is in these performing task moments that our consciousness (observe, reason, and act) bring meaning *out of them*.

7.6.3 Worker identity and authenticity

Workers such as project managers build an identity intrinsic to the job (Cowen & Hodgson 2015). Occupational values along with institutional norms and regional culture combine to provide an individual with a sense of identity and authenticity from their work. Prior to the industrial revolution, skilled vocations were often entered via a protracted apprenticeship, and there was a sense of identity associated with that position. The industrial revolution meant people worked on production lines, often performing repetitive tasks as part of the production system (Leach 1993). With this came a great change in professional values and what work meant to humans. Work is simply not a means to make a living, it also gives meaning to lives through enacting values and beliefs (Vannini & Williams 2009). Even some project managers have considered their role to be a calling, enabling them to practice their values (McKevitt, Carbery & Lyons 2017). However, values can clash in the organisation. For example, the nature of inquiry is a core value for academics, while the business of education also requires a large administrative burden, and that creates an unhappy even stressful scenario for university staff (Vannini & Williams 2009).

Occupations that have evolved over many years and been exposed to public scrutiny, such as nursing (Weis & Schank 2000), law enforcement (Shernock 1992), and journalism (Johnstone, Slawski & Bowman 1972), have received academic debate to better understand the challenges workers face. Business and engineering have also seen research into occupational values (Miloradova & Ishkov 2015; Pablo-Lerchundi, Morales-Alonso & González-Tirados 2015). For example, nursing has undergone significant evolution in the 20th century with the adoption of evidence-based practice. A critical aspect of nursing practice is to understand the nurse as worker and person, their values, and how these values relate to the workplace. Perhaps unsurprisingly, caregiving and activism are strong nursing values, which includes challenging and contributing to public policy and political progression (Weis & Schank 2000). Values also drive the affective learning and professional development of an individual, as a person is emotionally and socially connected to professional development learning outcomes (Weis & Schank 2002).

While investigating the relationship between the senior management of a hospital and organisational performance, Davies, Mannion, Jacobs et al. (2007) developed a competing values framework model on organisational culture. They found that the values of a hospital's

senior management team are not necessarily aligned with the values of the dominant hospital workforce of the nursing profession. And when Altun (2002) investigated the link between professional core values of nurses and their degree of burnout, she found that the indignity and depersonalisation of patients, and lack of freedom to make recommendations concerning patient needs, were significant factors leading to occupational stress and burnout for these nurses.

7.6.4 Management values

Managers and by extension project managers form the management class, which is a hierarchy of functions and people, including entrepreneurs, corporate managers, owner-mangers, administrators, engineers, and professional specialists who hold the top positions in an enterprise (Kerr, Harbison, Dunlop et al. 1960). There is a general tension within the value set of managers, as their habitual patterns of behaviour and routines develop in the pursuit of organisational objectives. For example, managers are expected to maximize the returns on investments and enhance the reputation of their organisation, while at the same time complying with regulatory standards, which include negotiating conflicts of interest (Petrick & Scherer 2003). Management values and their observable practices are said to have masculine underpinnings, which are reinforced in university business school MBAs (Simpson 2006). Locke and Spender (2011) go further and blame university business schools for leaving management students unaware of the importance of systemic morality, as within an organisation there is a privileged de-moralised management class that is empowered to make moral decision.

The military (dominator) model, with its underlying values of hierarchy/domination/control, competition/opportunism/conquest, and self-interest/individualism, along with the suppression of empathy, caring, and aesthetic sensibility, still appears to be structuring the workplace (Eisler 1991; Simpson 2006). The field of critical management refers to these as the 'hidden' values or traits of management education, which structure managerial thought, provide the basis for managementism and managerialism, and permeate most management education programs (Roberts 1996). The concept of management is culturally bound to the West (Mirvis 2014), as *managementism* is the expression within a community of a biased commitment to assumptions about the central role of management in contemporary society. However, as well as privileging the views and opinions of the manager over those of others

(Locke & Spender 2011), *managerialism* positions the manager in the hierarchy as decision maker, elevates and promotes the application of management techniques to solve diverse organisational problem (Locke & Spender 2011), and traps the manager in a "dialectic of control" (Roberts 1996), which manifest in the notion that a 'good' manager must constantly strive to be in control. Simply put, managerialism is a way of describing how all the elements of an organisation exist and relate to each other in a way that reifies the existence and power of – the manager.

7.6.5 Project management values

Minimising cost and schedule overruns by reducing risk through organising, planning, controlling and monitoring, are regarded as core occupational practices of a project manager (Shenhar & Dvir 1996). In the context of delivering on time and within budget, project managers highly regard accomplishment (Verburg, Bosch-Sijtsema & Vartiainen 2013). These values are congruent with those of management, and more broadly the values of capitalism, which is a form of reductionism aimed at removing the unnecessary and superfluous, for the purpose of saving money and time, hence reducing cost (Whitty & Schulz 2007). Project management values can be considered promise-centric and connect to *the hope* of their application delivering on time and on budget (Cowen & Hodgson 2015), rather than product or customer-centric, which focusses on doing what needs to be done to satisfy the customer's needs. Hodgson and Paton (2016) caricature the project manager as the *industry cosmopolitan* who can transcend industry types, break through barriers, and apply their universal knowledge of project management to *any* scenario or industry. This aligns with the Association for Project Management's promises that their Body of Knowledge (BoK) is applicable to any project (Association for Project Management 2020). The industry cosmopolitan is the archetype of the contemporary professional, as the project manager is dedicated to their profession and their chosen professional association, while not chained to their employer or industry sector (Hodgson & Paton 2016).

7.7 Methodology

To build our theory of projectmanagerialism and reveal the social machinery that creates the absurd behaviour so damaging to the project worker, we use the influence diagrams conceptualised by Senge (2011) to map the literature as a dataset. This is a systems thinking

approach that constructs an influence diagram, which is a normative theoretical image, using the stress symptoms of project workers as the dependant or problem variable. Broadly speaking, influence diagrams have attracted acceptance for theory building in sectors such as information systems research and sustainable land development, as they are an effective means of mapping the interacting relationships of multiple elements or vantage points of a decision setting, and provide a way of communicating these relationships and vantage points through a graphic (Palvia, Midha & Pinjani 2006; Hall 2010).

7.7.1 Theory building: creating the influence diagram

Table 12 shows how we implement the four phases of Senge's (2011) systems thinking approach to creating an influence diagram.

Table 12: Implementing Senge (2011) to create an influence diagram for projectmanagerialism

Phase	Instruction	Implementation
1	Clearly describe/state the problem symptom(s) (the dependant variable)	Dependent Variable: Project workers can suffer from occupational ill health and negative effects on well-being (Darling & Whitty 2019a). Project workers also find it a necessary and stressful consequence of project work to engage in sham behaviours (Darling & Whitty 2019b).
2	Bring the story or stories underlying the problem symptom(s) to the surface (Goodman & Karash 2011), by following the 'The Five Whys Perspective' (Ross 2011) to find the link(s) between the emerging vantage points / observed conditions / circumstances on the influence diagram. The five whys perspective poses 5 repeated questions to the literature such as, "why is such-and-such taking place?" Then. "why then did that take place?" And so on. The answers demand evidencing from the literature.	An Excel spreadsheet is used to collect the 'five whys' responses along with the necessary literature evidence for each answer. These were summarised as a condition or circumstance, and become the nodes for the influence diagram.
3	Identify reinforcing (positive feedback) and balancing (negative feedback) relationships between the influence diagram nodes.	As per van der Hoorn (2020) and Goodman and Kemeny (2011), a positive arrowheads indicates a proportional relationship where both variables/conditions increase or decrease together, whereas a minus sign at the arrowhead indicates an inversely proportional relationship where as one conditions increase so the other decreases.
4	Find a pattern of performance that sums up behaviour in the system. This phase can be considered a method of analysis, where core loops of key systems archetypes (see "Applying an archetype" steps in Goodman and Kemeny (2011)) are identified in the influence diagram.	The patterns in the influence diagram are compared with 7 possible systems archetypes. The 'Shifting the Burden' archetype is identifiable, showing the addiction loop.

7.8 Findings

Figure 6 shows the influence diagram that depicts our theory of the social machinery of projectmanagerialism, with *project worker stress* as the dependant variable. The influence diagram reveals projectmanagerialism's ideological incubators, which legitimises and mobilises its political strategy, increases projectification, and traps senior management and other project management professionals (and entities such as the PMO) in what Goodman and Kemeny (2011) call an addiction loop. We chose to use Camus language and call it an absurdity loop, as this enables us to appreciate the role values play in absurd behaviour. Figure 1 also shows how projectmanagerialism contains a 'Shifting the Burden' structure, which diverts attention away from the fundamental source of the problem (Senior Management's Ignorance of Work), and *shifts the burden* for solving senior management's dissatisfaction with project outcomes on to project management professionals and entities such as the PMO. Unfortunately, shifting the burned in this way can have a significant impact on the physical health and mental wellbeing of the project worker.

To examine the results of taking a systems thinking approach to creating an influence diagram for projectmanagerialism (Figure 6), we will consider the whole to comprise various constellations of influential conditions. For our analysis we distinguish the constellations by different colours, which we respectively call, the incubators [orange], the correcting processes [purple], and the side effects [blue]. We overview each constellation, citing the evidence for its influential conditions, substantiate its internal relationships and connections with other constellations, and draw attention to the values that each of the constellations endorse and preserve.

Figure 6: Influence diagram of projectmanagerialism

7.8.1 Constellation 1: the incubators [orange]

These are the incubators of projectmanagerialism. It comprises contemporary capitalism, the prevalence of scientific management and therefore managerialism in management education and training, and the business strategies of the project management associations, which includes the professionalization of their membership, and the proliferation and prevalence of project management BoKs and methodologies, which in turn links to *apply more project management* in constellation 2.

Constellation 1 emerges from the extant literature that describes how capitalism's attention on productivity for financial growth provides a fertile ground for the establishment of scientific management and managerialism, and more recently projectmanagerialism. It is Adam Smith's concepts on production that influences contemporary capitalism, which gained popularity during the industrial revolution. Capitalism is a socio-political ideology based on the premise of private ownership, personal wealth accumulation, and the efficiency of labour for wage exchange (Leach 1993; Weber 2001). In order to extract profit from surplus value to achieve private wealth, capitalism relies on ways of organising the labour of people to produce products that can be sold for more than the cost of production (Lipset 1993; Weber 2001). Therefore from a time and financial perspective, division of labour, efficiency, growth in production, reduction in rework (quality), and control over costs, are all vital to capitalism

(Smith 1776; Weber 2001). To foreshadow an argument in our discussion, it could be argued that socialism is a dialectical response to capitalism, and an effort to bring a balance to the system (Lipset 1993). In sum: capitalism values profit, monetary rationalism, and efficiency for the purpose of financial growth.

Scientific management's central themes of the measurement of time and the allocation of labour are also relate directly to the work of Adam Smith (Taylor 1911). Efficiency in the application of labour is a critical point for Taylor (1911), who states that the principal role of management should be to maximise prosperity for the company and the employees, not only from a remuneration perspective but also from societal standing. The success of the organisation has therefore become attributed to the global application of scientific management (Leach 1993; Kaplan 2014). From a time and labour perspective, scientific management is *the* approach to managing work.

However, managerialism is more than the proliferation of scientific management practices throughout society (Klikauer 2015). It an ideology in the form of an interconnected set or system of beliefs and ideals. In short, managerial*ism* is a system of beliefs that supports the notion that organizations have more similarities than differences, and the aspirational belief that organisation performance and problems are optimized and solved by the application of generic management skills and theory (Klikauer 2015).

University business schools are incubators for both managerialism and projectmanagerialism. The US approach to business education focusses on personal wealth creation, and was heavily influenced by Smith's capitalism and Taylor's scientific management (Kaplan 2014). Based on the US approach, the MBA curriculum has been replicated at other universities around the world, with the assumption that this approach is best (Kaplan 2014). Many universities see their MBA programs as a "cash cow" (Stiles 2004, p.168). And to preserve their revenue/growth their teaching programs reflect the dominant values of the business environment, and they consequentially do not take a critical stance on managerialism. Much of current MBA curricula is normative and prescriptive, and does not consider the broader sociological considerations beyond efficient production and high yield (Renouard 1999; Kaplan 2014). Simpson (2006) has characterised the MBA as having adopted masculine values and assumptions about how the world work, propagating normative theories based on

competition, opportunism and self-interest, meeting performance standards and maintaining control. Moosmayer (2012) has shown that the values of business school students are influenced by their academic teachers. Moreover, university business school academics want to establish their academic reputation, and they value "working in a business environment" (Stiles 2004, p.166), "being involved with non-academic professional bodies", and have a strong preference for using established case studies (Stiles 2004, p.168). In terms of attracting students, it financially benefits universities to have their programs professionally accredited, so universities collaborate with project management professional associations to endorse their programs. For example, the PMI publish a directory of globally accredited universities (PMI 2020a), which legitimises the values of PMI through participation in their accreditation scheme.

Interestingly, managerialism (Klikauer 2013) and projectmanagerialism both harbour contradictory premises. They both draw their conclusions about the world, i.e. their ideological definitions, from two inconsistent and incompatible premises, yet universities avoid the contradictions becoming evident by teaching them separately in management programs. We know that managerialism values the free-market and competition, and society should benefit from this competition in terms of innovation and reduced cost. Nevertheless, competition leads to winners claiming more ground over the other, and this leads to monopolies, which stifles innovation and inflates costs (Klikauer 2013). Furthermore, senior management have hopes for project work, as projects are a way for organisations to adapt in a dynamic environment (Fulmer 2000) by embracing change, requiring originality, and hoping for innovation. Moreover, the professional associations and individual project managers perceive the role of project manager as an out-of-the-box universal business problem solver (Hodgson & Paton 2016), yet the tools, techniques, and approaches of the various *highly measurable* project management methodologies are orthodox and fiscally conservative (Johnson & Duberley 2000). In sum: projectmanagerialism praises originality and innovation, yet enforces compliance and submission.

The project management professional associations are also incubators for projectmanagerialism. The professionalization venture of project management developed with the establishment of professional associations in the 1960s and 1970s, particularly in the US and UK (Hodgson & Paton 2016). Project management as a concept gains its authority by its

claim that it is essential to create business outcomes (Hodgson & Paton 2016). The professional associations purposefully shape the professional identity of the project manager through their certification and training businesses and professional development regimes (McKevitt, Carbery & Lyons 2017). What helps these associations achieve their goal of control over the project manager is that organisations have provided poor support for the role of project manager, so a disenfranchised project manager derives their rewards from the profession rather than their organisation. These professional associations could be considered to be a dialectical response to the failure of organisations to integrate the development of their project managers (McKevitt, Carbery & Lyons 2017).

The project management BoKs, methodologies, and maturity models make many grand and unsupported claims. This is projectism: the attempt to claim all endeavours as a product of project management. For example, it is said that projects have been instigated by mankind throughout history, and the literature often cities such accomplishments as Noah's Ark (Scranton 2014), the Egyptian Pyramids, the Great Wall of China, and even historical military campaigns such as the Crusades as evidence of project management approaches (Packendorff 1995; Cicmil, Hodgson, Lindgren et al. 2009; Webster & Knutson 2011; Engwall & Söderland 2012; Gauthier & Ika 2012; PMI 2017). However, while being significant achievements, there is no evidence that contemporary project management influenced these accomplishments.

7.8.2 Constellations 2&3: the correcting processes [purple] & the side effects [blue]

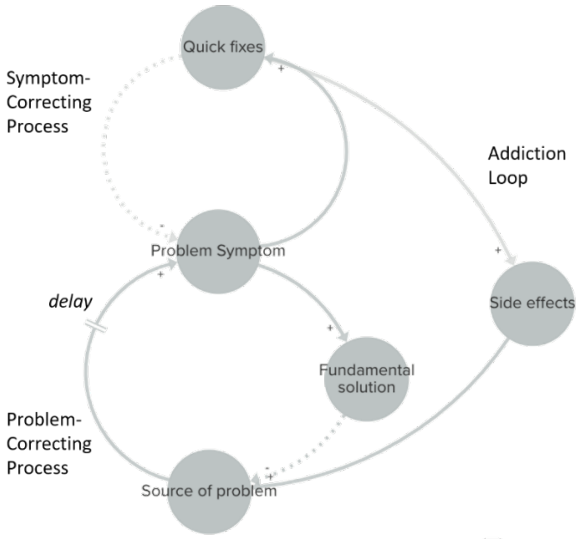

Figure 7: Shifting the Burden Archetype

We need to consider the structures of constellations 2 and 3 together as they form the performance pattern or system archetype of "Shifting the Burden" (see Figure 7), which comprises: a symptom correcting process, a problem correcting process, and an addiction loop (Goodman & Kemeny 2011). As the archetype shows, the symptom correcting process diverts attention away from the fundamental solution to the actual source of the problem. The diversion occurs by shifting attention from what is causing the problem to something or someone else. When we think the problem is something or someone else, we apply a *fix*, which quickly satisfies our hope of it working. However, the fix turns out to be a *quick fix* as it does not fundamentally address the real source of the problem, and instead creates unintended conditions and consequences that compound the problem, making the situation worse.

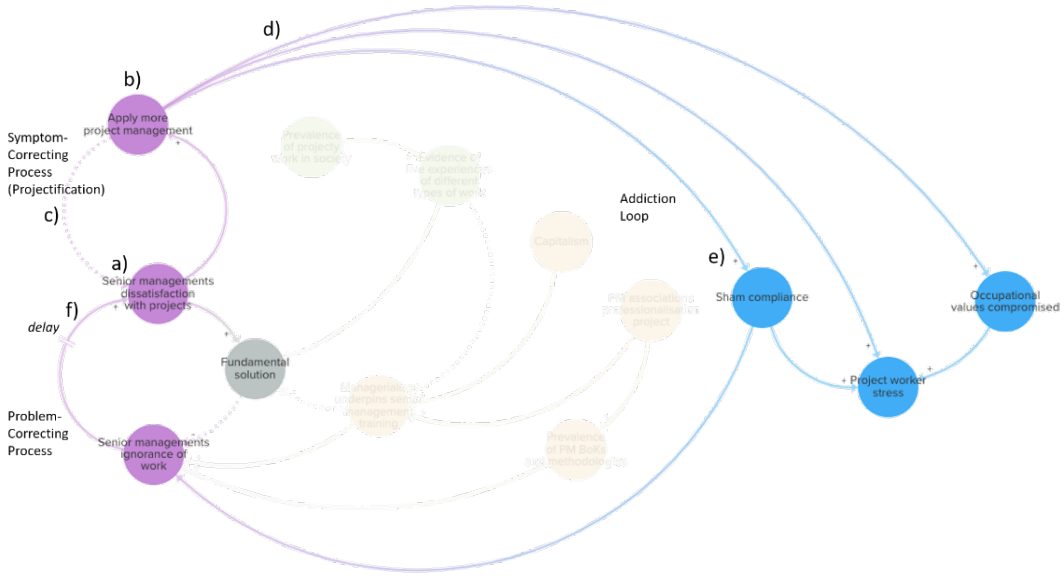

Figure 8: 'Shifting the Burden' and 'projectification' amidst projectmanagerialism

At the centre of constellation 2 (see purple conditions in Figure 8) is the chronic and cross-sector condition of senior management's dissatisfaction with schedule delays (Dille, Söderlund & Clegg 2018) and project outcomes (Cicmil & Hodgson 2006; Winter, Smith, Morris et al. 2006; Solutions 2011; Bloch, Blumberg & Laartz 2012; KPMG 2013; Alenezi, Gandapur, Javed et al. 2015; Chanda & Ray 2016). We posit that this problem symptom develops because of senior management's unrealistic performance expectations, which are established by the incubators. In short, the real source of the problem is that senior management are ignorant of the realities of project work (Darling & Whitty 2019b). It is not that senior management are dumb, rather it is that they have often entered the organisation through routes other than operational management, such as finance and marketing, and built their reputations in those areas (Michael 2004). While many regard management pursuits as thrilling, many also regard the details of actual work as boring (Michael 2004). The management literature lists many things senior management are ignorant of: globalising business activities (Harvey & Novicevic 1999), customer relationship management (Papic & Primorac 2014), information technology and its capability and use (Bakos & Treacy 1986; Efe, Raghavan & Choubey 2009), the role and function of human resource management (Khatri & Budhwar 2002), and the actuality of healthcare delivery (Bolton 2003).

Instead of dealing with the real cause of the dissatisfaction problem, which is their unrealistic expectations due to their ignorance of work, senior management shift the burden of solving

the problem onto those they believe are causing the problem, namely the project management professionals (Gallstedt 2003). As it is senior management who control organisational structures, it is they who design the structure to allocate blame to project managers and away from themselves (Cowen & Hodgson 2015). The project professionals also buy into this belief and blame themselves if projects don't go right, as they take personal ownership of projects (Cowen & Hodgson 2015). To exacerbate the situation, subordinate project workers also allocate blame to the project manager (Gallstedt 2003). Therefore, perhaps it is inevitable that when senior management want to see improvements in project outcomes, they want to see improvement in the project management practices of the organisation. For example, to enhance senior management satisfaction, the PMO *should* be more active (Ward 2013). We know this happens because the management structures of PMOs change frequently in a process of what can be described as creative destruction and co-evolution (Aubry, Hobbs & Thuillier 2008).

Concomitant to allocating blame and responsibility to others, shifting the burden creates unintended consequences that compound the problem and creates an addiction loop. We illustrate three unintended consequences in this study (see blue conditions in Figure 8). These are: sham behaviour, which contributes to the addiction loop; disengaging the worker from their occupational values; and project worker stress. Worker stress is a broad category that results from conditions inherent to project work, and include the ethical consequences of sham behaviour and the existential consequences of disengaging the worker from their occupational values. We know that project management brings about stressor conditions for the project workforce, which can result in their ill health and poor physical and mental well-being (Darling & Whitty 2019a). While some stressors are intrinsic to the insecure nature of project work (Bowen, Edwards, Lingard et al. 2014), many are brought about by superficial approaches to management that create ambiguous roles, goals, lines of authority, and proper resourcing (Darling & Whitty 2019a). Sham or deceptive behaviour is also well documented (Darling & Whitty 2019b), and often has a sinister image. Yet, individuals are often placed in difficult positions that require them to sham and fake behaviour. As project workers submit to projectmanagerialism, they give only answers that are palatable to senior management, and this can lead to stress and anxiety (Bowen, Edwards, Lingard et al. 2014; Cowen & Hodgson 2015; Darling & Whitty 2019a, 2019b). Shifting the burden disengages the worker form their

occupational values by burdening the worker with more and more project management practices.

The projectification addiction loop becomes more problematic than the source problem, as it severely hinders the ability to address the source problem. The addiction loop has a delay, between senior management's ignorance of work and their response to their dissatisfaction. The delay arises from the period of time that needs to pass between senior management request to improve project management practices and the next phase of status reporting. Senior management often have little knowledge of day-to-day project management activity and rely mostly on monthly reports (Walker & Christenson 2005). The reports that senior management want, mostly relate to budgets and schedules, which explains why techniques such as Earned Value Management have gained favour with senior management (Walker & Christenson 2005). However, senior management often do not have the knowledge to analyse what these reports mean (Jergeas 2008). Although senior management might show a genuine interest in developing standard practices in project management, the actuality of using the practices that organisations develop often results in continued dissatisfaction, as they are seen as bureaucratic and rigid (Aubry, Müller, Hobbs et al. 2010). Some case studies show that behind the scenes there is an organised rebellion by project managers, who attempt to expend effort on tasks that progress the project rather than comply with process (Aubry, Müller, Hobbs et al. 2010).

Simplistically, the shifting the burden system behaves as a set of connected sympathetic conditions:

a) Senior management are dissatisfied with project outcomes, unaware that their expectations and the management practices they introduce are unrealistic
b) Senior management call for more/better project management (projectification)
c) In response to b) senior management's level of dissatisfaction is temporarily alleviated shown by the dotted minus sign arrow, signifying the inverse relationship
d) Also in response to b) unintended consequences and conditions are created (sham compliance, occupational values compromised, and project worker stress)
e) Sham compliance, and any other forms of *playing along* with project management reinforce senior management's ignorance of work.

f) After a period of time (the delay), the reality of project outcomes becomes apparent and senior management dissatisfaction rises again.
g) Return to a)

To summarise our findings in this section, we use Table 13 to distinguish the feature of projectmanagerialism from that of managerialism. For this framework, we use the features of managerialism developed by (Klikauer 2013); Klikauer (2015) and (Roberts 1996).

Table 13: Distinguishing features of managerialism and projectmanagerialism

Feature	**Managerialism**	**Projectmanagerialism**
Ideological foundation	A belief that organizations have more similarities than differences, therefore the performance of all organizations can be optimized by the application of generic management skills and theory.	A belief that projects have more similarities than differences, consequently the performance of all projects can be optimized by the application of generic project management skills and theory.
Foundational behaviour	Management – a process consisting of planning, organizing, actuating and controlling performed to determine and accomplish the objectives by the use of people and other resources. It is a systematic way of organising ongoing work activities.	Project management – is the practice of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and meet specific success criteria at the specified time.
Ideological Incubators	University business school MBA programs	Professional project management institutions, their endorsed universities and training providers, and PMOs
Political strategy: *by what means*	The ideological incubators are to provide generic management programs to new managers These programs redirects management's thinking in a specific economic direction invented by a hegemonic power group.	The ideological incubators provide generic project management programs to new project managers Professional bodies provide 'industry' certification and obligatory monthly professional development meetings
Political strategy: *to what ends*	To systemically establish its ideology as the 'norm' in organizations, public, political, and economic institutions, and society in general. To move an enterprise away from competing and toward winning. Hence, of being a monopoly. That society believes no alternatives are possible. There is either managerialism or non-development. To forge the idea in society that managers are best suited to run society.	To systemically establish its ideology as the 'norm' in organizations, public, political, and economic institutions, and society in general. To establish project management maturity as the cornerstone for business maturity That society believes no alternatives are possible. There is either project management or chaos, financial failure, and dissatisfaction. To forge the idea in society that project managers are best suited to deliver projects.
Flouts civil liberties	Deprives owners of decision-making power and workers of their ability to resist managerialism.	Deprives workers of their occupational values and decision-making powers.
Symptoms/ Casualties	Working poor, workplace alcoholism, mass-unemployment, poverty, and misery from local to global level.	Workplace anxiety, anger, and despair. Learned helplessness, impulsiveness, stress, depressive mood, smoking tobacco, escapist drinking, job dissatisfaction, and reduced aspiration.

Feature	Managerialism	Projectmanagerialism
		For the project managers: coronary heart disease, mental illness, leave the organisation, minimise damage to self.
Ideological features	Non-democratic, unremitting organizational restructuring, sharpening of incentives, expansion in number and power, and remuneration of senior managers, with a corresponding downgrading of the role of skilled workers outsourcing, reducing employees to a material inventory framed as human resources and human capital, lowering their income, and downgrading working conditions	A predominant frugal focus to short-term budgeting and spending, to the detriment of performance and sustainment. Resources are sparse, and project managers lack processes and proper authority. Project goal and roles are ambiguous, and unachievable deadlines are common. Project staff feeling insecure and vulnerable to blame for lack of performance.
Contradictory premises	Valuing free-market yet aiming for monopoly. Win-Win is a strategy to achieve Win.	Praising originality and innovation yet enforce compliance and submission. Perceived as out-of-the-box business problem solvers, yet the approach and tools are orthodox and fiscally conservative.
A dialectical response to	Workers' opposition against managerial regimes	The failure of organisations to integrate the development of project managers. Senior management's ignorance and disinterest to project work.
Justification	The management class have exclusive knowledge and superior education, and pretend to have advanced the knowledge and know-how deemed necessary to the efficient running of organizations, and that society in general could benefit from this expertise.	The project management class, as professionals, have superior project management knowledge and by extension understanding the potentially unruly nature of project work. What is necessary to control it is a systematic, methodological, and frugal approach to the management of time, cost, and resources, including the project workforce.
Aphorism	"Management is, above all, a practice where art, science, and craft meet." – Henry Mintzberg	"Good project management is the best way to get good project results" (von Wasielewski 2010)
Legitimising ideologies	Capitalism; competition, efficiency, free markets, deregulation, and privatization.	Managerialism: projects require a rational business case, scope and performance should be controlled and measured, and project work should be systematically planned
Accolade	Credits itself with the prosperity and technological and living standard advances of the West. Corporations are the model to emulate.	Professional associations credit almost any endeavour through the ages to the proper application of project management; Noah's ark, pyramids, wall of china, the crusades, and Olympics games.
Language	Shareholder value organizational goals, outcomes, performance, objectives, adding value, 'triple bottom line' (PPP = people, planet, profit), 'the real bottom line'.	Stakeholder value, earned value, scope management, change management, risk management.
Espoused Values	Vague goals, disinterest in the detail of work,	'Appearance' of being in control and making progress; cost and schedule control.

7.9 Discussion

An important feature of the shifting the burden system archetype is the problem correcting process, which incorporates a corrective action strategy to address the real source of the problem. We propose that this strategy could be *making senior management aware of the lived experience of project management*. We use constellation 4: the lived experience movement [green], as shown in Figure 9.

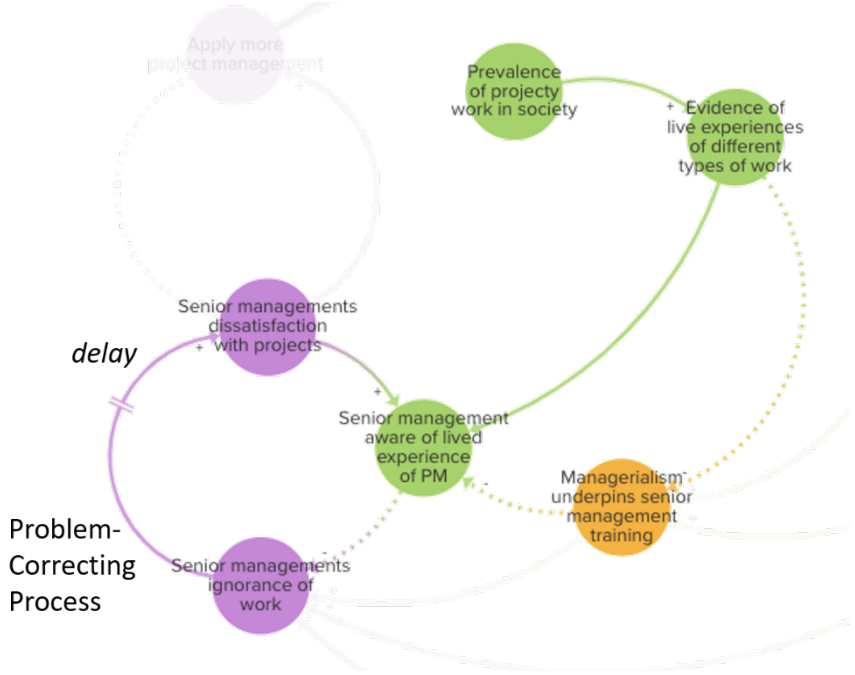

Figure 9: Lived experience research evidence as corrective action to projectmanagerialism

7.9.1 Constellation 4: the lived experience movement [green]

Perhaps an aspect missing in senior management and project management education is the ability to discern between the quality of research and the quality of knowledge. Professions such as nursing and medicine have developed their practice on evidence-based practice, as they understand the need for testing the validity of their assumptions and creating evidence-based knowledge. However, many project management practices rest upon the application of scientific-looking management approaches, which senior management endorse and direct.

When senior management face dissatisfaction from project outcomes, constellation 4 (Figure 9) proposes that instead of engaging with the symptom correcting process that responds with

projectification initiatives, senior management should engage with the problem correcting process, which will have the effect of making them more aware of the actualities of project work and what expectations are realistic.

Constellation 4 begins with the growing lived experience movement in project management research, which attempts to capture what actually happens in project work (Cicmil, Williams, Thomas et al. 2006; van der Hoorn 2015). An example of this is the concept of 'projectyness' or 'projecty' work, which is concept used to illustrate that projects are not objective things with universal features, but rather individual and organisational experiences, where the inherent capability to manage and perform the work is subjective and variable (van der Hoorn & Whitty 2016). Therefore, all of an organisations work can be placed variously along a projectyness spectrum, revealing the organisation's greater or lesser capability to perform it successfully. This shifts senior management's perspective from the one size fits all projectification approach, to a fit-for-purpose approach that appreciates the distinguishing characteristics of the work and the organisation's distinctive workforce capability to perform it (van der Hoorn & Whitty 2016). Corrective action like this would give validity to the mounting lived experiences evidence for the variability and subjectivity of project work, and dilute the generalist claims (shown as the minus sign at the dotted arrowhead between constellation 4 and constellation 1) of managerialism and projectmanagerialism. This would make way for practicable alternatives and bespoke project management delivery methodologies that have a sympathy for the nature of the work and for the project worker's occupational values. And these methodologies would be co-developed by individual organisations with the input of project workers and informed senior management.

As more academics in the university business schools are aware of lived experience research outcomes, so the weaker projectmanagerialism's grip is on senior management training, thus moderating their ignorance of the reality of work. Without a corrective action, senior management will continue to instigate the projectification of the workforce, and immerse the project worker in conditions that inculcate the beliefs and values of projectmanagerialism.

7.9.2 Projectmanagerialism and the Absurd

As mentioned, Camus (1955) invokes Sisyphus to illustrate how we can discover meaning, identity, and authenticity from how we occupy our time. For the worker, they discover

meaning in terms of their concrete craftsmanship values (Paanakker 2019). However, the management classes only have the incubators to show them how to find meaning and identity through the ideologies of managerialism and projectmanagerialism. To put this point more usefully for this discussion, ideologies are by definition systems of ideas that create and hold together meaning (Van Dijk 2006). Therefore, the idea of what senior managers and project managers are, is held together by managerialism and projectmanagerialism, which also structures their power in corporate society, and rationalise how they *ought* to occupy their time. However, there is a discordance between the oughts or values of these ideologies and how the reality of project work unfolds. Camus (1955) would describe the relationships senior management have with themselves and with their project-based organisation as – absurd.

For Camus, the absurd exists in our relationship to the world (Camus 1955). We human beings have a yearning for unity, as we are born neurologically wired with a compulsion to conjure rational explanation of how the world works. Similarly, under certain circumstances our human condition provides us with an awareness that our rational explanations are inept, even impotent, as the feedback we receive from the world informs us that our rational explanations are wrong. Camus argues that it is part of our human condition to be condemned to repeat the cycle of conjuring a rational explanation, sometimes glimpsing its ineptitude, then feel compelled to conjure yet another explanation, and so on. For Camus it is not an object or behaviour that is absurd, but rather it is our discordant relationship with or to something that is absurd, as we have an innate desire to find meaning, reason, and order. Put more succinctly, absurdity is a phenomenological experience that arises from the structures of our experience and consciousness. Specifically, the absurd is the tension between our yearning for unity and the indifference the world (or whatever else it is) has to this yearning.

Projectmanagerialism's addiction loop (see Figure 8) helps us perceive Camus absurdity as organisations attempt to manage projects. It illustrates how university business schools (amongst other incubators) condition senior management to yearn for managerialism's form of unity amidst the delivery of projects. Ideologically, managerialism makes conceptual room in the organisation for projectmanagerialism and its doctrine that projects *ought* to be delivered through simplistic generic project management methodologies, under the oversight of a Project Manager and/or Project Management Office (PMO). Unfortunately, as explained in constellation 3, senior management do not or choose not to acknowledge that continued

projectification frequently fails. In an effort to protect their situation, the project workers and PMO managers pander to senior management's expectations of project work by giving them exactly what they want, which necessarily reinforces their expectations and reifies the simplistic methodologies of the project management associations, and validates the roles of the project manager and PMO.

Absurdity goes unheeded. We generally disregard it in the reporting rhythm of project work. However, occasionally a troublesome experience can break this rhythm and awaken us to the absurd, where we question *the what* and *the why* of project management practices. Nevertheless, because we are human and biologically/psychologically possess a yearning or nostalgia for unity, an ideology can quickly mend this break. The inherent power of projectmanagerialism is in the interconnectedness and self-reifying rhythm that holds the beliefs and ideals together in a way that our sense of absurdity is repaired. This is possibly the reason why the lived experience research has a tough time breaking through into university courses, as there is no ideological construct interconnecting and holding the ideas together, helping us with *the what* and *the why* of our practices.

For Camus, the term nostalgia describes our fundamental need to *find* unity, to *find* a meaning to life and to what we do. It encapsulates our practice of looking to our past or to an ideal for meaning. Put another way, nostalgia is a dissatisfaction with the present, and a feeling about our relationship with our environment where we feel that this relationship has changed, and changed such that we have lost something important that formed part of our identity and sense of meaning (i.e. the narrative we have about how we fit in with our environment). For this reason, we can use nostalgia to describe the response senior management have when they feel dissatisfaction about project outcomes. The experience they describe as dissatisfaction emerges out of a relationship they are having with the current situation (where project performance is poor) and with a feeling that some ideal would be better and more in line with their identity of being someone in control.

Absurdity creates harmful consequences for the project workforce. It persists because project professionals and workers find it perilous to speak to power, and consequentially they respond to senior management by subjugating to projectmanagerialism and endure the labour

and emotional costs. In this way, projectmanagerialism is a dialectical response to senior management's ignorance and disinterest in project work.

7.9.3 Concluding remarks

Our influence diagram depicts our theory of the social machinery of projectmanagerialism, with 'project worker stress' as the dependant variable. The influence diagram reveals the elements projectmanagerialism: its ideological incubators, how it legitimises and mobilises its political strategy, and how it traps senior management and other project management professionals in an absurdity loop (Goodman and Kemeny (2011) call this an addiction loop) that affects a project manager and worker's levels of stress. Practically, we make the case for teaching lived experience research to senior managers and project managers, and highlight the positive influence it can have when articulated into the mainstream project management literature. This has the potential to reduce senior management ignorance and invigorate their interest in the lived experience work, and begin to release them and the rest of the project workforce from the addiction of the absurdity loop. Our hope is that it provides a way forward to constructing "more affirmative and caring forms of organising and management" (Hodgson & Cicmil 2016).

CHAPTER 8 DISCUSSION

Allow me to begin this section with an 'in a nutshell' statement, which is difficult to make brief without removing some of the important features. On the one hand such statements can be regarded as superficial, but on the other hand they can simply take the discussion quickly to where it needs to go, and then the rationale behind it can take a little longer to unfold.

8.1 In a nutshell

Senior management are a privileged class who hold hierarchical decision-making power in an industrialised society. They promote and defend managerialism, claiming they are universally essential to the prosperity of society; a claim which is essential if they are to hold on to their power. However, advances in technology, transport, and financial management etc., force organisations to adapt to remain competitive and survive. This disruption opened a need for organisations to reorganise their management methods. Early project managers, who originally heil from the occupational side of organisations with aspirations to join the management class, seized the opportunity to restructure the work environment to favour their social agenda. This restructuring we call projectification, and the PMO has proved to be crucial to altering the organisation's power structure to assert the importance of the position of project manager, while advocating its existence is essential for best practice purposes. We know this to be the case, as changes to the PMO are made when project delivery problems are encountered, yet changes to the PMO do not show up as project delivery improvements, but rather as advances in the projectification agenda. While senior management might not be satisfied with project outcomes, they tolerate the situation as it enables them to hold their power position in society.

In essence, this undeclared understanding between senior managers and project managers is what projectmanagerialism is. Others like University Business Schools and Project Management professional associations exploit and fuel the situation, which is perhaps not intentional but rather they are also subject to an unworkable bind and are simply attempting to comply. But projectmanagerialism is costly to organisations, the workers (including project managers), and society in general. These costs manifest out of four absurd situations created by projectmanagerialism. Figure 1 summarizes these absurdities. The costs are realised in

terms of; wasted management and worker time spent on largely impotent process; an inflated administrative workforce to deal with these processes; and physiological and psychological costs associated with worker and manager health and sense of wellbeing. There are ways to reduce these cost, but they are not easy to enact because projectmanagerialism is culturally well established. Reduction methods include scenario-based training for project managers and senior managers, and the introduction of lived experience project management research into mainstream management and project management education.

8.2 Contributions to the contiguous literature

As mentioned in section 3.1, this thesis contributes to the Making Projects Critical discourse through the presentation of self, the occupational stress aspect of project management and a systems thinking approach to project work in five key areas. They can be summarized as follows:

- Challenging some of the dominant ideas ingrained in the PMO literature and investigating where these ideas came from.
- Exposing the dualities of the 'lived experience' of PMO work, the factors that drive such behaviour that become entrenched in organisational culture and result in the proliferation of project practices that may in fact be unhelpful and even harmful.
- Identifying the impact of occupational stress on the individual and the resulting health outcomes while making recommendations on innovative training and education approaches to enhance the resilience of the project workforce, which includes project and senior managers.
- Modelling how projectmanagerialism impacts on the project workforce, and how this results in a conflict between occupational values and the impost of unscientific management values, which includes normalising dramaturgical act such as sham compliance.
- Collectively my research makes methodological contributions to the project management literature. For example, ethnography combined with the lens of dramaturgy can provide powerful insights to culture and examine scenarios beyond the façade. Applying the accepted occupational stress model to the existing knowledge on project stress provides a mosaic of what practitioners experience but have been unable to previously articulate. Finally, influence diagrams offer an approach to understanding how multiple elements contribute to create systemic outcomes. In

practice, this can be seen as how multiple problems combine and contribute to cause larger ‘different’ problems.

8.3 The PMO

Central to the making project critical approach is the need to depart from the iron triangle concept of project management that has dominated much of the 20th century literature, and instead leverage frameworks and concepts from sociology, moral philosophy, political science and psychology, particularly with a strong research lens is needed (Hodgson & Cicmil 2006a; Ansar 2018).

In the interest of furthering knowledge on PMOs and how organisations facilitate their projects, this thesis initially identified gaps in the existing literature. There are many opinions of what ‘best practices’ a PMO must fulfil, however very limited evidence-based practice currently exists. In fact, the many practices purported to result in enhanced outcomes either add no value or create detrimental outcomes.

This thesis challenges the dominant normative ideas and knowledge by demonstrating entrenched PMO concepts lack validity. Chapter 4 systematically reviewed normative and academic literature, drawing the differences between the invalidated concepts of the PMO and those to which a research lens had been applied. Not only does this thesis add to the knowledge by validating a wide range of PMO ideas, it also provides support for the systematic review method and an appreciation for evidence-based project management literature, a concept often supplanted by normative and populist ideas. The PMO of the early 1800’s was a means to improve agriculture production and trading between the UK and continental Europe. In the 1900’s the PMO largely was a means to facilitate engineering projects, initially civil then military and related such as aerospace, and finally computing and technology. Perhaps the way we approached the PMO 100 years ago can be reimagined and evolved to adapt to the challenges that face organisations in the coming 100 years. This reimaging could include means and methods of establishing ‘native management practices’.

8.4 Senior Management

This thesis contributes to the understanding of senior managements influence on project work through the expectations and constraints placed on the workforce and the lack of support provided to them. In chapter 4, I establish the project office concept was originally integrated as a means to encourage higher productivity in agriculture, and with increased taxation income from the government, this project office was a link between senior levels of government and industry. In chapter 5, I demonstrate that senior management are susceptible to acts of dramaturgy, and this can convey a misleading understanding of the true position of the project. However, these acts are not simple one-way communication scenarios. Rather, project staff are responding to the expectation and constraints placed upon them by senior management who do not appreciate the implications of their own directives or policies. Chapter 6 responds to the theme of occupational stress identified in chapter 5. The expectations and the bind that senior management place on project managers combined with the relative lack of training and education compared to operational roles and high levels of ambiguity, create a uniquely stressful scenario. Furthermore, due to the projectification of many organisations, much of the work now undertaken is by means of projects, and project managers have become the default managers in roles where previously middle and even some senior managers would occupy. Chapter 7 looks broadly at the professional values of project workers, authenticity and personal identity and how these combine and manifest as an absurdity loop. Controversially, the senior management class are not as experienced, educated or capable as they portray. Rather, senior management are commonly a victim of their own ambition, as they too need to portray an image to progress in their roles. When people learn I am undertaking a PhD in the field of project management, they often ask the normative question: what is needed for successful projects? My answer is, senior management - who are educated in their role in project work, have some first-hand experience in project work, are actively involved in their organisation's projects, and have an interest in designing organisational systems to enable and support their workforce while removing superfluous activities.

8.5 Project-based Organisations

This thesis contributes to the understanding of project-based organisations through a more human centred approach, and this includes exploration of the lived experience and

occupational stress in projects. In chapter 5, I investigate the actuality of project work through ethnography. A side effect of this study was a recognition of the inherently stressful scenarios experienced by project workers. Perhaps due to this 'normalised condition' the project worker was relatively unaware of their own stress. In chapter 6, I mapped the established characteristics that cause stress and symptoms of poor occupational health to those identified in the project management literature.

This thesis aggregates a broad range of factors that have been established as contributing to occupational stress in projects as well as how they manifest for the worker and the organisation. Suggestions are made as to how project-based organisation can better deal with occupational stress drawing on evidence-based practices such as scenario-based training from health, law enforcement and the military.

Not all modern, successful businesses follow the doctrines of Capitalism, Taylorism and projectmanagerialism. Semler (1989) discusses cases of advanced manufacturing companies with deep socialist traits, where employees set their own work hours and their own salaries. Semco is one of Brazil's most successful companies. In the 1980's the young CEO of Semco suffered a vasovagal syncope as a result of chronic stress, an event that was the catalyst for him to devise new approaches to working both for himself and Semco (Semler 1994). Not only are Semco job roles designed by employees, the company hierarchy is minimal to reduce bureaucracy and unnecessary management, ensuring all roles are functional. Even the factory location, layout and interior decorating was decided by the workforce (Semler 1989). The description of what Semo has achieved conjures thoughts of deep levels of intrinsic motivation, where motivation comes from control of ones domain while contributing to the system.

McGregor (1960) was one of the earliest North American management scholars to challenge the established ideas around motivation at the time and named this approach Theory Y. The premise of Theory Y is that employees are motivated by more than exchange of labour for payment. Relating to contemporary project management, many of the project-based initiatives we undertake require high level and diverse skills. Contemporary project organisations have complex, socio-political attributes that require creativity, and the sense of esteem and accomplishment in order to navigate. Maslow, who was a colleague of McGregor, described

this concept of the need for esteem and belonging as ‘self-actualisation’ (Maslow 1943). The literature on project management for many decades has been scientific management centric at best, and often overtly normative. The human dimension has not been addressed; the focus has been placed on masculine values such as achievement, control and self-interest. Semler (1989) is an example that alternative realities are viable and even superior to the established ‘best practice’.

8.6 Projectification

This thesis responds to the pressing need to look critically at the phenomenon of projectification. The phrase ‘The Dark Side of Projects’ (a future Project Management Journal Special Issue Theme) infers a hidden side to project work, and conjures anecdotes of aggression, selfishness, trickery, as well as stronger tales of villainy, corruption, and criminality. However, the phrase begs a series of questions, such as; what is hidden from whom, who is perpetrating the hiding and why, and is this hiding actually a wicked thing done by wicked people or is this an oversimplified perspective of a situation brought about by a peculiar set of conditions? Perhaps, as with the Earth’s Moon, there only ‘appears’ to be a Dark Side when one views it from the Earth, and one does not yet have the ability to view it from another point in space or even conceive that another view is possible.
Chapter 7 embarks on theory-building, and demonstrates the case that there is a dark side to the mainstream idea of how to manage project work, and that this idea subtly and silently exercises a tyrannical power over those who are involved in projects, while ingeniously hiding this power from them in plain sight. Briefly put, the term projectmanagerialism describes an ideological doctrine that controls the thoughts and behaviours of those in the project-based organisation. Almost imperceptibly, projectmanagerialism has restructured corporate society and turned all who associate with projects to ‘its way of seeing’ projects.

Chapter 7 contributes and crosses the boundaries of Critical Projects Studies (Cicmil and Hodgson, 2006, Hodgson and Cicmil, 2006, Cicmil et al., 2009), the Projectification literature, where projects are structured activities (Midler, 1995, Packendorff and Lindgren, 2014) and phenomenon (Godenhjelm, 2016, Maylor et al., 2006, Lundin et al., 2015, Grabher, 2002), and the ‘lived experience’ movement in project management, which attempts to capture what actually happens in project work (Cicmil et al., 2006, van der Hoorn, 2015), and the impact project conditions have on physical health and mental well-being (Darling and

Whitty, 2019). The temporary nature of projectified work impacts on the quality of working life. While project-based work can be seen as more exciting due to the 'newness' of one-off tasks, the ambiguity and deadline driven high demand can also be highly stressful, making a significant impact on individuals (Kuura 2020). Projectification is not only constrained to professional spaces, as in recent years there has been a significant adoption of the terminology and basic approach to our private lives (Kuura 2020).

Occupational stress has a direct impact on the health of the workforce and therefore society. Stress caused by workplace factors including job insecurity, lack of reward, unbalanced power in relationships, lack of control over one's own routine, and role ambiguity not only impact individuals they are a public health emergency (Leka, Griffiths & Cox 2003; Marmot 2004; Maulik 2017; World Health Organization 2020). Organisations have a duty of care to their employees and this is legislated in many countries (Maulik 2017). The field of project management has seen considerable debate in recent years on professionalization, usually this concept infers greater ability to recall knowledge from the various professional bodies of knowledge. However, perhaps the problem is not wholly with projects, perhaps it's the senior management class who need to professionalise. It is the senior management class who set the strategic direction of organisations, authorize the indicators of performance by which the workers are measured, and they play a key role in organisational design and set the culture within the organisation. Yet the path to senior managerial positions is not clear nor is it based on a protracted apprenticeship in the practice of management. Given that the decision-making of senior management has both economic performance outcomes for the organisation and exposes the mental and coronary health of every worker, this thesis argues the need for greater awareness, education and expectations of the senior management class. It is not that senior management are ignorant, frequently they are simply unaware, or themselves are chasing poorly considered performance indicators.

8.7 Lived Experience

This thesis contributes to the understanding of the lived experience through dramaturgical acts in the PMO and how these acts are portrayed beyond projects to include senior management. The dramaturgical presentation of self is a factor central to all human interactions and the domain of projects is not exempt. In communication, there is both a linguistic and a non-linguistic attribute, and this concept is well established even in popular management

literature. However, the academic literature until now has not addressed dramaturgy in projects. This contribution is extended through combining dramaturgy with a rich ethnographic study from which the scenarios are driven. Taylor (1911) observed some workers perform at a degraded rate than they are capable of and remarked that this is an evil of the workplace. He coined this phenomenon soldiering. We could look at projectmanagerialism as a modern-day white-collar version of soldiering, though perhaps this would be too simplistic. Rather, individuals attempt to survive within the system presented to them. When organisations set key performance indicators or measures of success, individuals expend their efforts to ensure they meet or exceed those measures (Ordóñez, Schweitzer, Galinsky et al. 2009). This presents a problem where unethical behaviour arises in fear of not performing, and individuals expend efforts not on the pragmatic level of getting the job done but rather on ensuring they look good by meeting their measures of performance (Blomquist, Farashah & Thomas 2018). Likewise, personnel who seek promotion need to be *seen* to be achieving, as it is not sufficient to simply *be* achieving. Therefore, dramaturgical acts are necessary for people to convey their fitness for promotion.

This thesis demonstrates how dramatic acts enable sham compliance to propagate, and how practices however worthless become ingrained and even referred to as 'best practices'. Senior management, even at the top levels of companies, are not immune to such acts. Finally, that although it could be considered unethical to deceive, it is in fact the organisation's demands and expectations, and even ongoing employment opportunities, that instigate such behaviour.

8.8 Methodological contribution

This thesis makes a methodological contribution to the knowledge on project management through the demonstration of methodologies not typically conducted in project management research. Chapter 5 presents a combination of Goffman's Dramaturgy and ethnography as a new research methodology to the project management literature. Reinforced by Chapter 5, there is a case to be made for more ethnographic case studies to be used in scenario-based education and training as part of the effort to reduce occupational stress for the project workforce. Chapter 6 contributes a combined systematic review with Cooper and Marshalls model of occupational stress, and creates a powerful construct underpinned by a stringent research method. Chapter 7 brings a nouveau methodology of influence diagrams as a

systems thinking tool for understanding complex relationships. The methodologies employed by this thesis were supported by robust research methods that are described in each chapter.

CHAPTER 9 CONCLUSION

9.1 Summary of thesis contributions

The contributions of this thesis are now summarised according to the six entities which can benefit from their disclosure.

9.1.1 Practitioners of project management:

- The need for evidence-based knowledge and the limitations of normative literature.

9.1.2 Senior management class

- The need for evidence-based knowledge and the limitations of normative literature;
- Enhanced understanding of the representations in project reporting and dramaturgical acts;
- Enhanced understanding how organizational policy drives behaviours;
- Enhanced understanding of the impact of organizational policy on occupational stress; and
- Enhanced appreciation of the role senior management play in projects and how they can be more effective as leaders.

9.1.3 Professional institutions

- The need for evidence-based knowledge and the limitations of normative literature;
- The understanding the continued pedalling of ‘best practice’ is scientifically unfounded; and
- There is a need for scenario-based training and this should be informed by the evidence-based literature.

9.1.4 University sector

- There is benefit in developing research methods for examining the sociological functions of project management; and

- There is a need for scenario-based education and this should be informed by the evidence-based literature.

9.1.5 Government and industry sectors

- The need for evidence-based knowledge and the limitations of normative literature;
- Enhanced understanding of the representations in project reporting and dramaturgical acts;
- Enhanced understanding how organizational policy drives behaviours; and
- Enhanced understanding of the impact of organizational policy on occupational stress.

9.1.6 Society

- The need for evidence-based knowledge and the limitations of normative literature; and
- The physiological and psychological burden and cost of stress.

9.2 Implications of the contributions

9.2.1 Implications for project management researchers

This thesis has challenged the philosophical assumptions of the prevalent understanding of project management.

Firstly, chapter 4 examines were the ideas and practice of the modern PMO and organisational project management have come from, and how they have evolved and been influences over 220 years. The key finding was that many of the concepts were normative and there is a need to take an anthropological review of project work. Chapter 5 establishes a new research method for project researchers the lens of ethnographic dramaturgy. This is a powerful approach to understanding how accepted practice is actually used and critically assesses with the aid of expert witness accounts the suitability of the techniques. Chapter 6 provides researchers with a mosaic of occupational stress in project work literature combined with a highly regarded lens, and there are several possibilities of further enquiry from this chapter. Finally, chapter 7 looks critically at projectification and the ‘dark side’ of the generic solutions provided by project management. It argues that research in the field of projects

needs to consider the multi-dimensional human aspects of organisations. Collectively, this thesis makes a significant contribution to project management researchers from the perspectives of methodology and fresh ideas based on the 'lived experience' of project work.

9.2.2 Implications for project management practitioners and senior management

This thesis has challenged the accepted normative knowledge that dominates the practitioner literature.

Firstly, chapter 5 employs a combined ethnographic dramaturgy lens to understand how the key component of iron triangle project management and the earned value method is applied. Earned value is so ingrained that it has its own national standards - Standards Australia (2006) and American National Standards Institute (2007). Yet chapter 5 demonstrates how its use can be faked. If compliance with the motor vehicle child restraint standard (Standards Australia 2010) was faked, there would be dire consequences. Yet in project management no one knows the difference. Further, there are implications for senior management whose policies and directives drive behaviours. This cohort needs to be actively involved in their organisation's projects. If organisations are going to embrace a form of projectification, senior management are going to need to be drastically upskilled in projects, and I am suggesting that is a role for universities.

Secondly, chapter 6 gives voice to the how and why project management as an occupation is stressful as well as identifying the very real health consequences. The key recommendation is that scenario-based training be implemented to help practitioners better understand and react to the occupational pressures they face. Many occupations provide scenario-based training, policing, military, health, air traffic control all invest greatly in providing their staff with immersive training, and it is somewhat odd that we often see the pinnacle of project management training in terms of theoretical 'best practice' certifications.

Lastly, this thesis makes a significant contribution to making evidence-based knowledge accessible to the project workers and senior management. The chapters have been deliberately written to maintain scientific rigour while being readable by a wide audience. Through this accessibility I hope there will be an adoption of academic literature and a rejection of the

normative. Perhaps, in a parallel to medicine, it previously relied on pseudo-science and potions but was forced to change to evidence-based practice, and with this life expectancies, quality of life, and health outcomes drastically improved.

9.3 Limitations of this thesis

The limitations of this thesis largely relate to the methodologies. The systematic review has many positive traits. For example, it ensures the full range of research on a particular subject is considered including contradictory perspective, and it requires the research methodology and the credibility of the research to be critiqued. The systematic review is considered the pinnacle of evidence-based research (Cook, Mulrow & Haynes 1997; Evans 2003; Tranfield, Denyer & Smart 2003). However, a systematic review is limited by the quality of the cited research. To counter this limitation my published papers applied an established systematic review method.

Ethnographic studies provide rich accounts of the lived experience; cultural anthropologists developed the method. There are limitations to the ethnographic approach, firstly as this is a labour-intensive methodology it often means only smaller sample rates are possible and therefore the sample may have been chosen to support the bias of the author. However, I reject this claim and maintained assurance through a data verification method, further I would highlight the social nature of management science is desperately in need of more first person accounts that disclose the complexity of the lived experience.

As a thesis there is a focus on the project worker and their environment, I would have liked to study senior management, their ideas and view of project workers. However, I did not find any individuals at the senior management level willing to partake in an ethnographic study.

9.4 Future research opportunities

Throughout this thesis each chapter identified future opportunities for research. These include:

- Further research on PMO practices;
- PMO research using anthropological research methods to understand the deep human interactions;

- Leveraging the combination of ethnography and dramaturgy to understand the lived experience of project work;
- Evaluating scenario-based education and training to assess its efficacy in decreasing project worker stress;
- Research collaborations with the epidemiology community in health research;
- Research collaborations which further couple frameworks and concepts from other management fields such as human resources. Projects do not operate independently of the organisation and greater integration of research is needed; and
- Testing of the influence diagram with researchers and practitioners.

9.5 Final remarks

This thesis addresses a knowledge gap on organisational project management by exploring the dramatic acts, occupational stress and professional values of the project worker. Through deep 'lived experience' descriptions this thesis discovers elements of organisational culture and dramaturgical representations of the self. The project worker often suffers as their professional values and personal identity conflict with projectmanagerialism.

Absurdity in the Camusian sense acknowledges the human need to organise and seek meaning. In projects this manifests by the organising of practices and giving them labels such as 'best practice'. This thesis demonstrates they are frequently not best, rather they are common. Established professions such as medicine, nursing and law base their approach on evidence-based practice that is underpinned by scientific, peer-reviewed knowledge. Early management thought was grounded in the evidence-based practice of fields such as linguistics, geography, history, science and technology (Kaplan 2014). It could be said that the earliest business schools were multi-dimensional in their curricular, however over time the diversity in thinking has become homogenised to what we see today as 'best practice', and lacks little evidence-base.

This thesis challenges the concept of 'best practice' and how project management practices are applied in general. Twenty-five years ago Packendorff (1995) noted despite highly sophisticated tools being developed, only the most basic are used and frequently not as designed. Therefore, this perception has driven the focus of projects as scientific management tool centric rather than social organisations involving the interaction of people. This thesis has

brought attention to the rarely discussed topics of occupational stress, professional values and personal identity in projects. While the normative literature is asking how to create better project outcomes, the Making Projects Critical movement has been responding through a broader understanding of the nature of project work. A significant body of literature already exists, and this thesis makes a further addition to it. However, an 'intellectual reset' will be required, and a different approach to thinking about projects is needed.

Projectmanagerialism is increasingly dominant in organisations. However, as disclosed by this thesis its normative ideals adversely impact organisations and project workers. Projectmanagerialism creates absurdity. And it is not only organisational efficiency that is at risk, but the physical and mental health of the project workforce. While this argument is strong, it is supported by the evidence in this thesis and grounds my belief in the criticality of rebelling against the status quo and cultivating 'native management practices' to cope with project work.

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