Cranfield University

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Leadership

Leaders' framing of complex problems: The everyday institutional activity that enables and constrains adaptive responses in organizational settings

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ABSTRACT

The principal issue of interest underpinning this study is captured in the assertion of Heifetz et al. (2009) who stated that the most common cause of organizational failure is a consequence of treating complex problems (adaptive challenges in their words) as reducible, technical problems. The overall study has explored how and under what contextual conditions leaders' framing of complex problems influences organizational responses over time. The study is important since, despite the burgeoning body of literature on leadership, very little empirical research is available to deepen understanding and potentially explain how an organization actually achieves an adaptive response to a complex problem. This research project is designed around three core papers; a systematic literature review and two qualitative empirical research studies. The studies employ complementary interview techniques to elicit how individual leaders think about addressing complex problems within an organizational context and their perceived effectiveness of organizational response. Study 1 used the Repertory Grid technique (Kelly, 1955) to deepen understanding of leaders' personal constructs and study 2 used semi-structured interviews to reveal rich descriptions of the specific contextual conditions influencing leaders' framing processes. A total of 38 and 42 interviews were completed in studies 1 and 2 respectively, with experienced leaders from three hierarchical cohorts in the British Army (junior, middle and senior leaders). The empirical findings are relevant to future research in the problems, leadership, institutional theory and framing literature domains. Methodological contributions are also made in the application of a critical realist perspective to epistemologically diverse literatures, to deepen understanding of the structural forces influencing leaders' framing of complex problems in an organizational setting. Finally, several practical recommendations relevant to management practice are offered.

Keywords: Complex problems, wicked problems, adaptive response, adaptive practices, leadership, institutional forces, framing, repertory grid, British Army

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LIST OF ABBREVIATIONS

ADP	Army Doctrine Publication
ANV	Average Normalised Variability
CAL	Centre for Army Leadership
CIMO	Context, Intervention, Mechanism, Outcome
CLT	Complexity Leadership Theory
DAC	Direction, Alignment, Commitment
D Pers	Director of Personnel
ECAB	Executive Committee of the Army Board
FOE	Future Operating Environment
HQ	Headquarters
JCN	Joint Concept Note
JDN	Joint Doctrine Note
JSCSC	Joint Services Command and Staff College
L-A-P	Leadership-As-Practice
NATO	North Atlantic Treaty Organization
NHS	National Health Service
P3M	Portfolio, Programmes and Project Management
PCT	Personal Construct Theory
RGT	Repertory Grid Technique
RMAS	Royal Military Academy Sandhurst
RQ	Research Question
RS	Research Strategy
SAF	Strategic Action Field
SLR	Systematic Literature Review
UF	Unique Frequency
UN	United Nations
VUCA	Volatility, Uncertainty, Complexity and Ambiguity

1 INTRODUCTION

Organizations are facing competing, overlapping and, for some, increasingly complex problems (Anderssen and Törnberg, 2018; Augier, 2001; Smith et al., 2017; Uhl-Bien et al., 2007; Uhl-Bien and Arena, 2018). Complex problems are non-reducible and since they cannot be objectively solved are ill suited to mechanistic procedural responses (Grint, 2005; 2010b; Heifetz, 1994; Heifetz et al., 2009). Complex problems manifest as both sudden and slow-onset (Meyer, 1982). Some challenge the prevailing narrative of organizations and societies grappling with *increasing* complexity citing twentieth century challenges in the post war period that included, for example, the implementation of the Marshall Plan to regenerate Europe (Tourish, 2019). Nevertheless, the narrative of increasing complexity is thriving with advances in technology and faster means of communication rendering complex intractable issues more visible to a wider audience than ever before (Smith et al., 2017). Rather than claiming *increasing* complexity, the present study simply asserts that some problems have complexity running through them, consistent with descriptions of non-reducible, complex problems. Technology cannot provide objective solutions to the typically people based, messy, non-reducible organizational and societal problems termed here as complex (Head and Alford, 2015; Smith et al, 2017).

Adaptive responses are commonly cited as critical to maintaining organizational effectiveness in the face of complex problems (Heifetz, 1994; Heifetz et al., 2009; Uhl-Bien and Arena, 2018; Uhl-Bien and Marion, 2009). Some scholarly work refers explicitly to 'Adaptive Leadership'. For example, Heifetz et al. (2009, p. 14) assert that adaptive leadership involves, "mobilizing people to tackle tough challenges and thrive." Others associate adaptive leadership with an outcome of collaborative endeavour and emergence through dynamic interactions (Lichtenstein et al., 2006; Lichtenstein and Plowman, 2009; Uhl-Bien and Marion, 2009). In line with more recent work from Uhl-Bien (see Uhl-Bien and Arena, 2018) and others **(**Tourish, 2019), this study avoids using 'adaptive' as an adjective to describe a type of leadership, preferring to consider conditions that enable and constrain adaptive organizational responses without predetermining the responses as wholly explained in terms of leadership.

While the study does not seek to claim an explicit causal link between leaders' actions and adaptive organizational responses, the study does nevertheless seek to deepen understanding of leaders' role in this process, since very little research has been conducted to explain the micro-foundations of adaptive organizational outcomes. What is it that leaders actually do, either to enable or constrain the emergence of this adaptive organizational response? A baseline critique of existing leadership literature in relation to this issue follows later in the chapter.

Frames and framing are ubiquitous constructs, used across traditions of management research (Cornelissen and Werner, 2014). At the individual level, framing is typically described in terms of the packaging of information, used to shape others' behaviours (Giorgi, 2017), and used extensively to explain cognitive processes (Cornelissen et al., 2011). The affective domain has started to attract greater attention, with Giorgi (2017) describing emotions and cognition as the twin pillars of frame effectiveness. Recent developments in framing literature have advanced a more interactional perspective, promoting the idea of using framing to understand the constitutive relationship between processes of institutionalization and the agency through which leaders can influence institutions (see Purdy et al., 2019). Used in this way, framing is able to explain the fundamental issue of macro-level phenomena emerging from, "...interpretations of humans in everyday interactions at the micro-level." (p.415). In line with the approach encouraged by Purdy et al. (2019), framing is used as a lens to view the enabling and constraining institutional influences affecting leaders when addressing complex organizational problems.

The remainder of the chapter will focus on three introductory elements; first an introduction to the case study organization and background to the research; second, a baseline critique of existing leadership literature relevant to the research; and third an outline of the overall structure of the research.

1.1 The case study organization

The British Army provides the specific case study organization for the empirical study, and was chosen for three principal reasons. Firstly, the British Army offers a rare opportunity to research an organization that has to cope with both rapid disruptions and crises, and long standing, intractable, problems. It operates in normal, non-operational and abnormal, operational contexts using the same hierarchical personnel. The operational environment is a term used to describe active duty across the full spectrum of military activities, from high intensity warfighting to low intensity assistance to the civil authorities. An operational environment is typically in a deployed location (physically removed from the normal, day-to day environment) and is consistent with the description of an abnormal environment. The non-operational environment is used to describe the day-to-day permanent military establishment environment and is consistent with the description of a normal environment. The army's operating model offers the potential to reveal similarities and differences in leaders' framing processes associated with addressing complex problems in normal, non-operational and abnormal, operational contexts.

Secondly, the lead researcher has 25 years' experience as a career army officer with deep professional knowledge about relevant organizational nuances required to unlock access to a cross section of the organization’s hierarchical actors up to and including the most senior level. This is important since empirical studies based on the uniformed public services are rare primarily because access to respondents is difficult. Finally, the British Army was chosen because it represents an organization with a distinctly unambiguous view about the role of leadership; put simply, the British Army views almost all agentic action through the lens of 16 layers of hierarchical leadership (from the first rung of the leadership ladder at Lance Corporal rank up to the most senior at General (4 star)). Organizational actors across the hierarchical spectrum therefore perceive themselves, and are perceived by others, to be acting as leaders. The unambiguous nature of the British Army’s perception of leadership is captured in the following illustrative quotes, taken from Army Leadership Doctrine and the army’s highest-level doctrine publication, ADP Land Operations:

"Leadership is everywhere. It is the lifeblood of any organization..." (**Army Leadership Doctrine, p.9**)

"*Land forces rely completely on the strength of their leadership at all levels.*" **(ADP Land Ops, p.309)**

"*In battle, it is leaders who break the paralysis of shock amid fear, uncertainty, death and destruction. Their vision, intellect, communication and unceasing motivation paves the path through chaos and confusion. They inspire the force through boldness, courage, personal example, compassion and resolute determination to win. Then, and at all other times, it is leaders who shape and control the conduct of the force, for good or ill.*" **(ADP Land Ops p. 3-10)**

1.2 Background to the research

The post Cold War security environment has led to a proliferation of interventions providing militaries, including the British Army, with a wealth of recent operational experience from which potentially to reflect, learn and adapt. In a synopsis of Post Operational Interviews from UK operations in Afghanistan (2010), one commander commented, "I think that the Army would like to be adaptive, and its commanders think it is, but progress is glacial". Recently published UK Joint Doctrine publications, most notably in the emergence of 'Influence'(JDP 3-40, 2009; Cialdini, 2009) and the Decision Making and Problem Solving Doctrine Note (JDN: 3/11, 2013), are increasingly focusing military leaders on a complex, emergent environment (GST, 2014; FOE, 2015) and the psychology of decision making (JDN 3/11, 2013), but there is little evidence to suggest that adaptive organizational responses have become the norm when faced with complex problems (Chilcot Report, 2016, Parliamentary Defence Committee Report, 2015).

The British Army's core doctrinal publication describes a new idea to cope with the increasingly complex character of warfare as "integrated action" which requires military leaders to, "...identify their outcome; second to study all of the audiences that are relevant

to the attainment of the outcome; third to analyse the effects that need to be imparted on the relevant audience; before determining the best mix of capabilities...to achieve the outcome." (ADP Land Operations, p.i). The dominant underlying theme is a narrative framed in logical planning, analysis, systematization and control, despite the complex and ambiguous nature of the problems faced. The British Army clearly recognizes the importance of agility and adaptability in addressing complexity stating, "...leaders who try to impose order on complexity are likely to fail." (JCN 2/17, p.48), and yet as the definition of integrated action suggests, the prevailing framing narrative remains one dominated by a language of reducible analysis and systematized control.

1.2.1 The operational environment. Integrated Action links with the doctrinal concepts of Joint Action, Mission Command and The Manoeuvrist Approach. Mission Command, in particular, describes a philosophy that emphasises the importance of good judgement, initiative and trust to achieve devolved decision making (ADP Land Ops 4-1). This resonates with a contemporary operating environment that tends to be ill-defined and not amenable to precise or pre-rehearsed solutions (FOE, 2015; JDN: 3/11, 2013). However, the British Army's principal planning and decision-making tool, the Estimate process (JDP 01: Campaigning; JDP 3-00), is based on a rational, logical model (Buchanan and Huczynski, 2010) that underpins planning activity and provides the basis for all coordinated action associated with executing the plan.

Complex problems present emergent challenges and yet the Army's procedural approach remains fundamentally suited to the challenges associated with conventional adversaries - a complicated environment with technical challenges. Of course, many operational level activities are necessarily structured and pre-rehearsed – the delivery of potentially lethal force requires carefully coordinated and synchronised activity in time and space, offering limited scope for unscripted opportunity. Other problems within an operational environment are associated with highly time-sensitive decision making and action - dealing with crises. Crises require rapid responses, regardless of the level of complexity running through the problem. Neither of these two principal responses - rational, reducible problem solving and dealing with crises - appear to be well suited to embedding adaptive responses to longer-term complex problems. Hannah et al. (2009) note that,

despite many examples of leadership in extreme contexts within the military environment, it is one of the least researched areas in the leadership field. Empirical research focused on adaptive organizational responses and the role of leadership within an organizational setting is therefore both important and, particularly within operational/abnormal environments, rarely studied.

1.2.2 The non-operational environment. During the past two decades the British military has been perceived as struggling in the managerial leadership domain, particularly with regards to financial planning and management, but also in terms of contemporary human resource management practices (Gray, 2009; Levene, 2011; Prederi 2014).

There is a clear hierarchy of documentation to support the Army's organisational activity: The National Security Strategy (2015); the Strategic Defence and Security Review (2015); British Defence Doctrine (2014); and most recently, The New Operating Model (2015). As the illustrative quotes above demonstrated, it is the army's leaders across multiple levels who are expected to take direction and turn policies and directives into purposeful and resource efficient action. The drive for efficiency within the public sector, combined with myriad policy and procedural directives drive problem-solving behaviours even more stubbornly towards reducible, linear solutions that demonstrate tangible deliverables framed as cost effective solutions. Whilst delivering defined, cost effective outputs is a laudable aspiration, suitable for many organizational problems, the British Army arguably has a poor recent record in enabling an adaptive response to the more intractable and non-reducible problems. For example, the House of Commons Committee of Public Accounts (2019) was highly critical of the Ministry of Defence's 10 year recruiting contract with Capita.

The rational, logical decision-making tool used predominantly in operational contexts - the Estimate - is replaced by an equally rational tool in non-operational/normal organizational contexts. The army's New Operating Model (2015) states, '...major programme spending is managed using a Portfolio, Programme and Project Management (P3M) approach, following best practice across Government.' Whilst P3M literature

(MoD, 2015) suggests a methodology applicable within a dynamic, emergent environment, P3M tends to follow a highly structured linear process more suited to reducible, definitively solvable problems. Within the last few years, the Cynefin framework has been introduced in doctrinal thinking (JCN 2/17). The Cynefin framework distinguishes between complex problems and other problem types and is aimed at improving individuals' decision making within the context of emergence and complexity.

The key premise underlying this doctoral research study therefore is that the British Army has quite a challenge on its hands. The army needs to operate within both normal and abnormal environments, conform to public service procedures, demonstrate value for money across its spectrum of activities, deal with crises (sometimes in highly threatening and dangerous environments) *AND* develop the capacity to enable adaptive responses when faced with the non-reducible, intractable problems termed here as complex. Since all this doing is performed by people, a large proportion of whom are conceived as leaders and it is leaders who, "...shape and control the conduct of the force, for good or ill." (ADP Land Ops, p.3-10), the next section will provide a summary of different perspectives in literature about what leading, and leadership actually is.

1.3 Traditional conceptions of leadership and complex problems - a critique

When trying to deal with macro level problems – especially societal problems such as sustainability, poverty and conflict, but also major organizational or institutional challenges such as transformational change programmes or industry wide adaptation in relation to an external or legislative stimulus, Andersson and Törnberg (2018) describe a trend away from top down, traditional approaches to dealing with problems, rooted in hierarchy, rational planning and control. There is increasing support for a view that accepts problem qualities associated with ideas of complexity such as unpredictability and multidimensionality as, "irreducible root causes of problems" (Andersson and Törnberg, 2018, p. 118). However, there is a lack of shared understanding about the important foundational concepts of complex and wicked problems as a result of contrasting social or natural science backgrounds, ontological positions and research

method preferences leading to messy and divergent understandings (Andersson and Törnberg, 2018). Paper 1 (Chapter 2 of this thesis) provides a more detailed explanation of issues relating to problem complexity, perceived desirable responses, and the role of leadership. The next section provides a baseline critique of current leadership literature and aims to highlight the deficiencies in traditional leadership literature in relation to explanations for addressing problem complexity with adaptive responses.

Leadership has been a topic of interest since the days of the ancient philosophers (see Fairhurst and Connaughton, 2014; Grint, 2005; 2010a). Grint (2010a) aligns our historical understanding with the presence of written records by the likes of Sun Tzu (4th Century BCE) in the East and, at a similar era in history, the likes of Plato and Aristotle in the West. These ancient texts were typically preoccupied with military matters and, as is largely the case today, history is written by the "winners" (Grint, 2010a, p.33).

Thomas Carlyle in the mid nineteenth century is often cited as the first modern writer on leadership (Grint, 2005; Northouse, 2016; Yukl, 2013). The modern industrial revolution took hold in the nineteenth century, but it was not until the early twentieth century that a notable expansion in leadership literature emerged (Grint, 2011; Yukl, 2013). Indeed, interest in the study of leadership as an inter-disciplinary, contemporary and relevant area of scholarship continues to grow to the extent that even specialist scholars struggle to keep up with its breadth (Collinson et al., 2011). Northouse (2016) observed that 65 different classification systems have been developed in relation to the various dimensions of leadership over the past 60 years. As Stogdill (1948) identified over 60 years ago, there are nearly as many definitions of leadership as there are people who have tried to define it (Northouse, 2016). Yukl (2013, p.18) posits, "Most definitions of leadership reflect the assumption that it involves a process whereby intentional influence is exerted over other people to guide, structure, and facilitate activities and relationships in a group or organization." Bennis (2007) first described these elements of leader(s), followers and outcome as a tripod and this has become a well-used description over the past decade (see Crevani et al., 2010; Drath et al., 2008; Yukl, 2013). Drath et al. (2008) presented an inclusive and alternative ontology to the leadership tripod, moving away from an explicitly entitative description and instead focusing on the productive outputs of a

leadership dynamic, termed Direction, Alignment and Commitment (DAC). Grint (2010a) asserts that the importance of defining leadership is to do with adding clarity to alternative perspectives rather than about agreeing a common perspective – we need to define what we mean by leadership so that we can understand each other's arguments. Yukl (2013) acknowledges that attempts to organize leadership literature along common lines according to approach or perspective have had limited success.

According to Grint (2011) interest in the dominant normative and rational schools of thought has ebbed and flowed since the normative Great Man theories espoused by Thomas Carlyle were challenged by rational models of organizational leadership in the early twentieth century. Northouse (2016) describes the schools differently (trait and process) but agrees with other scholars that the last 50 years has seen a significant resurgence in models that suggest a link between effective leadership and inspirational individuals (Collinson et al., 2011; Grint, 2011; Northouse, 2016; Yukl, 2013). Arguably, the one overarching area of common ground across definitions and categories has been descriptions that place the (entitative) leader at the heart of prescribed actions.

Leaders are commonly conceived as the individuals responsible for cohering purposeful activity in relation to achieving organizational goals (See Bennis, 2007; Grint, 2010a; Yukl, 2013). Organizational performance typically revolves around solving problems, meeting targets, making progress and demonstrating that benefits exceed costs (Weber and Khademian, 2008). Organizational research has long been interested in the conditions that enable leaders to influence their organizations (Clark et al., 2014). Friedrich et al. (2009) highlight the prevalence of research into individuals' conceptual skills and abilities, citing leaders as being those who often identify problems and engage in effective decision making. Mumford et al. (2007) highlight the importance of past experience in enabling leaders' effective problem identification, communication to others and delineation of responsibilities within work teams. Head and Alford (2015) assert that common orthodoxy dictates that a leader's principal roles are to frame and pursue a vision, implying the leader has a privileged position from which to assess what is wrong with the current position and also how to move to a more desirable one. This traditional view of leader chimes with the traditional view of organization; one based around

prescribed rules, hierarchy and procedures to simplify work based challenges through reductionist rather than holistic thinking (Plowman et al., 2007). According to Plowman et al. (2007), leadership has typically been viewed as a way of directing and controlling identifiable organizational futures and leaders are thus those who exercise intentional influence over others most effectively.

Traditional leadership literature remains focused either on the heroic roles of individual leaders, or on an objective analysis of the factors required of the leader role and therefore backgrounds structure to the point of invisibility. These traditional conceptions arguably remain highly relevant to rule-based, rational planning and procedurally driven orgaizational activity to address linear problems and time-critical crises. The next section considers evidence in literature that supports an alternative conceptualization of the leader role in relation to purposeful activity to address complex organizational problems.

1.4 Alternative conceptions: the emerging plural view of leadership

New, plural theories of leadership (Denis et al., 2012) increasingly distinguish between (individual) leader and (collective) leadership and provide an alternative perspective on the role of leader, suggesting that leadership moves beyond a description of a skill, an interaction or symbolic figurehead, to a concept of emergence through dynamic interactions, (Lichtenstein et al., 2006; Lichtenstein and Plowman, 2009; Uhl-Bien and Marion, 2009). Plural, collaborative theories of leadership therefore appear to align to the challenges presented by complex organizational problems.

In their comprehensive literature review, Avolio et al. (2009) suggest that heroic models may not be sufficient in a knowledge driven era that requires leadership to be shared within organizations in order to produce adaptive responses. In contrast to traditional, entitative conceptions of leadership rooted in psychology that frame individuals as repositories of knowledge, a range of new perspectives on leadership have challenged the traditional tripod of leaders, followers and shared goals (Crevani et al., 2010; Gronn, 2002; Drath et al., 2008; Raelin, 2011; Uhl-Bien, 2006). These alternative conceptualizations of leadership have arisen to some extent as a response to perceptions

of increased complexity and ambiguity in the workplace (see Liechtenstein et al., 2006; Marion and Uhl-Bien, 2001; Uhl-Bien et al., 2007). Denis et al. (2012, p.211) consider four different streams of new literature (leadership shared in teams; pooling leadership at the top of the hierarchy; spreading leadership across boundaries; and producing leadership through interactions) and settle on the overarching term of plural leadership, which is the generic term that will be used throughout this paper. The four categories of plural leadership literature cover a broad spectrum of theories and demonstrate how ideas around the entitative, or processual nature of leadership are better viewed as a continuum than as a binary issue. Broadly speaking, the categories outlined by Denis et al. (2012) move progressively further away from the leadership tripod, towards a more processual conceptualization (leadership shared in teams through to leadership through interactions).

To varying degrees, theories of plural leadership consider leadership as something that happens "in the space between" individuals (Lichtenstein et al., 2006, p.2) and where leadership is seen as a collective rather than individual (leader) responsibility (Uhl-Bien, 2006). Leadership-as-practice (L-A-P) probably represents the most processual based theory. Raelin (2016, p.5/6) states that the L-A-P movement, "resonates with a number of closely related traditions, such as collective, shared, distributed, and relational leadership." The common ground linking these theories is a desire to differentiate from a focus on traits, behaviours, abilities and competencies in seeking to deepen knowledge about the leadership phenomenon (Raelin, 2016). In terms of differentiating the theories, Raelin (2016) asserts that L-A-P releases leadership from a role-driven entitative influence relationship that is still a characteristic of many of the other (distributed/shared/relational) approaches.

A discrete area of new, plural leadership theory, grounded in complexity science that has gained significant scholarly attention is Complexity Leadership Theory (CLT) (Lichtenstein et al., 2006; Marion and Uhl-Bien, 2001; Plowman et al., 2007; Uhl Bien et al., 2007). Hazy and Uhl-Bien (2015, p.80), state that, "Complexity approaches do not discount individual leaders, but focus instead on the importance of broader organizing effects that include both individual practices and complex system effects". Drath et al. (2008) consider the potential of complexity theory to inform leadership research, citing

its focus on holism, which states that the whole of any phenomenon is greater than the sum of its parts, and that there is an irreducible level of uncertainty within a complex system. In this way, leaders do not add up to the whole of leadership and future outcomes cannot be predicted accurately.

Uhl-Bien and Marion (2009, p.633) distinguish between administrative, adaptive and enabling leadership within CLT. Administrative leadership describes the managerial leadership that is effective for many of the linear, definable problems associated with bureaucratic functions within organizations. According to Uhl-Bien and Marion (2009), adaptive leadership is informal leadership that encourages innovation and change through creativity and collaborative endeavour and enabling leadership acts as the interface; fostering conditions conducive to adaptive leadership, whilst managing and supporting the administrative processes. Uhl-Bien and Arena (2018) updated the theory, adjusting the categories to entrepreneurial (formerly adaptive), enabling and operational (formerly administrative) leadership in recognition that the "adaptive space" resides within the enabling function (p.99).

Although new plural leadership literature recognises the requirement to overcome bureaucratic paradigms in pursuit of adaptive responses when facing complex organizational problems, it fails to offer an explanation beyond aspirational conceptions of unhindered collective agency in terms of how and under what conditions the bureaucratic paradigm is actually overcome. In adopting a utopian and collective lens to agency, plural leadership literature backgrounds structural influences almost to the same extent as traditional literature. The lack of attention to the role of power within plural leadership theory is particularly prominent (Alvesson & Spicer, 2012; Collinson, 2005; Collinson and Tourish, 2015; Denis et al., 2012; Gordon, 2011). Gordon (2011, p.197) notes, "Since the dispersed leadership theories promote the redistribution of power, one would expect the analysis of power to be central to their research frameworks: this is not the case." The next section will consider the relevance of critical perspectives to leadership as a literature domain that pays attention to the influence of power within the leadership dynamic.

1.5 Critical perspectives of leadership literature

Critical approaches aim to penetrate a level of understanding deeper than, "naïve celebration or earnest interpretations of leadership" (Alvesson and Spicer, 2012, p.368). For Alvesson and Spicer (2012), the recent theories of plural leadership have made matters worse by broadening conceptions of leadership even further, without meaningfully advancing research into the impact of power and domination within the leadership dynamic. This is important to the sort of leadership described as "enabling" by Uhl-Bien and Marion (2009), since "...even when there are apparently open forums for deliberation, people sometimes remain attached to assumptions that strong leaders are important." (Alvesson and Spicer, 2012, p. 384). The dominant paradigm of strong individual leaders is unlikely to enable the informal, emergent creativity described in CLT.

Grint (2010b) links Etzioni's (1964) typology of compliance (coercive, calculative and normative) with his critical/tame/wicked problem typology, aligning coercive power to critical problems; calculative power to tame problems; and normative power to wicked problems. Paying attention to the role of power within an organization is important when considering action to address complex problems since, "...you cannot force people to follow you in addressing a Wicked Problem because the nature of the problem demands that followers have to want to help." (Grint, 2010b, p.308). In this way, scholarly work that seeks to investigate individual leaders' construction and framing of complex problems within an organizational context can ill afford to ignore the influence of power. A group of scholars have developed critical approaches to leadership that draw on interpretive methods and social constructionist processes, but also seek to go further by examining the dynamics of power and politics within the leadership dynamic and relating it to institutional context (for example, Alvesson and Spicer, 2012; Collinson, 2005, 2014; Collinson et al., 2017; Gordon, 2011; Grint, 2005; Tourish, 2014; 2019; Tourish et al., 2009 and Willmott, 1993). A fuller discussion exploring the importance of power is presented in paper 1 (chapter 2) and is developed further in the empirical studies that follow.

1.6 Entitative and processual conceptions of leadership

Identifying what is an act of 'leading' is recognised as problematic in literature (Collinson et al., 2011; Crevani 2018; Yukl, 2013). An increasingly common distinction made in leadership literature is between entitative and processual conceptions (Crevani, 2018; Denis et al., 2012). As Denis et al. (2012) found in their comprehensive review of plural leadership literature, entitative and processual conceptions are better viewed as positioned within a spectrum rather than at opposite ends of a binary scale. Unless one is claiming a direct causal link between actors' prescriptions for action and the resulting enactment of tasks, research that seeks to uncover the mechanisms that enable and constrain adaptive responses within organizational settings is highly likely to benefit from a processual (rather than a purely entitative) approach (Tsoukas and Chia, 2002).

A processual approach does not deny the existence of entitative leaders. Tourish (2019) describes leadership as a process that emerges through the interactions of leaders. Leaders are individuals who have successfully claimed or accepted entitative status within an organizational setting (p.229). To background the entitative status claimed or given to individuals would be problematic within the context of the case study organization, since the British Army has a distinctly unambiguous and entitative view of leading and leadership. The army's leaders are individuals, across many hierarchical tiers, who are assigned tasks and held to account for the resulting outcomes. Importantly though, a processual approach focuses principally on the combination of communicative interactions between entities rather than on the entities themselves. Such an approach is appropriate within the context of the present study since adaptive organizational responses cannot simply be prescribed by leaders (see thesis chapter 2; paper 1). Change in organizations needs to be made to work; the change does not happen through stable, linear patterns between entities, but rather through a dynamic and constantly mutating series of micro-level interactions (Tsoukas and Chia, 2002, p.577). Framing is well suited to the challenge of understanding meaning making in relation to these interactions since the literature places a sophisticated and nuanced processual approach at its core, drawing on theories of communication and interaction to, "...add to our vocabulary and inventory of mechanisms that offer explanatory power." (Purdy et al., 2019, p.417).

The two empirical studies therefore paid attention to both entitative and processual aspects. An entitative perspective was used to consider what individual leaders reported or perceived they did in pursuit of somewhat entitative organizational responses. A processual perspective was used to consider the flow between individual leader actions and organizational level responses, identifying contextual conditions that combined in non-linear ways to constrain or enable adaptive organizational responses over time. The study follows the approach taken by Raelin (2016, p.3), distinguishing between *practices* which are entitative (typically either subject-object or subject-subject) in nature and *practice* which is processual (described as a continual flow of processes where engagements produce meaning that is emergent and mutual). Accordingly, the term adaptive organizational *practices* is used alongside the term adaptive organizational *responses*, with both terms referring to somewhat entitative conceptions of organizational activity. Where the term *practice* is used, it is in connection with the processual flow of communicative interactions occurring inbetween individual leaders. The following section will introduce the overall structure of the research study.

1.7 Overall structure of the research

Figure 1-1 below introduces the overall structure of the research. The next section will provide a brief outline of the development of each stage of the study.

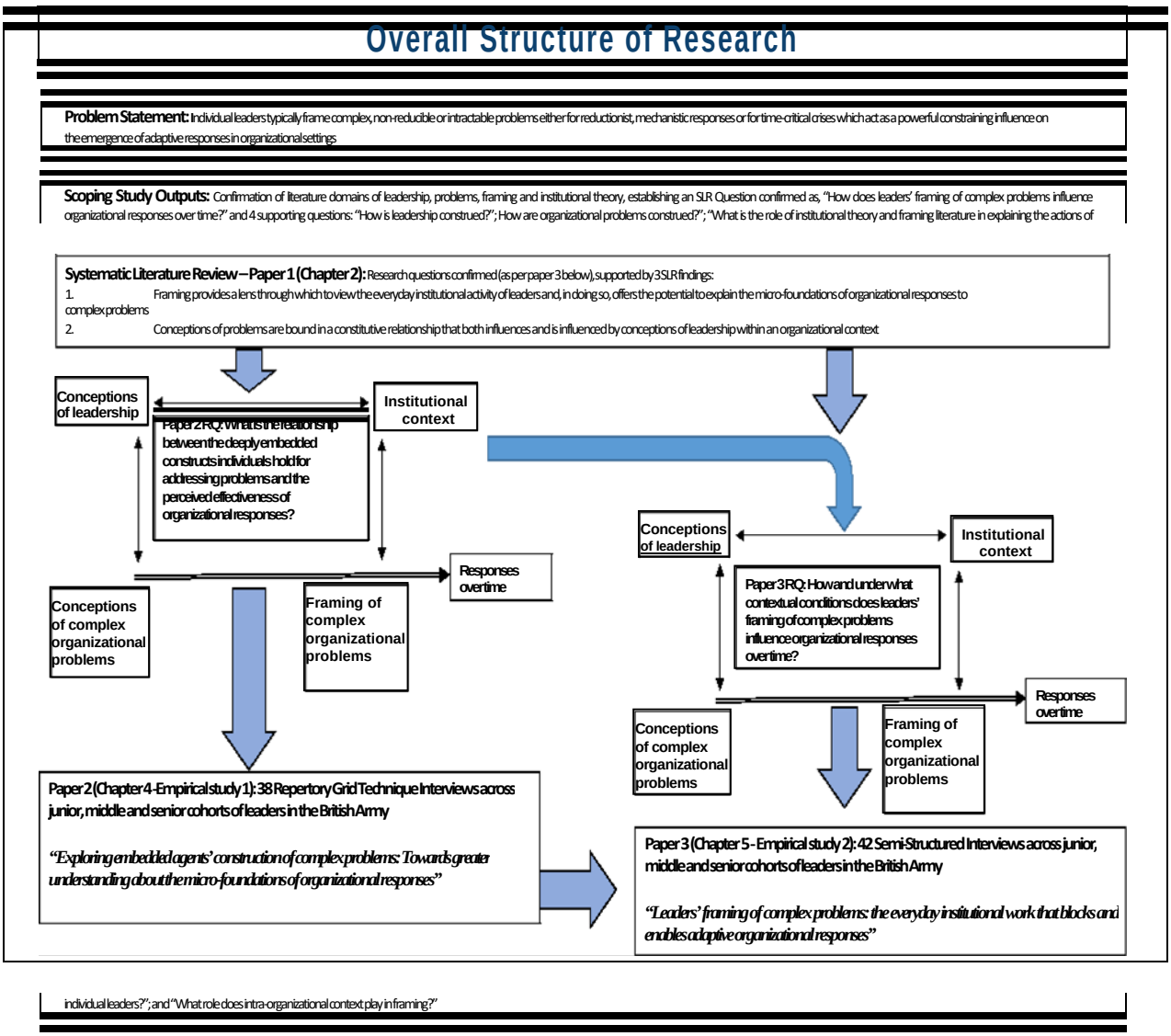


Figure 1-1: Overall structure of research study

1.7.1 Scoping study outcomes

A broad scoping study was completed to explore potentially relevant literature to the study's problem statement. The output from the scoping study was an established focus on the literature domains of leadership, framing, institutional theory and organizational problems. However, during the scoping study these domains were found to overlap substantially with other related literatures. The following section summarises this overlap and points to where progress with theory integration could benefit future organizational research.

1.7.1.1 Institutional theory and Organizational Culture

Institutional theory was chosen in favour of organizational culture because it focuses more specifically on forces operating beyond the scope and reach of individual organizations and places the maintenance of legitimacy at the heart of its theorizing. This is highly relevant to an organization such as the British Army since its purpose is to serve as a lever of power of the democratically elected government of the day and therefore maintaining credibility and legitimacy in the eyes of government and broader public is hardwired into the organization's psyche.

A further reason for an institutional focus is that, at times, literature addressing organizational culture describes culture as a relatively tangible property of an organization and therefore implies a high degree of potential for human agency to control and change culture (Martin, 2002). Notions of "strong cultures" built by organizational leaders continue to offer oversimplified conceptions of organizational culture that play to traditional leadership paradigms that foreground heroic power-based agency, and background structural influences (Martin, 2002, p.8; see also Collinson and Tourish, 2015). As Hatch and Cunliffe (2013) noted, the route to organizational culture change is neither linear nor guaranteed. The British Army tends to view culture from the perspective of a "strong culture" built by leaders (Defence Leadership Centre, 2004; MoD Report on Inappropriate Behaviours, 2019) and consequently, the language of organizational culture was seen to be insufficiently removed from perceptions of traditional heroic leaders and notions of organizational property. Nevertheless, there is undoubtedly significant overlap in the literature, and much could be gained from a more integrative approach, since institutional forces effectively manifest as culture at the organizational level (Giorgi et al., 2015; Thornton et al., 2012). The recent turn towards micro-level foundations in institutional literature addresses many of the challenges inhibiting further integration between the literature domains identified by Hatch and Zilber (2012). The conditions for further theory growth and integration between these two important and vast literature domains therefore appear to be more permissive than ever before.

1.7.1.2 Institutional logics, Strategic Action Fields and Framing literature

Identifying the forces that influence leaders' action is recognised as problematic in the literature. The initial focus in paper 1 was on the burgeoning literature of institutional logics. The recent focus on logics within institutional literature has enabled a productive line of research to develop, seeking to connect macro-level structural influences with micro-level actions (for example, see Besharov and Smith, 2014; and McPherson and Sauder, 2013 for two highly cited examples). As such, logics places the notion of "embedded agency" (Berente and Yoo, 2012, p.378) at its core and claims to provide a metatheory of institutions, "...that includes organizations and explains not simply homogeneity, but also heterogeneity." (Thornton et al, 2012, p.15). However, the logics literature poses several challenges for researchers seeking to explain the contextually nuanced and embedded agency of leaders within an organizational setting. First, the language of logics often results in a static view of meaning-making, with complex interactional dynamics at the micro-level being reduced to a small number of competing logics (Purdy et al., 2019). Second, logics are derived from 7 higher level categories of institutional order (family, community, religion, state, market, profession, and corporation) and placing logics within their appropriate higher-level category is often left unspecified in literature, or acts as a constraining influence on providing full explanations based on bottom-up processes (Purdy et al., 2019). Third, "...there is a lack of vocabulary for conceptualizing the micro-level processes within the logics framework (e.g., how does one "logic" as a verb?)" (Purdy et al., 2019, p. 415). Lastly, the logics literature has been criticised for continuing to background the influence of power (Thornton et al., 2012, p. 64). The findings in paper 1 suggested power could ill afford to be ignored in the search for coherent explanations of new and innovative micro-level activities within organizational settings.

Research into strategic action fields (Fligstein and McAdam, 2011; Fligstein, 2013) places a far greater focus on power struggles and political manoeuvrings within organizational contexts than other areas of institutional literature. Fligstein and McAdam (2011, p.2) assert "...students of *any* institutional actor in modern society—are interested in the same underlying phenomenon: collective strategic action." They describe strategic

action fields as meso-level social orders, where collective actors, "...vie for strategic advantage in and through interaction with other groups." (p.2). However, the research stream is "macro-orientated" (Cornelissen and Werner, 2014, p.183) and rarely reaches down to the individual level (and when it does it tends to focus on the top hierarchical tier of organizational leaders). Despite its potential for theory integration, particularly in relation to its focus on power relations, current literature into strategic action fields therefore offers only a limited relevance to the present research study. It is for the reasons articulated above that the researcher chose framing literature to connect macro-level institutional forces with micro-level individual leaders' meaning-making and decision-taking actions, in the pursuit of explanations regarding the enabling and constraining mechanisms affecting organizational responses to complex problems. The next section will provide an overview of overlapping, but unused (in the research study) literature domains.

1.7.1.3 Additional literature identified as overlapping but unused

The organizational context of addressing complex problems is likely to lead actors to experience tension or conflict since addressing complex problems is highly likely to require actors to grapple with competing or conflicting demands for action. Paper 1 identified two overlapping literatures that have addressed the same underpinning issue from a different perspective.

First, the separate and large body of literature around **organizational learning** appears to have enormous, largely untapped potential for theory integration. For example, the organizational challenge of assimilating new knowledge (Easterby-Smith et al., 2009) has much in common with the challenge of achieving adaptive responses to complex problems. Furthermore Drath et al. (2008) conceptualized organizational learning as being a purposeful outcome of leadership and therefore well placed to sit within the DAC ontology, suggesting that there is potential for closer links to be made between leadership, organizational learning and framing literature.

Second, **resilience** literature contains both significant overlap and potential for theory integration. Resilient organizations, "thrive despite experiencing conditions that are surprising, uncertain, often adverse, and usually unstable" (Lengnick-Hall et al., 2011, p. 243). Linnenluecke, (2017) describes how resilience literature has typically prioritised response and recovery, termed colloquially 'bouncing back', from extreme events (Hällgren et al., 2018), (such as terrorist attacks, extreme weather events, pandemics). Organizational resilience is not only about avoiding or responding to adverse events but also adapting before the cost of not changing becomes too great, leveraging opportunities and driving change in the face of challenging conditions (Hamel & Valikangas, 2003; Horne & Orr, 1998). Described in this way, an adaptive response is synonymous with a resilient response, suggesting that research leading to further integration between leadership and resilience offers potential for theory growth in both literature domains. Regardless of whether one is seeking adaptive or resilient organizational responses, framing appears to be well suited to providing a lens to connect macro-level structural influences with the interpretations of everyday actions of individuals at the micro-level. The remaining thesis chapters are outlined briefly below:

1.7.2 Chapter 2: Systematic Literature Review (Paper 1)

Reviewing relevant literature systematically proved to be challenging since there is very little overlap between the literatures addressing leadership and institutional theory. The Systematic Literature Review (SLR) also set an ambitious agenda to consider both normal and abnormal environments within an overall context of leaders' framing of complex problems. The result was a complicated search strategy that required a wide net to be cast in order to maximise the number of relevant returns. Eventually, a core baseline of **81** articles was established which grew to **112** through a process of follow on key reference research. The SLR's principal review question and three key findings are as follows:

"How does leaders' framing of complex problems influence organizational responses over time?"

The SLR has three principal findings. Firstly, framing was identified as providing a useful lens through which to view the everyday institutional activity of leaders and, in doing so, offers the potential to explain the micro-foundations of organizational responses to complex problems. Secondly, conceptions of problems are bound in a constitutive relationship that both influences and is influenced by conceptions of leadership within an organizational context. Thirdly, leaders' framing of complex problems is influenced by contextual conditions within the immediate organizational environment.

1.7.3 Chapter 3: Research Philosophy and Design

Adopting a critical realist perspective (Blaikie, 2007), the researcher argues that this ontological position is well suited to incorporating a diverse base of literatures. A critical realist perspective takes the position that objective reality exists (see Blaikie, 2007), but it exists within a stratified reality where causal generative mechanisms remain unobservable. Such an ontological position can therefore accommodate a largely constructionist epistemology, since events observed in the empirical domain (the principal domain in which humans experience reality) are the result of an emergent dynamic within the actual domain (where events are potentially observable) and are based on processes and generative causal mechanisms in the real domain (which cannot be observed). In this way, objective reality can never be fully explained within the empirical domain. Nevertheless, this approach promotes the idea that purposeful endeavour attempting to explain the underlying mechanisms that account for empirical outcome patterns is worthwhile. It is through such endeavours that currently unobserved events in the actual domain become part of the experienced, or empirical domain, thereby advancing knowledge.

1.7.4 Chapter 4: Empirical Study 1 using Repertory Grid Technique (Paper 2)

The SLR identified a need for research seeking a deeper understanding into the relationship between the deeply embedded constructs leaders hold for addressing complex problems and the perceived effectiveness of organizational response. As a result,

empirical study 1 was designed to provide a foundation of empirical research to support the principal research question and asked:

What is the relationship between the deeply embedded constructs individuals hold for addressing problems and the perceived effectiveness of organizational responses?

The study utilized the Repertory Grid Technique (RGT) in 38 interviews with British Army leaders from three cohorts of hierarchy (junior, middle and senior leaders). The study concluded that the pattern of individuals' responses within 8 identifiable common construct categories suggested deeply embedded, structurally influenced conceptions of both complex problems and effectiveness of organizational response. However, the study was not able to develop the rich descriptions required to offer explanations about the contextual nuances that enable or constrain the emergence of adaptive responses within organizational settings. Consequently, empirical study 2 was designed to address this shortfall.

1.7.5 Chapter 5: Empirical Study 2 using Semi-Structured Interviews (Paper 3)

Study 2 utilized a semi-structured interview technique to complement the findings produced in study 1 and aimed to reveal the specific micro-processes that combine to either enable or constrain the development of adaptive organizational responses to complex problems. 42 leaders from 3 cohorts of hierarchy within the British Army (junior, middle and senior leaders) were interviewed with a focus aimed at providing rich descriptions that address the study's principal research question.

1.7.6 Chapter 6: Overall Discussion

Chapter 6 provides an overall discussion, offering insights based on the combined findings of the empirical research studies. The chapter concludes with a table of theoretical contributions, summarizing the claims relating to specific theories and citing key findings within the study.

1.7.7 Chapter 7: Overall Conclusions, Limitations and Future Work

Chapter 7 provides the overall conclusion of the thesis, highlights limitations, and outlines some implications for future research, broken down into theoretical, methodological and practical implications.

REFERENCES

Alvesson, M. and Spicer, A. (2012) 'Critical leadership studies: The case for critical performativity', *Human Relations*, 65(3), pp. 367–390.

Andersson, C. and Törnberg, P. (2018) 'Wickedness and the anatomy of complexity', *Futures*, 95, pp. 118-138.

Augier, M., Shariq, S.Z. and Thanning Vendelø, M. (2001) 'Understanding context: its emergence, transformation and role in tacit knowledge sharing', *Journal of Knowledge Management*, 5(2) Kempston: Emerald Group Publishing Limited, pp. 125–137.

Avolio, B.J., Walumbwa, F.O. and Weber, T.J. (2009) 'Leadership: Current Theories, Research, and Future Directions', *Annual Review of Psychology*, 60(1), pp. 421–449.

Bennis, W. (2007) 'The challenges of leadership in the modern world: Introduction to the special issue.', *American Psychologist*, 62(1), pp. 2–5.

Berente, N. and Yoo, Y. (2012) 'Institutional Contradictions and Loose Coupling: Postimplementation of NASA's Enterprise Information System', *Information Systems Research*, 23(2), pp. 376–396.

Besharov, M.L. and Smith, W.K. (2014) 'Multiple Institutional Logics in Organizations: Explaining Their Varied Nature and Implications', *Academy of Management Review*, 39(3), pp. 364–381.

Blaikie, N. (2007) *Approaches to Social Enquiry*. Cambridge: Polity Press.

Cialdini, R. (2009) *Influence, Science and Practice (5th).* New York: HarperCollins.

Clark, J.R., Murphy, C. and Singer, S.J. (2014) 'When do leaders matter? Ownership, governance and the influence of CEOs on firm performance', *Leadership Quarterly*, 25(2) Elsevier Inc., pp. 358–372.

Collinson, D. (2005) 'Dialectics of leadership', *Human Relations*, 58(11), pp. 1419–1442.

Collinson, D., Bryman, A., Collinson, D. and Grint, K. (2011) *The Sage handbook of leadership*. London: Sage Publications.

Collinson, D., Smolović Jones, O. and Grint, K. (2017) '"No More Heroes": Critical Perspectives on Leadership Romanticism', *Organization Studies*, p. 1-23.

Collinson, D. and Tourish, D. (2015) 'Teaching leadership critically: New directions for leadership pedagogy', *Academy of Management Learning and Education*, 14(4), pp. 576–594.

Cornelissen, J. P., Holt, R., & Zundel, M. (2011). The role of analogy and metaphor in the framing and legitimization of strategic change. *Organization Studies, 32*(12), 1701–1716.

Cornelissen, J.P. and Werner, M.D. (2014) 'Putting framing in perspective: A review of framing and frame analysis across the sensemaking, social movements and institutional literatures', *Academy of Management Annals*, 8(1), pp. 181–235.

Crevani, L. (2018) 'Is there leadership in a fluid world? Exploring the ongoing production of direction in organizing', *Leadership*, 14(1), pp. 83–109.

Crevani, L., Lindgren, M. and Packendorff, J. (2010) 'Leadership, not leaders: On the study of leadership as practices and interaction', *Scandinavian Journal of Management*, 26(1), pp. 77–86.

Denis, J.-L., Langley, A. and Sergi, V. (2012) 'Leadership in the Plural.', *Academy of Management Annals*, 6(1), pp. 211–283.

Drath, W.H., McCauley, C.D., Palus, C.J., Van Velsor, E., O'Connor, P.M.G. and McGuire, J.B. (2008) 'Direction, alignment, commitment: Toward a more integrative ontology of leadership', *Leadership Quarterly*, 19(6) Elsevier Inc., pp. 635–653.

Easterby-Smith, M., Lyles, M.A. and Peteraf, M.A. (2009) 'Dynamic capabilities: Current debates and future directions', *British Journal of Management, 20, pp, S1-S8.*

Fairhurst, G.T. and Connaughton, S.L. (2014) 'Leadership: A communicative perspective', *Leadership*, 10(1), pp. 7–35.

Fligstein, N. (2013) 'Understanding stability and change in fields', *Research in Organizational Behavior*, 33 Elsevier Ltd, pp. 39–51.

Fligstein, N. and McAdam, D. (2011) 'Toward a General Theory of Strategic Action Fields', *Sociological Theory*, 29(1), pp. 1–26.

Friedrich, T L., Vessey, W., Schuelke, M.J., Ruark, G.A., and Mumford, M.D. (2009) 'A framework for understanding collettive leadership: The selettive utilization of leader and team expertise with networks', *The Leadership Quarterly*, 20(6), pp. 933–958.

Giorgi, S., Lockwood, C. and Glynn, M.A. (2015) 'The Many Faces of Culture: Making Sense of 30 Years of Research on Culture in Organization Studies', *The Academy of Management Annals*, 9(1), pp. 1–54.

Gordon, R. (2011) 'Leadership and Power', in Collinson, D., Bryman, A., Grint, K., Brad, J. and Uhl-Bien, M. (eds.) *The SAGE Handbook of Leadership*. London: Sage Publications, pp. 195–202.

Grint, K. (2005) 'Problems, problems, problems: The social construction of "leadership"', *Human Relations*, 58(11), pp. 1467–1494.

Grint, K. (2010a) *Leadership: A Very Short Introduction*.Oxford: Oxford University Press.

Grint, K. (2010b) 'The cuckoo clock syndrome: Addicted to command, allergic to leadership', *European Management Journal*, 28(4) Elsevier Ltd, pp. 306–313.

Grint, K. (2011) 'A History of Leadership', in Collinson, D., Bryman, A., Grint, K., Brad, J. and Uhl-Bien, M. (eds.) *The SAGE Handbook of Leadership*. London: Sage Publications, pp. 3–14.

Gronn, P. (2002) 'Distributed leadership as a unit of analysis', *Leadership Quarterly*, 13(4), pp. 423–451.

Hällgren, M., Rouleau, L. and de Rond, M. (2018) 'A Matter of Life or Death: How Extreme Context Research Matters for Management and Organization Studies', *Academy of Management Annals*, 12(1), pp. 111–153.

Hamel, G. and Välikangas, L. (2003) The Quest for Resilience *Harvard Business Review*.

Hannah, S.T., Uhl-Bien, M., Avolio, B.J. and Cavarretta, F.L. (2009) 'A framework for examining leadership in extreme contexts', *Leadership Quarterly*, 20(6), pp. 897–919.

Hatch, M.J. and Cunliffe, A.L. (2013) *Organization Theory. Modern, Symbolic, and Postmodern Perspectives*. 3rd edn. Oxfrod: Oxford University Press.

Hatch, M.J. and Zilber, T. (2012) 'Conversation at the Border Between Organizational Culture Theory and Institutional Theory', *Journal of Management Inquiry*, 21(1), pp. 94–97.

Hazy, J.K. and Uhl-Bien, M. (2015) 'Towards operationalizing complexity leadership: How generative, administrative and community-building leadership practices enact organizational outcomes', *Leadership*, 11(1), pp. 79–104.

Head, B.W. and Alford, J. (2015) 'Wicked Problems', *Administration & Society*, 47(6), pp. 711–739.

Heifetz, R.A. (1994) *Leadership without easy answers*. London: Harvard University Press.

Heifetz, R.A., Linsky, M. and Grashow, A. (2009) *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*, Harvard Business Press.

Horne 111, J. and Orr, J. (1998) Assessing Behaviors That Create Resilient Organizations. *Employment Relations Today*, 24, 29-39.

Lengnick-Hall, C.A., Beck, T.E. and Lengnick-Hall, M.L. (2011) 'Developing a capacity for organizational resilience through strategic human resource management', *Human Resource Management Review*

Lichtenstein, B.B. and Plowman, D.A. (2009) 'The leadership of emergence: A complex systems leadership theory of emergence at successive organizational levels', *Leadership Quarterly*, 20(4) Elsevier Inc., pp. 617–630.

Lichtenstein, B.B., Uhl-bien, M., Marion, R., Seers, A., Douglas, J. and Schreiber, C. (2006) 'on Leading in Complex Adaptive Systems', *Emergence: Complexity and Organization*, 8(4), pp. 2–12.

Linnenluecke, M.K. (2017) 'Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda', *International Journal of Management Reviews*, 19(1), pp. 4–30.

Marion, R. and Uhl-Bien, M. (2001) 'Leadership in complex organizations 105', *Leadership Quarterly*, 12(4), pp. 389–418.

Martin, J. (2002) *Organizational Culture: Mapping the Terrain*. London: Sage Publications.

McPherson, C.M. and Sauder, M. (2013) 'Logics in Action: Managing Institutional Complexity in a Drug Court', *Administrative Science Quarterly*, 58(2), pp. 165–196.

Meyer, A.D. (1982) 'How Ideologies Supplant Formal Structures and Shape Responses to Environments', *Journal of Management Studies.*

Mumford, M.D., Friedrich, T.L., Caughron, J.J. and Byrne, C.L. (2007) 'Leader cognition in real-world settings: How do leaders think about crises?', *Leadership Quarterly*, 18(6), pp. 515–543.

Northouse, P. (2016) *Leadership*. 7th edn. London: Sage Publications.

Plowman, D.A., Solansky, S., Beck, T.E., Baker, L., Kulkarni, M. and Travis, D.V. (2007) 'The role of leadership in emergent, self-organization', *The Leadership Quarterly*, 18(4), pp. 341–356.

Purdy, J., Ansari, S. and Gray, B. (2019) 'Are Logics Enough? Framing as an Alternative Tool for Understanding Institutional Meaning Making', *Journal of Management Inquiry*, 28(4), pp. 409–419.

Raelin, J. (2011) 'From leadership-as-practice to leaderful practice', *Leadership*, 7(2), pp. 195–211.

Raelin, J.A. (2016) 'Imagine there are no leaders: Reframing leadership as collaborative agency', *Leadership*, 12(2), pp. 131-158.

Smith, K, W., Erez, M., Jarvenpaa, S., Lewis, M.W. and Tracey, P. (2017) 'Adding Complexity to Theories of Paradox, Tensions, and Dualities of Innovation and Change: Introduction to Organization Studies Special Issue on Paradox, Tensions, and Dualities of Innovation and Change', *Organization Studies*, 38(3–4), pp. 303–317.

Stogdill, R.M. (1948) 'Personal Factors Associated with Leadership: A Survey of the Literature', *The Journal of Psychology*, 25(1), pp. 35–71.

Thornton, P.H., Ocasio, W. and Lounsbury, M. (2012) 'Introduction to the institutional logics perspective', in *The institutional logics perspective: a new approach to culture, structure, and process*. Oxford: Oxford University Press.

Tourish, D. (2014) 'Leadership, more or less? A processual, communication perspective on the role of agency in leadership theory', *Leadership*, 10(1), pp. 79–98.

Tourish, D. (2019) 'Is Complexity Leadership Theory Complex Enough? A critical appraisal, some modifications and suggestions for further research', *Organization Studies*, Vol. 40(2) p. 219-238.

Tourish, D., Collinson, D., & Barker (2009). Manufacturing Conformity : Leadership Through Coercive Persuasion In Business Organisations Manufacturing Conformity : Leadership Through Coercive Persuasion in Business Organisations, *12*(4), 360–383.

Tsoukas, H. (2002) 'On organizational becoming: Rethinking organizational change', *Organization science*, 13(5), pp. 567–582.

Uhl-Bien, M. (2006) 'Relational Leadership Theory: Exploring the social processes of leadership and organizing', *Leadership Quarterly*, 17(6), pp. 654–676.

Uhl-Bien, M. and Arena, M. (2018) 'Leadership for organizational adaptability: A theoretical synthesis and integrative framework', *Leadership Quarterly*, 29(1), pp. 89–104.

Uhl-Bien, M. and Marion, R. (2009) 'Complexity leadership in bureaucratic forms of organizing: A meso model', *Leadership Quarterly*, 20(4)

Uhl-Bien, M., Marion, R. and McKelvey, B. (2007) 'Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era', *Leadership Quarterly*, 18(4), pp. 298–318.

Weber, E. and Khademian, A.M. (2008) 'Managing Collaborative Processes', *Administration & Society*, 40(5) College of Liberal Arts at Washington State University, Pullman ; Center for Public Administration and Policy, Alexandria, VA ; College of Liberal Arts at Washington State University, Pullman: SAGE PUBLICATIONS, INC., pp. 431–464.

Willmott, H. (1993) 'Strength Is Ignorance; Slavery Is Freedom: Managing Culture in

Modern Organizations*', *Journal of Management Studies*, 30(4), pp. 515–552.

Yukl, G. (2013) *Leadership in Organizations*. 8th edn. Harlow: Pearson.

Military and Government publications

Defence Board (16)64 In Committee Report: The Chilcot Report – Seizing the Opportunity (25 November, 2016).

Defence Leadership Centre. (2004) *Leadership in Defence.*

Defence Reform: An Independent report into the structure and management of the Ministry of Defence by Lord Levene of Portsoken KBE (June, 2011).

Director Leadership. Army Leadership Doctrine (2016).

House of Commons Committee of Public Accounts (2019) *Capita's Contracts with the Ministry of Defence*

Land Warfare Development Centre. *Army Doctrine Publication: Land Operations.* Army Doctrine Publication AC 71940.

Ministry of Defence *Portfolio, Programme and Project Management (P3M) Professional Competence Framework.* Association for Project Management (December, 2015)

Parliamentary Defence Committee Report (2015). http://www.publications.parliament.uk/pa/cm201415/cmselect/cmdfence/682/682.pdf

Prederi Report. Defence Leaders Training Education Review (2014).

Review of Acquisition for the Secretary of State for Defence: An independent report by Bernard Gray (2009).

Synopsis of Post Operational Interviews From Commanders of Op HERRICK 12, Lessons Exploitation Centre, LWC (2010).

The National Security Strategy - A Strong Britain in an age of uncertainty (2015).

The New Operating Model: How Defence works (Dec, 2015).

The Strategic Defence and Security Review - Securing Britain in an age of uncertainty (2015).

United Kingdom. Developments, Concepts and Doctrine Centre. The Global Strategic Trends Programme; Out to 2045. 5th ed. Shrivenham: DCDC, 2014.

United Kingdom. Developments, Concepts and Doctrine Centre. British Defence Doctrine. Joint Doctrine publication 0-01. 5th ed. Shrivenham: DCDC, 2014.

United Kingdom. Developments, Concepts and Doctrine Centre. Joint Doctrine Publication 01. Shrivenham: DCDC, 2014.

United Kingdom. Developments, Concepts and Doctrine Centre. Campaign Execution. Joint Doctrine Publication 3-00 3rd ed. Shrivenham: DCDC, 2009.

United Kingdom. Developments, Concepts and Doctrine Centre. Security and Stabilisation: The Military Contribution. Joint Doctrine Publication 3-40 Shrivenham: DCDC, 2009.

United Kingdom. Developments, Concepts and Doctrine Centre. The Strategic Trends Programme; Future Operating Environment; Out to 2035. Shrivenham: DCDC, 2015.

United Kingdom. Developments, Concepts and Doctrine Centre. Decision Making and Problem Solving: Human and Organisational Factors. Joint Discussion Note 3/11. Shrivenham: DCDC, 2013.

United Kingdom. Developments, Concepts and Doctrine Centre. Future Command and Control. Joint Concept Note 2/17. Shrivenham: DCDC, 2017.

Wigston, M. (2019) *Report on Inappropriate Behaviours*.

2 A SYSTEMATIC LITERATURE REVIEW

Abstract:

A common response to a new organizational challenge is to call for ever more effective leadership. These organizational challenges are increasingly perceived to be associated with the complexity of the problem. Existing leadership theories fall short of fully explaining variability of response: traditional theories remain focused on heroic individualistic conceptions, backgrounding structural influences; and new, plural theories adopt a utopian view of unhindered collective agency that similarly backgrounds structural influences. This paper takes a framing approach to address the review question:

How does leaders' framing of complex problems influence organizational responses over time?

The author uses a systematic review to develop a research agenda that aims to explain variability in organizational response, and motivate advances in leadership theory, methodology and practice. This review develops an understanding of the underlying mechanisms affecting individual and organizational leadership within an overarching contextual setting of complex organizational problems. The findings highlight the dominant regulative, normative and cultural-cognitive institutional forces within organizational settings that lead to perceived legitimate leader framing aligned to individual, time-sensitive decision-making. A synthesis of the findings suggests that in most situations, regardless of the problem context these institutional forces combine with agentic preferences for demonstrating individual leader strength and decisiveness, leading either to framing for clarity, with linear paths to solutions, or to crises, with a perceived time-critical requirement for immediate action. This acts as a powerful constraining influence on adaptive responses, addressing the most challenging and complex organizational problems.

2.1 Introduction

Organizations across all sectors increasingly face challenges perceived to be complex and ambiguous (Uhl Bien et al., 2007). A common response is to call for ever more effective leadership that can thrive in these conditions. Whilst various leadership lenses have been applied to the challenge of dealing with complexity and ambiguity – for example, the considerable body of literature around complexity leadership theory (CLT) (see Hazy and Uhl-Bien, 2015; Lichtenstein et al., 2006; Marion and Uhl-Bien, 2001; Plowman et al., 2007; Uhl Bien et al., 2007; Uhl-Bien and Marion, 2009) – existing literature falls short of fully explaining variability of response. Traditional leadership theories background structural influences and remain focused on heroic individualistic conceptions (for example, see transformational leadership in Bass, 1990); and new, plural theories adopt a utopian view of unhindered collective agency that similarly backgrounds structural influences. The lack of attention paid to power is particularly prominent (Tourish, 2019; Willmott, 1993).

The contribution of this paper is to use a framing lens to elucidate the recursive process through which, "...institutions are produced and reproduced through the everyday activities of individuals." (Purdy et al., 2019, p.410). Recent developments in framing literature have offered the potential to address the largely unanswered call by Currie et al. (2009a; 2009b) for further integration of leadership and institution theory. Whilst traditionally focused on isomorphic structural influences at the macro level (see Thornton and Ocasio, 2008, p.100), more recent institutional and framing approaches have focused on multi-level manifestations of embedded agency. Consistent with Cornelissen and Werner's (2014, p.196) description, the meso-level is used to describe the *organizational* level, connecting macro (institutional) and micro (individual) levels. This more recent focus on embedded agency at the micro-level acknowledges purposeful agentic action, whilst continuing to pay careful attention to the enabling and constraining institutional forces in which agency is embedded (see Thornton and Ocasio, 2008). Taking an interactional view (see Purdy et al., 2019), framing literature provides an appropriate lens through which to study the embedded nature of agency at the micro-level and explain the manifestations of macro-level institutional forces. Such an approach also considers the

constitutive role of ever-changing context (see Drath et al., 2008). The author argues that applying a framing lens to the leadership challenges associated with addressing complex organizational problems in this way provides both an original approach and a highly relevant context for further research that can help to explain variability in organizational response, and motivate advances in leadership theory, methodology and practice.

Cardinale (2018, p.137) describes institutions simply as, “Forms of social structure that are reproduced through relatively self-activating processes.” It is over ten years since Currie et al (2009a; 2009b, p.1735) described an established institution of individual leading and an in-the-making institution of distributed leadership, concluding, “...competing institutional forces simultaneously foster and stymie the adoption of distributed leadership.” The researcher builds on this work by considering recent advances in institution theory and framing literature to highlight the dominant institutional forces influencing the everyday work of individuals (Purdy et al., 2019) within organizational settings.

Many existing approaches to leadership theory remain grounded in the premise that leadership is the influence by the leader on followers that allows for the accomplishment of collective goals (Bass, 1990, p. 14; Grint; 2011; Northouse, 2016). The commitment to this entity-based ontology, characterized by the leadership tripod of leaders, followers, and shared goals (Bennis, 2007) has resulted in a set of “in-house” assumptions (Alvesson and Sandberg, 2011, p.254) within the leadership literature that are shared and accepted as unproblematic by many advocates. However, a growing body of work around plural theories of leadership (see Denis et al., 2012), and most notably in CLT argues that complex organizational problems require a collaborative and adaptive response that is ill suited to the dominant paradigm of individual, ‘heroic’ leaders (See Yukl, 2013). Whilst rarely conforming to neat category labels, organizational problems are typically framed for purposeful action to address them – problems are there to be ‘fixed’ (Bundy et al., 2017) as efficiently as possible. The review highlights a variety of problem categories and identifies that there is no universally agreed typology of problem types. However, the review argues that problems described as complex – those associated with non-linear, non-reducible ambiguity (Head and Alford, 2015, p.716) – are a highly suitable

overarching context in which to study evidence of adaptive responses within an organizational setting, since complex problems are ill-suited to traditional, individual leader-led paradigms (Grint, 2005; Heifetz, 1994; Heifetz et al., 2009). Complex problems are differentiated from problems termed complicated or technical (Heifetz et al., 2009) and crises (see Grint, 2005; 2010b).

Context is inextricably linked with understanding meaning (Cornelissen and Werner, 2014). In their empirical study of the institutionalization of leadership in an English public service setting Currie et al. (2009b, p. 1735) concluded that leadership, "...cannot be divorced from its institutional context and that the relative influence of divergent institutional forces depends upon the immediate organizational environment." The contextual relevance of time - and specifically a perception that time to action is constrained – is shown to be particularly important in relation to complex organizational problems. A synthesis of findings suggests that institutional forces combined with agentic preferences for demonstrating (individual) leader strength and decisiveness typically leads to framing for clarity (with linear paths to solutions), or crises (with a perceived time-critical requirement for immediate action) in most situations, regardless of the problem. However, a deep understanding of the immediate organizational contextual conditions is required to explain the potential for variability of response (Cornelissen and Werner, 2014; Currie et al., 2009b).

This systematic review of key literatures drawn from the leadership, problems, framing and institution theory domains addressed the review question; *How does leaders' framing of complex problems influence organizational responses over time?* To provide structure to the SLR findings, three supporting questions were identified to link the literature domains in a way that combined to contribute to the overall review question, as is portrayed in **Figure 2-1** below:

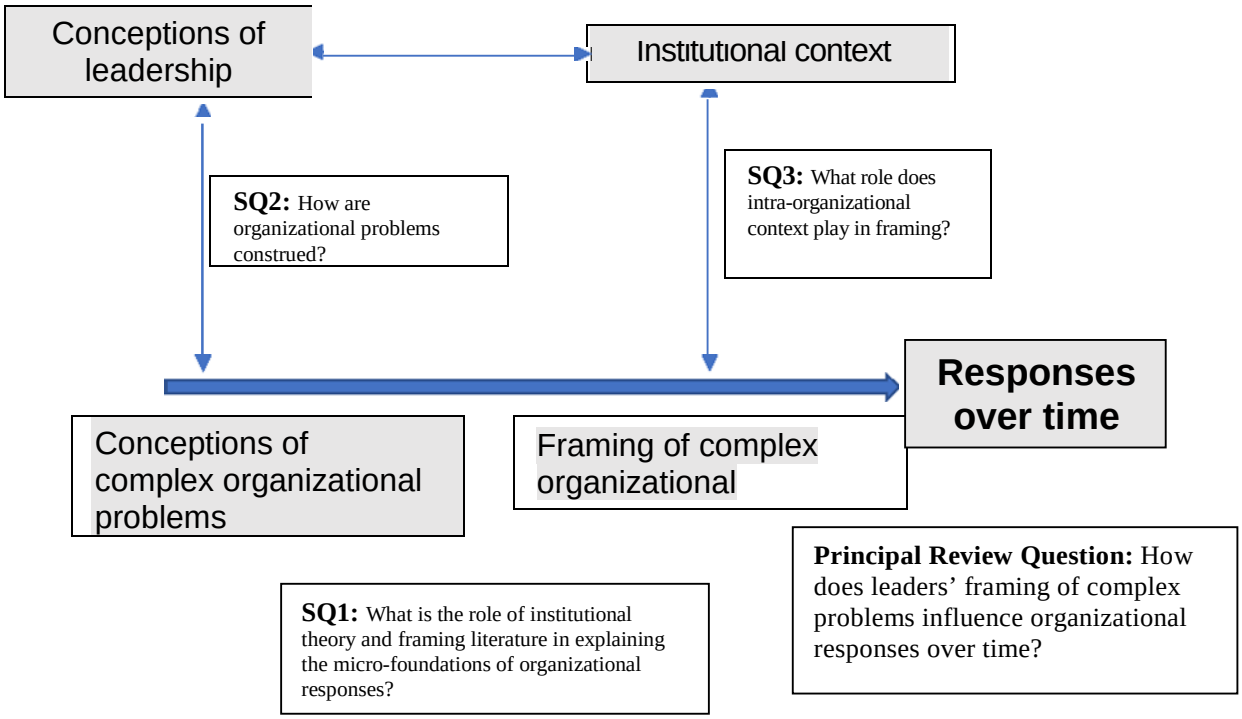


Figure 2-1: Systematic Literature Review Questions

2.2 Methodology

This review was informed by the Systematic Literature Review (SLR) methodology outlined by Tranfield, Denyer and Smart (2003). The SLR process provides a structure to commence with a broad search of literature, before applying quality and relevance criteria to narrow the review. In this way, the SLR process enables researchers to select, appraise and integrate relevant studies, irrespective of academic discipline. This process is particularly appropriate for identifying research themes and limitations within existing literature and followed the SLR strategy detailed in **Appendix A** as outlined by Tranfield, Denyer and Smart (2003). The following section details the planning and conduct of the review, before the reporting and presentation of review findings.

In line with the SLR process outlined above, the review was informed by a broad review of potentially relevant literature in a comprehensive scoping study. The relevant literature domains identified in the scoping study are the more recent, plural leadership theory, framing literature and the new institutional theory focused on institutional logics. The scoping study identified that leadership theory remains deeply rooted in psychology and focused on agency, either in the form of heroic roles of individual leaders, or as a utopian collaborative ideal. It is therefore argued that leadership theory alone is insufficient in its explanatory potential in relation to the review questions. The framing literature, although traditionally focused on cognitive processes, is increasingly recognising the affective domain (Maitlis and Sonenshein, 2010; Sandberg and Tsoukas, 2015) and it has been widely used as an umbrella term to describe the purposeful use of communication (Cornelissen and Werner, 2014). Framing therefore provides an appropriate lens through which to access underpinning influences on leader behaviour. The most challenging area of literature to integrate into the review was the new institutional theory since this domain of literature, deeply rooted in sociology, rarely acknowledges the leader construct, preferring to refer to the micro (individual) level in less prescriptive terms. However, the burgeoning literature on institutional logics has focused attention on the particular ways in which individual agency is embedded in institutional structure. In this way, recent institutional work provides a source of conceptual and empirical study that seeks to

explain the nature of embedded agency in relation to individual actors within organizational contexts.

The amount of literature returned by early searches that aimed to capture comprehensively all relevant literature domains was simply too large to progress (tens and sometimes hundreds of thousands). Whilst no methodology will find every relevant article, careful construction of seven search strings was developed and used in combination to narrow the focus across five searches that returned a manageable number of scholarly articles (n=5724). The 5724 articles were reduced to 368 after title and abstract review and further reduced to **81** articles after full text review. The total number of articles reviewed grew to **112** after the completion of further research based on exploring important references identified in key texts as can be seen in **Appendix A**.

2.3 Findings

The findings are presented in 4 sections, aligned with the questions embedded within Figure 2-1 above. Section one addresses findings in relation to the role of institutional theory and framing literature in explaining the microfoundations of organizational responses; section two addresses findings in relation to the construction of organizational problems; section three addresses findings in relation to the role of intra-organizational context in framing; and section four addresses the overarching review question, presenting finding in relation to how leaders' framing of complex problems influences organizational responses over time.

2.3.1 What is the role of institutional theory and framing literature in explaining the microfoundations of organizational responses?

Traditional leadership theories privilege the role of agency in explaining actions either in terms of the heroic roles of individual leaders, or in terms of an objective analysis of the factors required of the leader role (see Avolio et al., 2009; Bennis, 2007; Grint, 2005; 2010a; Yukl, 2013). This agentic focus has dominated leadership literature (Drath et al., 2008; Yukl, 2013). The agentic focus in traditional leadership theory suggests it is an unlikely candidate for integration with traditional institution theory, which is traditionally focused on structural influences. However, a recent focus on the microfoundations of institutions has led to a greater focus on individuals as the "sites for interpretation, maintenance, and change of institutionalized practices" (Raaijmakers et al., 2015, p.88). Indeed, an increasing recognition of the embedded nature of agency has led some scholars to call for greater attention to be paid to the relationship between leadership and institutional forces. Thornton et al. (2012, p.32) remind us of Selznick’s (1957) seminal work on institutions and suggest that reintroducing leadership theory to the study of institutional theory could lead to theory growth.

Recent research calling for further work to examine the conceptual and empirical links between institutions and leadership (see Currie et al., 2009a; 2009b; Kraatz and Block, 2008) has so far remained largely unanswered. This section makes the case that, although

underexplored, the influence of institutional forces is highly relevant to explaining how and why leaders' framing of complex problems influences organizational responses over time. Currie et al. (2009b, p.1737) assert that, "Leadership fits perfectly with the definition of an institution...", conceiving individual leadership as the firmly established institution, alongside an emergent institution of distributed leadership (Gronn, 2002). Institutionalized *individual* leading is therefore closely associated with the dominant leadership paradigm of individual, 'heroic', time-sensitive decision-making. Coming from a CLT perspective, Lichtenstein et al. (2006, p.3) reach a similar conclusion about the presence of nascent institutional forces aligned with plural leadership responses that challenge traditional conceptions, stating, "A complex systems perspective introduces a new leadership "logic" to leadership theory and research by understanding leadership in terms of an emergent event rather than a person." Viewed in this way, CLT can be seen to advance the idea of a nascent institutional force prescribing plural leadership action (that appears to align conceptually with the type of enabling leadership required to address complex organizational problems) that sits alongside the established, dominant institutional force of individual leading.

Traditionally focused at the macro-level of analysis (Friedland and Alford, 1991), recent institutional research has started to focus on micro-level individual actions (see McPherson and Sauder, 2013). Importantly, the literature pays close attention to the myriad influences on individual actor behaviour within the context of enabling and constraining institutional forces**.** As Cardinale (2018, p.132) highlights, "After a long period of oscillating...institutional theory seems to be converging toward the view that both agency and structure matter." Berente and Yoo (2012, p.378) describe 'embedded agency' as emphasising the rationality of actors, but with this rationality, "embedded in a context of goals and taken-for-granted assumptions that are situated within a particular institutional context." (see also Thornton and Ocasio, 2008, p.104). Described in this way, embedded agency is situated in a constantly changing context that plays a constitutive role in actions over time (Drath et al., 2008). Although institutional literature rarely identifies individuals as leaders – the terms (focal, institutional, or social) actor; (change, or social) agent; focal interactant; decision-maker; and (elite, or institutional) entrepreneur are most commonly used – it is highly relevant to leading and leadership

since the literature's focus is on understanding the embedded nature of influential individuals' agency within organizational settings.

Focusing on the often neglected meso level, where myriad individual actions, that influence and are influenced by institutional forces, manifest in organizational responses, Currie et al. (2009b, p.1741) suggest that, "...the enactment of a particular form of leadership is profoundly influenced by institutional pressures operating in an organizational field". Currie et al. (2009a; 2009b) cite regulative forces (e.g. government policy); normative forces (e.g. professional norms); and cultural-cognitive forces (e.g. internalized, salient perceptions of leadership) (see Scott, 1995 for a full description) as being particularly significant in influencing the enactment of leadership within an organizational field (in their case, secondary education in England). These institutional pressures are highly likely to act as constraining influences on the enactment of plural leadership activity to address complex problems. Currie et al. (2009b, p.1741) cite constraining influences from government policy, focused on performance management strategies that promote individual leadership responses; and both normative and cultural-cognitive influences that naturally align with the more mature, institutionalized form of leadership behaviour – individual leadership.

The last decade has seen a burgeoning of institutional literature focusing on 'institutional logics' (Besharov and Smith, 2014; McPherson and Sauder, 2013; Pache and Santos, 2010 Thornton et al., 2012). Institutional logics focus attention on the dominant institutional forces influencing actors or particular aspects of the organization (Aagaard, 2016), effectively providing the "frame of reference" (Currie and Spyridonidis, 2016, p.78) that condition actors' construction of meaning and communicative actions. Early definitions described institutional logics as, "deeply ingrained societal beliefs and practices that are exogenous to actors and their framing" (Cornelissen and Werner, 2014, p.30). However, more recent work defines logics as, "frames of reference that condition actors' choices for sensemaking, the vocabulary they use to motivate action and their sense of self and identity" (Thornton et al., 2012, p. 2). As such, institutional logics effectively act as guiding frames of reference that are subject to interactional construction (Cornelissen and Werner, 2014) and provide the foundations on which leaders'

communicative framing actions are built. Viewed in this way, framing and particularly "framing contests" - the process that occurs when one or more actors challenge or reject the framing of another (Cornelissen and Werner, 2014, p.208) - provides a window to observe embedded agency at the individual level, revealing the constitutive manifestations of dominant or contradictory institutional forces influencing actions over time (Ocasio and Radoynovska, 2016, p.29). In relation to the burgeoning logics literature, Purdy et al. (2019, p.415) caution that, "...there is lack of a vocabulary for conceptualizing the micro-level processes within the logics framework (e.g., how does one "logic" as a verb?)." and suggest that researchers need to move beyond the recent tendency to rely on the language of institutional logics (see also Alvesson et al., 2019; Meyer and Hollerer, 2017).

According to Cornelissen and Werner (2014, p. 181), "There are few constructs that are as ubiquitous across traditions of management and organizational research, and indeed the social sciences more generally, as that of frame, or framing." Giorgi (2017, p.712) describes framing as simply, "...the packaging and organization of information" asserting that it can be "a powerful tool for shaping others' understandings and behaviours" (p.712). Framing has been extensively used to explain the cognitive processes of individual sensemaking (Cornelissen and Werner, 2014; see also Fairhurst and Connaughton, 2014) with Rhee and Fiss (2014, p.1737) positioning framing as, "A particularly prominent form of sensegiving in organizational accounts...". Regardless of the terminology used around the communicative acts of meaning making and giving – sensemaking, sensegiving, and framing – the literature has traditionally privileged the cognitive domain, particularly at the individual level (see D'Andreta, 2016, p.296). However, recognition of the affective domain is becoming more prominent (see Heaphy, 2017; Maitlis and Sonenshein, 2010; Sandberg and Tsoukas, 2015). Giorgi (2017) places the significance of emotions alongside cognition, claiming that frame effectiveness – described as the pathways through which framing can lead to desired outcomes – hinges on the twin pillars of cognition and emotions. This approach resonates with Fan and Zietsma's (2017, p.2323) call for greater attention to be paid to the role of emotions in influencing socially embedded actors within the logics literature.

Klein et al. (2006, p.88) describe the term frame as a metaphor for the initial meaning-making perspective people use to make sense of events. Ocasio and Radoynovska (2016, p.297) found that, "Organizations use framing and reframing to cope with complexity". Benford and Snow (2000, p.614) distinguish between frames and schema, asserting that schema relate to a purely psychological concept, whereas frames incorporate an interactive, constructionist element. Frames can therefore be seen to provide the "interpretive footing" (p.614) that helps to align participants' schema in a way that fits closely with descriptions of institutional logics. Framing activity is based on interactional construction rather than purely on cognitive schema driven knowledge structures (Cornelissen and Werner, 2014; see also Ocasio et al., 2015, p.29). This supports the notion that leaders' framing activities play a constitutive role (Drath et al., 2008) in actions and resonates with Ocasio et al. (2015, p.29) who propose that, rather than simply instantiating institutional logics, communicative processes can actively shape the constitution of the logics themselves.

It is only recently that framing literature has enabled more nuanced research to emerge that pays attention to embedded agents and groups within organizational settings. This has enabled stronger relationships to be drawn between framing on the ground and outcomes such as new practices or organizational structures (Cornelissen and Werner, 2014). Lounsbury et al.'s (2003, p.72) introduction of the "field frame" construct provided an early attempt, describing a field frame as providing, "...an analytical structure for understanding the process by which an initial set of framing practices evolves into a set of commonly held conventions (as a field frame), which in turn pave the way for new practices, organizational forms and market categories" (Cornelissen and Werner, 2014, p.207). Described in this way, the field frame construct is analogous to institutional logics, with leaders' framing activity providing a lens through which to access the underpinning mechanisms affecting the constitutive and observable relationship between micro level communicative actions and organizational level outputs to address complex problems.

Supporting the notion of interactional construction, Gray et al. (2015, p.117) have more recently described framing as, "...inherently a bidirectional, structurational process".

Framing is therefore ideally suited to studying and explaining the construction, maintenance and change of institutions (Purdy et al., 2019, p.410) and is less prone to institutional logics based explanations that tend to see patterns that can be reduced to a single or small number of dominant logics that control organizational life (Purdy et al., 2019, p.409). Framing is more suited to understanding and explaining the fundamental issue of macro-level phenomena emerging from, "...interpretations of humans in everyday interactions at the micro-level." (p.415). The author aligns with this interactional view of "framing" (see Purdy et al., 2019) which attributes a lower level of agency and intention to actors than some of the prominent strategic and collective action literatures. This interactional view enables framing – which includes observable communicative actions – to act as an apposite lens for connecting macro-level institutional forces with micro-level activity that can be seen to influence organizational (meso) level attempts to address complex problems over time.

The organizational context of addressing complex problems is likely to lead actors to experience tension or conflict since addressing complex problems is highly likely to require actors to grapple with competing or conflicting demands for action. A number of overlapping literatures have addressed the issue. Within the logics literature, institutional complexity defines a position when organizations face incompatible prescriptions from multiple institutional logics (Greenwood et al., 2011). Paradox literature addresses a similar issue, describing attempts to manage the contradictions between two poles (see Calabretta et al., 2017, p.368). Calabretta et al. (2017) used a paradox lens to consider the interplay of intuition and rationality in strategic decision-making processes (see also Miron-Spektor et al., 2018; Smith and Lewis, 2011; and Smith et al., 2017). Ambidexterity literature effectively adopts a paradox lens (Smith and Lewis, 2011, p.388). At the core of Ambidexterity literature is tension, with the central premise being that, practiced effectively, an ambidextrous response creates positive conditions for action out of conflicting forces – enabling organizations to explore and exploit simultaneously (see Uhl-Bien and Arena, 2018, p.90; see also Greenwood et al., 2011; Smets et al., 2015; Turner et al., 2013). Greenwood et al. (2011) see many similarities with institutional complexity but highlight a fundamental difference: institutional

complexity places attempts to achieve external legitimacy at its core; whereas ambidexterity seeks to achieve improved internal capability.

Institutional complexity, with its focus on external legitimacy appears to be a particularly interesting prospect for future research. However, the literature is linked inextricably with institutional logics and with the top-down, higher level institutional orders, making it less flexible than a framing perspective which, whilst paying attention to institutional forces, makes no specific claims about institutional order categorisation (Purdy et al., 2019).

Purdy et al. (2019, p.415) highlight other attempts that have focused on bottom-up approaches to institutional forces, noting **institutional work** (Lawrence et al., 2009); the **practice lens** (Smets and Jarzabkowski, 2013; Smets et al., 2015); and **sensemaking** (Cornelissen and Werner, 2014) as areas where productive inroads have been made. All of these literatures appear to offer great potential for theory integration. Smets et al. (2015) in particular have made inroads in the integration of practice theory alongside institutional logics (and institutional complexity) literature. Whilst a practice focus has clear overlap with framing, its connection to top-down structural forces is most commonly through pairing with institutional logics literature. Recent developments in framing literature have provided opportunities for a more holistic focus on the relationship between bottom up and top down processes in influencing individual actor behaviours within organizational settings (Purdy et al, 2019).

Ansari et at. (2013) consider the role of framing within an environment of institutional complexity, describing frame shifts as the result of deliberate attempts to persuade other actors to change their frames. Ansari et al. (2013, p.1018) assert that, “In contested institutional fields, frame analysis is a particularly useful tool for analysing how field-level actors engage in discursive struggles to advance their respective logics”. Cornelissen and Werner (2014) point to recent management literature by Henisz and Zelner (2005) theorizing that reference points used by individual actors has relevance to institutional research into how actors formulate frames in the context of both emerging and mature institutions, with emerging institutions typically struggling to achieve

cognitive legitimacy when reference points for mature institutions are available. Accordingly, the relative influence of mature and emerging institutional influences on frame formulation would appear to be highly relevant to research seeking to explain how and why leaders' framing of complex problems at the micro level, influences organizational responses over time.

In summary, the literature suggests that leaders' actions to address complex organizational problems are influenced by strong regulative, normative and cultural-cognitive forces (Currie et al., 2009a; 2009b, Scott 1995; 2003). Framing provides an ideal lens through which to view this, "...recursive perspective where institutions are produced and reproduced through the everyday activities of individuals." (Purdy et al., 2019, p.410). Whilst dominant institutional forces appear to align with traditional leadership paradigms, a framing lens renders visible the 'productive tension' (Heifetz and Laurie, 1997, p.127; see also Uhl-Bien et al., 2007), generated through struggles among leaders and groups or by the clash of existing but (seemingly) incompatible needs, ideas, or preferences (Fligstein, 2001; Fligstein, 2013; Fligstein and McAdam, 2011).

Section one findings suggest that: *Framing provides a lens through which to view the everyday institutional activity of leaders and, in doing so, offers the potential to explain the micro-foundations of organizational responses to complex problems*

Section two will consider how problems are construed by leaders within organizational settings.

2.3.2 How are organizational problems construed?

The dominant agentic focus in traditional leadership literature (Drath et al., 2008; Yukl, 2013) resonates strongly with a leader-doing narrative around addressing and fixing problems (Bundy et al., 2017). Leaders identify problems, set priorities and engage in effective decision making (Friedrich et al., 2009). This is important since these dominant conceptions are institutionalized within organizational settings, legitimising behaviours associated with traditional, heroic individual leadership (Currie et al., 2009a; 2009b). The contextual issue of temporality in relation to leader responses to problems appears to be highly significant since central to the conceptualization of leading is *doing;* problems are there to be solved and challenges overcome. When these problems are linear and tangible, often referred to as a "tame problem" (Rittel and Webber, 1973) or "technical challenge" (Heifetz, 1994; Heifetz et al., 2009), or when there is an emergency situation, which is highly time sensitive, a "critical problem" (Grint, 2005; 2010b), the individual leader-doing mind-set acting within a defined hierarchy as catalyst for time attributable, purposeful activity around a clearly communicated goal, is likely to be highly desirable.

VUCA, short for volatility, uncertainty, complexity and ambiguity, is a commonly used acronym rooted in military thinking (Tourish, 2019) often associated with addressing problem complexity. Bennett and Lemoine (2014) assert that VUCA conflates different types of challenges requiring different responses and Tourish (2019) argues that it uses four words where one would do. VUCA is a term, "increasingly used by those who share the conviction that we live in times of unprecedented turmoil and change." (Tourish, 2019, p. 234). The term VUCA therefore aligns well with the type of complexity that demands urgent attention – a crisis. Indeed, much of the problem related literature aligns addressing complexity with highly time sensitive activity; for example, Heifetz (1994, p.116) asserts, "Urgency, well framed, promotes adaptive work." VUCA therefore appears to be somewhat suited to the traditional leader mindset of addressing complex problems with a sense of urgency.

Contrastingly, when a problem is perceived to be complex, ambiguous or non-linear, the solution is unlikely to be found in assertive, leader-led declarations, "Because the problem

lies in the people, the solution lies in them, too." (Heifetz et al., 2009, p.73/74). These problems are generally associated with scientific uncertainty, complexity, social pluralism and a requirement for new learning (Head and Alford, 2015, p.716). Whilst the term "complex problems" is often used (see Anderssen and Törnberg, 2018; Augier, 2001), Heifetz's (1994, p.138) label of "adaptive challenge" and Rittel and Webber's (1973) "wicked" problems (see Head and Alford, 2015; Fulop and Mark, 2013; and Waddock et al., 2015 for comprehensive analyses of wicked problems) remain commonly cited descriptors.

Some scholarly attention has been given to considering a "degrees of wickedness" approach (Head and Alford, 2015, p.712; see also Waddock et al., 2015), with Heifetz et al (2009) choosing to distinguish between type 2 problems (where the problem is understood but the solution unknown) and type 3 problems (where neither the problem nor solution is understood); Type 2 and 3 problems were subsequently aligned with complex and wicked problems respectively by Roberts (2000). However, adaptive challenges, complex problems and wicked problems are also treated as essentially the same phenomenon in the literature (Head and Alford, 2015, p.729; see also Crowley and Head, 2017; Daviter, 2017; Lagreid and Rykkja, 2015). Broadly speaking, wicked, adaptive and complex problems are associated with meso (organizational) or macro (societal) level issues that require multi-level purposeful activity. Such problems, have no clearly identifiable, objective route to a solution, no imperative to act instantly, and contain multiple stakeholders, all of whom are to some degree entitled to judge or control levers of action (Rittel and Webber, 1973), or to diverge in their perceptions of acceptable solutions (Reinecke and Ansari, 2016; Weber and Khademian, 2008). At the societal level, climate change probably represents the most salient example of a complex problem. At the organizational level, an example of a complex problem of particular salience across many sectors in the UK would be facing the post-Brexit landscape since February 2020.

The Cynefin framework presents a leadership and decision making model based on complexity science and seeks to categorise different problem contexts (simple, complicated, complex, chaotic and disorder) with the aim of assisting leaders' sensemaking and subsequent decision making action (for a full description see Snowden

and Boone, 2007; see also Fulop and Mark, 2013). Murphy et al. (2017, p.692) make an important contribution highlighting the "entangled" nature of organizational problems, recognising that many problems reveal both adaptive and technical elements. Rather than binary dualisms, the entangled nature of these problems are better conceptualized as dualities (Murphy et al., p. 701). Notwithstanding the entangled nature of complex problems, Foldy et al. (2008, p.526), highlight that the vast majority of leadership literature focuses on the unifying effect of the "vision" which aligns closely with framing the solution rather than framing the problem. This is problematic in relation to complex problems since reframing problems to catalyse new ways of thinking is often highlighted as an essential aspect of addressing these types of challenges appropriately (Foldy et al., 2008; Grint, 2005, 2010b; Heifetz et al., 2009). Heifetz et al. (2009) assert that those in authority typically try to deal with adaptive challenges as technical problems – by providing the solution – partly because that is what is expected of them; and partly because that is what they expect of themselves. The premise that leaders seek to frame for clarity around solutions to problems regardless of problem complexity is therefore well supported in literature.

Grint (2005) adds a third category of "critical problems" to Rittel and Webber's (1973) wicked and tame typology. A critical problem aligns with the use of coercive power due to the perceived requirement for decisive, authoritative action. However, this temporal dimension appears to have been largely ignored in the literature. For example, neither Heifetz et al. (2009), nor the considerable body of literature around CLT (Lichtenstein et al., 2006; Marion and Uhl-Bien, 2001; Plowman et al., 2007; Uhl Bien et al., 2007) address the dimension of time-critical problems. The temporal distinction between critical and complex problems is particularly relevant to future research since the defining requirement of leader actions in relation to crises are clarity and decisiveness and therefore reframing complex problems as crises (see Grint, 2005; 2010b) offers an alternative and possibly even more salient leader response than the reframing as traditional technical response (Heifetz et al., 2009).

New, plural theories of leadership typically attempt to make distinctions between (individual) leader and (collective) leadership, offering an alternative perspective on the

role of leader and suggesting that leadership moves beyond a description of a skill, an interaction or symbolic figurehead, to a concept of emergence through dynamic interactions, (Lichtenstein et al., 2006; Lichtenstein and Plowman, 2009; Uhl-Bien and Marion, 2009) or practice (Crevani et al, 2010; Raelin, 2011, 2016). CLT for example views leadership as an emergent phenomenon, achieved through a balance of administrative, enabling and adaptive leadership processes (Hazy and Uhl-Bien, 2015). Although new plural leadership literature recognises the requirement to overcome bureaucratic paradigms in pursuit of adaptive responses when facing complex organizational problems, it fails to offer explanations describing how and under what conditions the bureaucratic paradigm is actually overcome. Instead, plural theories tend to either find their way back to descriptions of heroic, individual agency (Tourish, 2019, p. 223) or describe aspirational conceptions of unhindered collective agency. In doing so, plural leadership literature backgrounds structural influences almost to the same extent as traditional literature. The lack of attention to the role of power within plural leadership theory is particularly prominent (Alvesson & Spicer, 2012; Collinson, 2005; Collinson and Tourish, 2015; Collinson et al., 2017; Denis et al., 2012; Gordon, 2011; Tourish, 2014).

In summary, the literature relevant to review question two suggests that institutional forces (Currie et al., 2009a; 2009b, Scott 1995; 2003) are likely to influence leaders, prescribing actions that align leaders with purposeful activity to "fix-the-problem" (see Bundy et al., 2017, p.1671) regardless of problem complexity. In this way, a constitutive relationship is revealed whereby conceptions of leadership held by individual leaders both influence and are influenced by conceptions of problems within organizational settings. Leaders' actions enabling the type of leadership responses described as adaptive in CLT literature (see Uhl-Bien and Marion, 2009, p.633) are likely to be competing with deeply embedded conceptions of appropriate leader responses to problems that invoke traditional, directive, time-sensitive individual actions regardless of the problem context. The findings suggest that: *Conceptions of problems are bound in a constitutive relationship that both influences and is influenced by conceptions of leadership within an organizational context.*

This review seeks to outline the key lines of debate relevant to how complex problems are conceived and addressed by leaders within an organizational context. The next section describes the significance of intra-organizational context to leaders' framing processes in relation to complex problems.

2.3.3 What role does intra-organizational context play in framing?

In their empirical study of the institutionalization of leadership in an English public service setting Currie et al. (2009b, p. 1735) concluded that, "...leadership more generally, cannot be divorced from its institutional context and that the relative influence of divergent institutional forces depends upon the immediate organizational environment." In his systematic review of the contextual factors that shape leadership and its outcomes, Oc (2018, p.218) asserts that after decades in the wilderness, "...the theoretical and empirical leadership literature is once again devoting considerable attention to how contextual factors might influence leadership and its outcomes". Conceptualising context as an individual rather than collective construct, Augier et al. (2001, p.128) highlight the significance of context in relation to complex problems, stating, "...we maintain that there is a need for explaining both context and its emergence and transformation - especially, since this need for understanding context is urgent when the problems to be solved are complex and unstructured."

Cornelissen and Werner (2014, p.183) see context as inextricably linked with understanding meaning, explaining "...discursive framing and cognitive frames, or knowledge schemas, are separate concepts but are reciprocally and recursively interconnected in the construction of meaning in context. Making this distinction is important to marking the difference between instances where already available frames of reference or cognitive frames are primed, or activated, and instances where frame-based meanings are actively constructed by individuals in context."

Time (and specifically a perception that time to action is constrained) is likely to be highly relevant to institutionalized leading, in relation to addressing complex organizational problems. Fischer et al. (2017) highlight the lack of attention paid to the contextual

relevance of time in process research in general, and more specifically in relation to work in leadership (see also Uhl-Bien, 2006). Raaijmakers et al. (2015, p.86) note that time has received very little attention in the context of institutional work. A notable exception is the work by Smets and Jarzabkowski (2013, p.1280) considering the passing of time and developing a relational and dynamic perspective that explains how, "...over time, practitioners can construct the same two logics and their associated practices as strange, contradictory, commensurable and complementary." Aagaard (2016), notes that leaders often attempt a collaborative approach initially, switching to a more manipulative or coercive approach if the collaboration fails. The sequence of events unfolding over time is likely to form an important aspect of any research that seeks to understand micro-level leader framing in relation to meso-level organizational responses to complex problems.

Research into extreme context is salient to an organization such as the British Army, since elements of the organization are regularly deployed in geographically distant and physically dangerous operational environments. Recent debate into the potential for integration of resilience and crisis literature has paid greater attention to the significance of context (Hällgren et al., 2018 p.145). A contextual focus moves attention away from an extreme event to a process perspective that incorporates the temporal nature of pre, during and post activity in relation to events (see Hällgren et al., 2018; Hannah et al., 2009; Williams et al., 2017).

In their wide-ranging review of literature, Hällgren et al. (2018) align with Hannah et al. (2009), distinguishing an extreme context from broader crises (that can also be applied to mundane contexts like, for example, copyright infringement within a bureaucratic setting). An extreme context is one where, "one or more extreme events are occurring or are likely to occur that may exceed the organization's capacity to prevent and result in an extensive and intolerable magnitude of physical, psychological, or material consequences to—or in close physical or psycho-social proximity to—organization members." (Hannah et al., 2009, p.898). Attention is paid to intra-organizational nuance; an army combat unit could be described as a 'Critical Action Organization', but that it would be wrong to classify an entire Army as one, since administrative units are unlikely to face the same pressures (Hannah et al., 2009, p.900). Hällgren et al. (2018) develop Hannah et al.'s

(2009) work and offer an integrative process model using a context-specific typology that differentiates between, "...risky contexts, emergency contexts, and disrupted contexts" (p. 111) and is highly relevant to an organization such as the British Army that operates in deployed operational environments. Risky contexts are characterized by, "near-constant exposure to potentially extreme events" (p. 117). In emergency and disrupted contexts an extreme event has become an actuality and they consequently align with both complex problems and crises encountered in an operational environment. The principal difference between an emergency and disrupted context is that the former allows for preparation (as they are related to core activities), whereas the latter typically catch organizations unawares. (p.125). For example, military training within an operational theatre is inherently *risky;* planned military intervention within an operational environment is consistent with the description of *actual emergency;* and operationally deployed forces dealing with the ongoing (at the time of writing) COVID-19 crisis represents a *disruptive* context for a military force.

Time and complexity tend to act as 'intensifiers' that, "...raise the level of extremeness experienced and/or reduce an organization's ability to respond." (Hannah et al., 2009, p.909). Described in this way, facing complexity in one of the extreme contexts described by Hällgren et al. (2018) is likely to intensify individuals' perceptions of extremeness and sensitivity to time as well as heighten actors' emotional (rather than cognitive) response mechanisms (Maitlis and Sonenshein, 2010; Sandberg and Tsoukas, 2015). Regardless of how organizational problem complexity is initially conceived, institutional forces are likely to influence framing processes to align individuals' perceptions of effective response with purposeful activity to "fix-the-problem" (see Bundy et al., 2017, p.1671). Within a normal organizational context, dominant institutional forces are likely to manifest as framing for a rational gatekeeper response, delivering effective and efficient activity to solve the problem. Contrastingly, within an extreme context, dominant institutional forces are likely to manifest as framing for crises where an intensified awareness of time and complexity legitimizes highly time-sensitive, prescriptive solutions. This suggests that adaptive practices (see Uhl-Bien and Marion, 2009, p.633) associated with effective responses to complex problems are only likely to emerge when

dominant structural influences invoking traditional, decisive, reducible responses can be overcome.

In summary, literature shows that developing an understanding of contextual conditions within the immediate organizational environment is key to understanding the everyday institutional activity of individual leaders addressing complex organizational problems. Time influences appear to be particularly important within an extreme context. More broadly, literature suggests that careful attention should be paid to specific power related dynamics within an organizational context (Alvesson & Spicer, 2012; Collinson and Tourish, 2015; 2019; Gordon, 2011) as well as more generally, the emergence of disproportionally influential individual behaviours whether they are specifically related to formal power structures or not (Purdy et al., 2019, p. 417). The findings from this section suggest that: *Leaders' framing of complex problems is influenced by contextual conditions within the immediate organizational environment*

In addressing the SLR questions, this review has paid particular attention to the significance of individuals' communicative framing in context, across hierarchical levels and over time, rather than focusing on the strategic nature of collective action frames (see Benford and Snow, 2000) advocated by social movement theorists (see Cornelissen and Werner, 2014). The next section will bring together the findings of the review around the principal review question and outline the various organizational level responses that are likely to manifest as a result of the cumulative, micro-level leaders' framing processes in relation to addressing complex problems. It would appear that institutional forces prescribing actions either framed to deliver rational individually accountable solutions to reducible problems, or framed as crises are unlikely to be overcome unless a call to action that successfully challenges existing views (Cornelissen and Werner, 2014, p.202) gains sufficient legitimizing momentum to overcome dominant framings of reality.

2.3.4 How does leaders' framing of complex problems influence organizational responses over time?

2.3.4.1 Overview

The influence of deeply embedded institutional forces outlined in the previous sections suggests that leaders' prescriptions for action are likely to manifest in ways that constrain the collaborative energy enabling the emergence of adaptive responses to complex problems. Over time and regardless of problem complexity, problems are likely to be framed for clear decisive action, with a commitment to a dominant problem frame at the organizational level – either through rational plans or through crisis style time-critical command actions. However, evidence has been found in literature to support possibilities for alternative responses; either an enduring state of contestation and divergent problem framing; or acceptance of multiple problem frames with a commitment to collaboration and compromise. The following sections will outline these categories of potential organizational response aligned to the cumulative outcome of individual leaders' framing processes.

2.3.4.2 Commitment to a dominant problem frame leading to a traditional organizational response

A traditional response tends towards the collectively familiar (Cornelissen et al., 2014; Pazzaglia et al., 2018) and represents the institutionalized version of perceived legitimate leadership that is dominated by the traditional paradigm of individual, time-sensitive, decisive and results-orientated actions (Currie et al., 2009a; 2009b). Cornelissen et al. (2014, p.699) examine how, "individuals, as part of a collective, commit themselves to a single, and possibly erroneous, frame, as a basis for sensemaking and coordinated actions." Pazzaglia et al. (2018) provides support for this view in their examination of the banking crisis in Ireland, finding that, "The reinforcement of a shared frame dulls the emerging cues of changing market conditions and weakens perception of the risks..." Highlighting the powerful influence of framing, Mumford et al. (2007, p.535), note that, "framing has a pervasive influence on decision-making and problem-solving (Tversky &

Kahneman, 1973) and may lead to error by virtue of the assumptions imposed. Moreover, leaders may fail to question these assumptions, and, if these assumptions are inappropriate, errors in performance will likely arise."

Tourish et al. (2009), use the concept of coercive persuasion to consider issues around power and conformity within the leadership dynamic. They differentiate coercive persuasion, which manifests as internalized, often subconscious attachment to dominant cultural norms, from coercive power, which simply describes forced compliance. Drawing on examples that include the Challenger disaster and Enron, Tourish et al. (2009) assert that scholars have yet to unpack fully the underpinning influences that result in unchallenged coercive persuasion manifesting in organizations. Interestingly, they note that traditionally hierarchical organizations are particularly susceptible to the sort of conformity associated with coercive persuasion.

Grint (2010b, p.310) adds grist to the mill in his assertion that, "Hierarchists can become addicted to command to the point where Critical Problems are everywhere and Wicked Problems nowhere." Grint (2005) coined the phrase "irony of leadership" (p.1478)**,** to describe the situation where the greater the need for a collective resolve to accept a level of enduring uncertainty posed by wicked/complex problems, the greater the forces are to reframe as crises and therefore legitimise (in the minds of key stakeholders) purposeful command action to address the problem. However, Heifetz and Laurie (1997, p.124) remind us of the anxiety that complex problems cause for many employees, who would prefer to be given answers than face the effortful challenge of developing new approaches to work. In some cases, employees, "...look to the senior executive to take problems off their shoulders.". It is therefore likely that coercive persuasion (Tourish et al., 2009) and the "irony of leadership" (Grint, 2005, p.1478) are not wholly explained by top down notions of power and domination.

Daviter (2017, p.579) warns of the dangers of commitment to a solution in relation to a complex problem, stating that this approach, "...accepts that competing problem perspectives are cast aside rather than explored." Friedrich et al. (2009, p.938), highlight research which suggests that leaders, "selectively utilize, or consult with, individuals that

have a shared understanding of the situation, and who possesses the requisite competence and job experience to participate in the leadership process." This traditional approach suggests evidence of a self-fulfilling prophecy dynamic which sees leaders hand picking the individuals assessed as having the appropriate skills or experience to 'solve' the problem as framed by the leader. Furthermore, problems are typically framed, "...in such a way as to align it with existing administrative expertise and policy responsibilities." (Daviter, 2017, p.578). While a collective commitment to a dominant problem frame may be suitable for addressing linear problems and even be desirable in addressing time-critical crises, it is unlikely to be effective in addressing the sorts of challenges associated with complex organizational problems since, as Heifetz et al. (2009) reminds us, the answer to these problems are unlikely to be found in assertive, leader prescribed actions.

2.3.4.3 Enduring contestation and divergent problem framing leading to unpredictable organizational responses

Response category two focuses on research suggesting that institutional forces are either refracted, reducing the coherence of organizational action, or enduringly contested, leading to divergent actions and potentially to organizational demise (see Pache and Santos, 2010).

Dechurch et al. (2010, p.1069) highlight the inherently multilevel nature of leadership in organizations, stating, "Organizational effectiveness hinges on coordinated leadership being enacted from leaders residing within multiple hierarchical levels, whose leadership shapes crucial individual-, team-, unit-, and organizational-level outcomes". Using the language of institutional logics, Martin et al. (2017) found that institutional influences are often refracted through and across organizational levels, suggesting the type of coordinated multi-level leader action described by Dechurch et al. (2010) may be challenging to achieve. Martin et al. (2017, p.123) explain, "by refraction we mean that the institutional logic, like white light passing through a prism, is slowed, bent or even dispersed into its component parts." This is not to say that purposeful outcomes cannot be achieved, simply that the process of refraction results in staff engaging in "conscious, selective coupling" (Martin et al., p.123) in relation to dominant institutional forces

leading to at times divergent and unpredictable outcomes (McPherson and Sauder, 2013). This suggests that individual leaders, operating across departments and hierarchical levels within organizations, will engage in behaviours that are consistent with descriptions of embedded agents – both enabled and constrained by institutional forces. And while these behaviours are more likely to manifest in purposeful actions that align with dominant institutional forces, the process of refraction suggests that there is scope for divergent and unpredictable responses that foreground the role of agency and the potential for change.

Foldy et al. (2008, p.514) use the term "cognitive shift" to describe what actors aim to achieve through framing of problems (typically aiming to change perceptions about the cause of the concern; heighten the importance of the concern; or attempt to broaden the scope of the concern). Ansari et al. (2013) use the term "frame shifts" to describe a similar process (a term that usefully incorporates both affective and cognitive elements). According to Rhee and Fiss (2014), practices that involve contestation and conflicting narratives include framing activity that actively seeks to align with a dominant logic or purposely avoid opposing narratives. This description is analogous to descriptions of a framing contest (see Cornelissen and Werner, 2014, p.208). Framing contests occur when one group challenges or rebuts the framing of another group, a situation that intensifies during periods characterised by uncertainty, change and upheaval. A contested environment is finely balanced; breaking from dominant institutional influences must be perceived as significant enough to challenge legitimacy whilst remaining sufficiently recognisable so as to mobilise support for the change (Baum and McGahan, 2013).

Head and Alford (2015) add a cautionary note about the potential negative outcomes of framing contests, explaining that they may lead to heightened organizational conflict rather than purposeful and aligned actions. Fligstein and McAdam's work on "strategic action fields" (Fligstein and McAdam, 2011, p.1; see also Fligstein, 2013) in particular, foregrounds the contestation caused by political and professional manoeuvring within organizational contexts. The key implication for further research, according to Cornelissen and Werner (2014, p.211), is to, "...account for differences in motivations and political interests between actors and groups, as doing so seems important for explaining framing struggles and emerging settlements...". Framing contests, influenced

by competing institutional forces and enacted by individuals across multiple groups and levels within an organizational context, appears to offer significant explanatory potential in relation to the influences affecting organizational responses to complex problems. As Daviter (2017) observes, the process of taming a complex problem involves trying to control rather than solve it and this is accomplished by framing the problem so as to align it with existing expertise and responsibilities. It may therefore be that addressing complex problems as complex requires a successful framing contest, with sufficient scale and momentum to challenge the legitimacy of the dominant institution of individual leading, whilst remaining sufficiently recognisable so as to mobilise collective action to "tip the scales" (Ansari et al., 2013, p.1032) towards new action.

Divergent framing contests may be ephemeral, preceding organizational commitment to a single frame or lead to dysfunctional responses consistent with descriptions of enduring contestation and potential organizational demise (see Pache and Santos, 2010). Framing contests may even result in adaptive responses, if the contest results in the scales tipping sufficiently towards the acceptance of new approaches (Ansari et al., 2013). The final part of the section will consider circumstances where acceptance of multiple problem frames and a commitment to collaborative activity enables adaptive responses to complex organizational problems.

2.3.4.5 Acceptance of multiple problem frames with a commitment to collaboration and compromise leading to adaptive organizational responses

Citing Mary Douglas' (1976) cultural theory to illuminate the challenge of achieving coherent action to address wicked problems, Grint (2010b, p.309) explains, "Individualists can solve the problem of decreasing carbon emissions from cars (a Tame problem open to a scientific solution), but they cannot solve global warming (a Wicked Problem)... Hierarchists can improve rule enforcement for the fraudulent abuse of social services (a Tame Problem) but they cannot solve poverty (a Wicked Problem)." As Grint (2010b) highlights, wicked problems lie across several organizational cultures and institutional orders. Weber and Khademian (2008, p.336) explain that numerous stakeholders, each with alternative perspectives, agendas and skill sets are inevitably

involved with complex problems and, highlighting a temporal dimension, explain that, "...participants come and go depending on the way in which a wicked problem affects individuals, organizations, or groups of people at any given point in time."

Actors need not necessarily adopt each other's framing, rather a minimum level of shared agreement is required to tip the balance towards action (Cornelissen and Werner, 2014, p.211). Ansari et al. (2013, p.1032) refer to this process as "tipping the scales...". Cornelissen et al. (2011, p.1704) share an insight from an empirical research project about successful reframing, explaining that, "...proponents cleverly invoked in their framing a common cultural metaphorical understanding of honouring past traditions behind oneself, while being open to the future and its possibilities in front of oneself.". This framing was essential both for the legitimacy of the change and for the subsequent institutionalization of the changed form. (Cornelissen et al., 2011). This type of framing activity appears to be highly relevant, since purposeful action by leaders to address complex organizational problems requires the scales to be tipped in such a way as to see manifestations of plural leadership legitimized in the minds of multiple actors (see Currie et al., 2009b).

Action to address complex organizational problems does not equate to a mandate to admire the problem indefinitely, but it does require a commitment to accept the clumsiness of the problem (see Daviter, 2017; Grint 2005; Grint, 2010b). There is also a requirement amongst key stakeholders to recognise that tangible guarantees of cost benefits cannot be assured upfront and existing practices are insufficient to deal effectively with the problem. In tackling complex problems, action needs to focus on identifying areas of overlap to unlock adaptive responses, working in novel ways across divergent stakeholder groups rather than seeking a unified plan of action (See Daviter, 2017; Head and Alford, 2015). Daviter (2017) advocates coping rather than taming strategies to address complex problems, focusing on purposeful action whilst acknowledging that the solution is unclear. Attempts to address complex problems need to move beyond a fixed "either/or" mind-set, towards the "both/and" thinking (Murphy et al., 2017, p.701) necessary to address complex problems alongside other activity.

Daviter (2017, p.581) explains that in contrast to “taming” complex problems, which necessitates the freezing of the problem-solution link, “coping” strategies accept the, “...impossibility to resolve a policy problem comprehensively and definitively...”, focusing instead on continuous adaptation. Daviter (2017, p.581) highlights research that, “echoes another prominent line of argument that advocates for ‘messy institutions’ to solve wicked problems”. One perspective advocates a deliberately loosely coupled and fragmented governance structure in order to avoid attempts at holistic approaches that would, “...hopelessly overwhelm any purposeful attempt at addressing wicked problems.” (Daviter, 2017, p.580). Fincham and Forbes (2015, p.668), identified conflicting demands between stakeholders and yet, “the pattern of institutional forces remained a viable way of achieving goals (Fincham and Forbes, 2015, p.662). Grint (2010b, p.309) advocates the adoption of “clumsy” rather than seeking “elegant” solutions in relation to wicked problems.

Weber and Khademian (2008, p.343) highlight one of the organizational realities of attempts to address complex problems, “In the whirl of management change and reform philosophies emphasizing results, the question of performance typically focuses on whether the problem has been solved, the targets met, whether progress is being made toward a solution, and whether benefits exceed costs.” This quote perhaps provides a good example of the influence of the public service regulative, normative and cultural-cognitive forces referred to by Currie et al. (2009a; 2009b), acting to further challenge the emergence of adaptive responses to complex problems. Understanding the tensions that result in perceived legitimate leader actions to address complex organizational problems and that play out over time between departments and across levels of hierarchy, are therefore likely to be key to understanding how institutional forces influence meso-level (organizational) responses to complex problems.

2.4 Summary and future direction for research

2.4.1 Summary

A model that builds towards a theoretical framework is offered below, that aims to motivate advances in leadership theory, methodology and practice, focused around a proposed empirical research question derived from the SLR's findings:

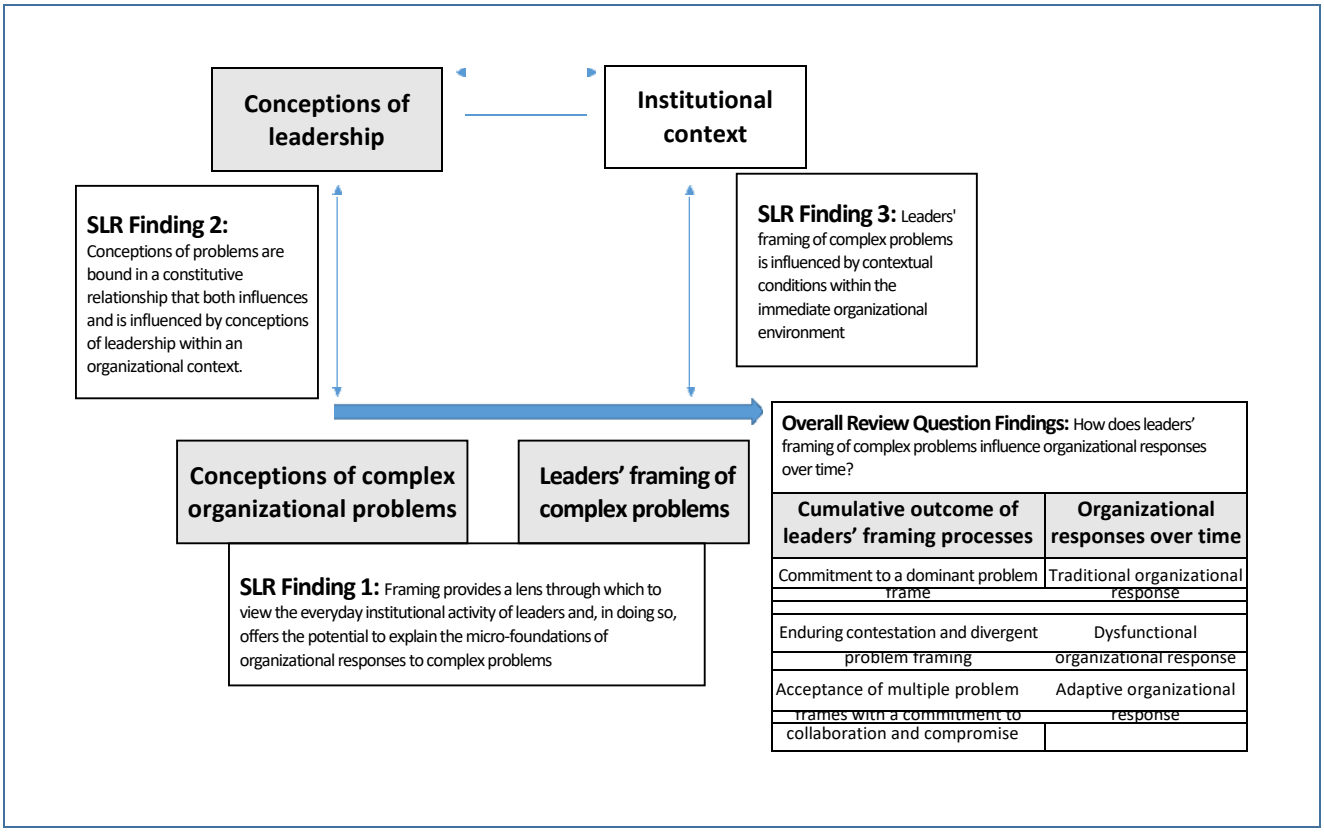


Figure 2-2: Systematic Literature Review Findings

This study has reviewed the key literature drawn from the leadership, problems, framing and institution theory domains to provide a synthesis of findings to address four principal areas: the role of institutional theory and framing literature in explaining the micro-foundations of organizational responses; how problems are construed within an organizational setting; the role of intra-organizational context; and how all of this

contributes to improving understanding about how leaders' framing of complex problems influences organizational responses over time.

The review findings suggest that in most situations, regardless of the problem context institutional forces combine with agentic preferences for demonstrating individual leader strength and decisiveness, leading to framing for clarity, with linear paths to solutions, or crises, with a perceived time-critical requirement for immediate action. This acts as a powerful constraining influence on adaptive organizational responses to address the most challenging and complex problems (Aagaard, 2016; Grint, 2005; 2010b; Pazzaglia et al., 2018; Tourish et al., 2009). However, the literature suggests that there are circumstances where the dominant institutional forces that typically drive out adaptive collaboration and the acceptance of multiple problem frames can be resisted at the individual and collective level. The lens of framing was introduced as an ideal way to access multi-level influences on organizational responses to complex problems. It is argued that using the lens of framing to connect micro-level individual actions to macro-level institutional influences has significant explanatory potential in developing deeper understanding of organizational level responses to complex problems.

2.4.2 Future direction for research

Whilst the review findings have distinguished between underlying mechanisms, it is not yet possible to explain under what specific contextual conditions and why a particular mechanism prevails in influencing leaders, and how this affects the organizational response to a complex problem. Literature shows that developing an understanding of contextual conditions within the immediate organizational environment is key to understanding the everyday institutional activity of individual leaders addressing complex organizational problems. Time influences appear to be particularly important, but it is not known to what extent Time influences variability of response to the institutionalized practices enacted by leaders. Literature also shows that careful attention needs to be paid to specific power related dynamics within an organizational context, as well as more generally the emergence of disproportionally influential individual behaviours whether they are specifically related to formal power structures or not.

The review has identified three broad categories of potential organizational level responses to complex problems. Future empirical research could usefully advance the conceptual model developed from the synthesis of literature in this review by identifying and distinguishing between the underlying mechanisms that lead to each of the organizational responses identified above. In particular, research that provides a deeper exploration into the relationship between deeply embedded constructs leaders hold for addressing problems, and the perceived effectiveness of organizational response, would be worthwhile. Future research would benefit from a multi-methods approach (for example ethnographic study or semi-structured interview) that facilitates the development of rich descriptions that explain contextual nuances – unpacking the particular contextual factors that enable or constrain adaptive responses at the organizational level. Such an approach would enable power and hierarchical influences to be explored.

The author has argued that individual leaders' framing of complex problems is an appropriate overarching context for research seeking to explain variability of organizational response. The principal research question (RQ) presented for future empirical work is therefore: *How and under what contextual conditions does leaders' framing of complex problems influence organizational responses over time?*

REFERENCES

Aagaard, P. (2016). How to Make the Mix Matter: A Case Study of Post-Transformational Leadership in Hybrid Public Management. *International Journal of Public Administration*, *39*(14), 1171–1179.

Alvesson, M., Hallett, T. and Spicer, A. (2019) 'Uninhibited Institutionalisms', *Journal of Management Inquiry,0(00), pp.1-9.*

Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematization. *Academy of Management Review*, *36*(2), 247–271.

Alvesson, M., & Spicer, A. (2012). Critical leadership studies: The case for critical performativity. *Human Relations*, *65*(3), 367–390.

Andersson, C., & Törnberg, P. (2017). Wickedness and the anatomy of complexity. *Futures*, *95*(September 2017), 118–138.

Ansari, S. (Shaz), Wijen, F., & Gray, B. (2013). Constructing a Climate Change Logic: An Institutional Perspective on the "Tragedy of the Commons". *Organization Science*, *24*(4), 1014–1040.

Augier, M., Shariq, S. Z., & Thanning Vendelø, M. (2001). Understanding context: its emergence, transformation and role in tacit knowledge sharing. *Journal of Knowledge Management*, *5*(2), 125–137.

Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current Theories, Research, and Future Directions. *Annual Review of Psychology*, *60*(1), 421–449.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*.

Baum, J. A. C., & McGahan, A. M. (2013). The reorganization of legitimate violence: The contested terrain of the private military and security industry during the post-cold war era. *Research in Organizational Behavior*, *33*, 3–37.

Benford, R. D., & Snow, D. a. (2000). Framing P Rocesses And Social Movements : An Overview and Assessment. *Annual Review Sociologic*, *26*(1974), 611–639.

Bennett, N., & Lemoine, J. G. (2014). *What VUCA really means for you.* Harvard Business Review, pp. 27-28.

Bennis, W. (2007). The challenges of leadership in the modern world: Introduction to the special issue. *American Psychologist*, *62*(1), 2–5.

Berente, N., & Yoo, Y. (2012). Institutional Contradictions and Loose Coupling: Postimplementation of NASA's Enterprise Information System. *Information Systems Research*, *23*(2), 376–396.

Besharov, M. L., & Smith, W. K. (2014). Multiple Institutional Logics in Organizations: Explaining Their Varied Nature and Implications. *Academy of Management Review*, *39*(3), 364–381.

Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). *Crises and Crisis Management: Integration, Interpretation, and Research Development*. *Journal of Management* Vol. 43(6), pp. 1661-1692.

Calabretta, G., Gemser, G. and Wijnberg, N.M. (2017) 'The Interplay between Intuition and Rationality in Strategic Decision Making: A Paradox Perspective', *Organization Studies*, 38(3–4), pp. 365–401.

Cardinale, I. (2018). Beyond Constraining and Enabling: Toward New Microfoundations for Institutional Theory. *Academy of Management Review*, *43*(1), 132–155.

Collinson, D. (2005). Dialectics of leadership. *Human Relations*, *58*(11), 1419–1442.

Collinson, D. (2014). Dichotomies, dialectics and dilemmas: New directions for critical leadership studies? *Leadership*, *10*(1), 36–55.

Collinson, D., Bryman, A., Collinson, D., & Grint, K. (2011). *The Sage handbook of leadership*. *Handbook of leadership*. London: Sage Publications.

Collinson, D., & Tourish, D. (2015). Teaching leadership critically: New directions for leadership pedagogy. *Academy of Management Learning and Education*, *14*(4), 576–594.

Collinson, D., Smolović Jones, O. and Grint, K. (2017) '"No More Heroes": Critical Perspectives on Leadership Romanticism', *Organization Studies*, p. 1-23.

Cornelissen, J. P., Holt, R., & Zundel, M. (2011). The role of analogy and metaphor in the framing and legitimization of strategic change. *Organization Studies*, *32*(12), 1701–1716.

Cornelissen, J. P., Mantere, S., & Vaara, E. (2014). The contraction of meaning: The combined effect of communication, emotions, and materiality on sensemaking in the stockwell shooting. *Journal of Management Studies*, *51*(5), 699–736.

Cornelissen, J. P., & Werner, M. D. (2014). Putting framing in perspective: A review of framing and frame analysis across the sensemaking, social movements and institutional literatures. *Academy of Management Annals*, *8*(1), 181–235.

Crevani, L., Lindgren, M., & Packendorff, J. (2010). Leadership, not leaders: On the study of leadership as practices and interaction. *Scandinavian Journal of Management*, *26*(1), 77–86.

Crowley, K., & Head, B. W. (2017). The enduring challenge of 'wicked problems': revisiting Rittel and Webber. *Policy Sciences*, *50*(4), 539–547.

Currie, G., Lockett, A., & Suhomlinova, O. (2009a). Leadership and institutional change in the public sector: The case of secondary schools in England. *The Leadership Quarterly*, *20*(5), 664–679.

Currie, G., Lockett, A., & Suhomlinova, O. (2009b). The institutionalization of distributed leadership: A "catch-22" in English public services. *Human Relations*, *62*(11), 1735–1761.

Currie, G., & Spyridonidis, D. (2016). Interpretation of Multiple Institutional Logics on the Ground: Actors' Position, their Agency and Situational Constraints in Professionalized Contexts. *Organization Studies*, *37*(1), 77–97.

D'Andreta, D., Marabelli, M., Newell, S., Scarbrough, H., & Swan, J. (2016). Dominant Cognitive Frames and the Innovative Power of Social Networks. *Organization Studies*, *37*(3), 293–321.

Daviter, F. (2017). Coping, taming or solving: alternative approaches to the governance of wicked problems. *Policy Studies*, *38*(6), 571–588.

Dechurch, L. A., Hiller, N. J., Murase, T., Doty, D., & Salas, E. (2010). Leadership across levels: Levels of leaders and their levels of impact. *Leadership Quarterly*, *21*(6), 1069–1085.

Denis, J. L., Langley, A., & Sergi, V. (2012). Leadership in the Plural. *Academy of Management Annals*, *6*(1), 211–283.

Drath, W. H., McCauley, C. D., Palus, C. J., Van Velsor, E., O'Connor, P. M. G., & McGuire, J. B. (2008). Direction, alignment, commitment: Toward a more integrative ontology of leadership. *Leadership Quarterly*, *19*(6), 635–653.

Fairhurst, G.T. and Connaughton, S.L. (2014) 'Leadership: A communicative perspective', *Leadership*, 10(1), pp. 7–35.

Fan, G. H., & Zietsma, C. (2017). Constructing a Shared Governance Logic: The Role of Emotions in Enabling Dually Embedded Agency. *Academy of Management Journal*, *60*(6), 2321–2351.

Fincham, R., & Forbes, T. (2015). Three's a Crowd: The Role of Inter-logic Relationships in Highly Complex Institutional Fields. *British Journal of Management*, *26*(4), 657–670.

Fischer, T., Dietz, J., & Antonakis, J. (2017). Leadership Process Models: A Review and Synthesis. *Journal of Management*, *43*(6), 1726–1753.

Fligstein, N. (2001). Social Skill and the Theory of Fields. *Sociological T*, *19*(2), 105–125.

Fligstein, N. (2013). Understanding stability and change in fields. *Research in Organizational Behavior*, *33*, 39–51.

Fligstein, N., & McAdam, D. (2011). Toward a General Theory of Strategic Action Fields. *Sociological Theory*, *29*(1), 1–26.

Foldy, E. G., Goldman, L., & Ospina, S. (2008). Sensegiving and the role of cognitive shifts in the work of leadership. *Leadership Quarterly*, *19*(5), 514–529.

Friedland, R., & Alford, R. (1991). Bringing Society Back In: Symbols, Practices, and Institutional Contradictions. In W. W. Powell & P. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis* (pp. 232–263). London: The University of Chicago Press.

Friedrich, T L., Vessey, W., Schuelke, M.J., Ruark, G.A., and Mumford, M.D. (2009) 'A framework for understanding collettive leadership: The selettive utilization of leader and team expertise with networks', *The Leadership Quarterly*, 20(6), pp. 933–958.

Fulop, L., & Mark, A. (2013). Relational leadership, decision-making and the messiness of context in healthcare. *Leadership*, *9*(2), 254–277.

Giorgi, S. (2017). The Mind and Heart of Resonance: The Role of Cognition and Emotions in Frame Effectiveness. *Journal of Management Studies*, *54*(5), 711–738.

Gordon, R. (2011). Leadership and Power. In D. Collinson, A. Bryman, K. Grint, J. Brad, & M. Uhl-Bien (Eds.), *The SAGE Handbook of Leadership* (pp. 195–202). London: Sage Publications.

Gray, B., Purdy, J. M., & Ansari, S. (Shaz). (2015). From Interactions to Institutions: Microprocesses of Framing and Mechanisms for the Structuring of Institutional Fields. *Academy of Management Review*, *40*(1), 115–143.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional Complexity and Organizational Responses. *The Academy of Management Annals*, *5*(1), 317–371.

Grint, K. (2005). Problems, problems, problems: The social construction of 'leadership.' *Human Relations*, *58*(11), 1467–1494.

Grint, K. (2010a). *Leadership: A Very Short Introduction*. Oxford University Press.

Grint, K. (2010b). The cuckoo clock syndrome: Addicted to command, allergic to leadership. *European Management Journal*, *28*(4), 306–313.

Grint, K. (2011). A History of Leadership. In D. Collinson, A. Bryman, K. Grint, J. Brad, & M. Uhl-Bien (Eds.), *The SAGE Handbook of Leadership* (pp. 3–14). London: Sage Publications.

Gronn, P. (2002). Distributed leadership as a unit of analysis. *Leadership Quarterly*, *13*(4), 423–451.

Hällgren, M., Rouleau, L., & de Rond, M. (2018). A Matter of Life or Death: How Extreme Context Research Matters for Management and Organization Studies. *Academy of Management Annals*, *12*(1), 111–153.

Hannah, S. T., Uhl-Bien, M., Avolio, B. J., & Cavarretta, F. L. (2009). A framework for examining leadership in extreme contexts. *Leadership Quarterly*, *20*(6), 897–919.

Hazy, J. K., & Uhl-Bien, M. (2015). Towards operationalizing complexity leadership: How generative, administrative and community-building leadership practices enact organizational outcomes. *Leadership*, *11*(1), 79–104.

Head, B. W., & Alford, J. (2015). Wicked Problems. *Administration & Society*, *47*(6), 711–739.

Heaphy, E. D. (2017). " Dancing on Hot Coals " : How Emotion Work Facilitates Collective Sensemaking. *Academy of Management Journal*, *60*(2), 642–670.

Heifetz, R. A. (1994). *Leadership without easy answers*. London: Harvard University Press.

Heifetz, R. A., Grashow, A., & Linsky, M. (2009). *The Theory Behind the Practice A Brief Introduction to the Adaptive Leadership Framework. The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*. Boston: Harvard Business Press.

Heifetz, R. A., & Laurie, D. L. (1997). The work of leadership. *Harvard Business Review*, *75*(1), 124.

Henisz, W. J., & Zelner, B. A. (2005). Legitimacy, Interest Group Pressures, and Change in Emergent Institutions: The Case of Foreign Investers and Host Country Governments. *Academy Of Management Review*, *30*(2), 361–382.

Klein, G., Moon, B., Hoffman, R., & Associates, K. (2006). A Macrocognitive Model Human-Centered Computing A Macrocognitive Model. *IEEE Intelligent Systems*, *21*(5), 88–92.

Kraatz, M. S., & Block, E. S. (2008). Organizational Implications of Institutional Pluralism. In *The Sage Handbook of Organizational Institutionalism* pp. 243-275. London: Sage Publications.

Lagreid, P., & Rykkja, L. H. (2015). Organizing for “wicked problems” – analyzing coordination arrangements in two policy areas. *International Journal of Public Sector Management*, *28*(6), 475–493.

Lawrence, T., Suddaby, R. and Leca, B. (2009) *Institutional work: Actora and Agency in Institutional Studies and Organizations.* Cambridge: Cambridge University Press.

Lichtenstein, B. B., & Plowman, D. A. (2009). The leadership of emergence: A complex systems leadership theory of emergence at successive organizational levels. *Leadership Quarterly*, *20*(4), 617–630.

Lichtenstein, B. B., Uhl-bien, M., Marion, R., Seers, A., Douglas, J., & Schreiber, C. (2006). on Leading in Complex Adaptive Systems. *Emergence: Complexity and Organization*, *8*(4), 2–12.

Lounsbury, M., Ventresca, M., & Hirsch, P. M. (2003). Social movements, field frames and industry emergence: A cultural–political perspective on US recycling. *Socioeconomic Review*, *1*, 71–104.

Maitlis, S., & Sonenshein, S. (2010). Sensemaking in Crisis and Change: Inspiration and Insights From Weick (1988). *Journal of Management Studies*, *47*(3), 551–580.

Marion, R., & Uhl-Bien, M. (2001). Leadership in complex organizations 105. *Leadership Quarterly*, *12*(4), 389–418.

Martin, G., Currie, G., Weaver, S., Finn, R., & McDonald, R. (2017). Institutional Complexity and Individual Responses: Delineating the Boundaries of Partial Autonomy. *Organization Studies*, *38*(1), 103–127.

McPherson, C. M., & Sauder, M. (2013). Logics in Action: Managing Institutional Complexity in a Drug Court. *Administrative Science Quarterly*, *58*(2), 165–196.

Meyer, & Hollerer. (2017). Does institutional theory need microfoundations? *Journal of Management Studies*, *51*, 1221–1233.

Miron-spektor, E., Keller, J., Smith, W.K. and Lewis, M.W. (2018) ‘*Microfoundations of Organizational Paradox : the Problem Is How We Think About the Problem*’, 61(1), pp. 26–45.

Mumford, M. D., Friedrich, T. L., Caughron, J. J., & Byrne, C. L. (2007). Leader cognition in real-world settings: How do leaders think about crises? *Leadership Quarterly*, *18*(6), 515–543.

Murphy, J., Rhodes, M. L., Meek, J. W., & Denyer, D. (2017). Managing the Entanglement: Complexity Leadership in Public Sector Systems. *Public Administration Review*, *77*(5), 692–704.

Northouse, P. (2016). *Leadership* (7th ed.). London: Sage Publications.

Oc, B. (2018) ‘Contextual leadership : A systematic review of how contextual factors shape leadership and its outcomes’, *The Leadership Quarterly*, 29(1) Elsevier, pp. 218–235.

Ocasio, W., Loewenstein, J., & Nigam, A. (2015). How Streams of Communication Reproduce and Change Institutional Logics: the Role of Categories. *Academy of Management Review*, *40*(1), 28–48.

Ocasio, W. and Radoynovska, N. (2016) ‘Strategy and commitments to institutional logics’, *Strategic Organization*, 14(4), pp. 287–309.

Pache, A.-C., & Santos, F. (2010). When Worlds Collide: The Internal Dynamics Of Organizational Responses To Conflicting Institutional Demands. *Academy of Management Review*, *35*(3), 455–476.

Pazzaglia, F., Farrell, M., Sonpar, K., & Martin de Holan, P. (2018). Keeping up with the Joneses: Industry rivalry, commitment to frames and sensemaking failures. *Human Relations*, *71*(3), 427–455.

Plowman, D. A., Solansky, S., Beck, T. E., Baker, L., Kulkarni, M., & Travis, D. V. (2007). The role of leadership in emergent, self-organization. *The Leadership Quarterly*, *18*(4), 341–356.

Purdy, J., Ansari, S. and Gray, B. (2019) ‘Are Logics Enough? Framing as an Alternative Tool for Understanding Institutional Meaning Making’, *Journal of Management Inquiry*, 28(4), pp. 409–419.

Raaijmakers, A. G. M., Vermeulen, P. A. M., Meeus, M. T. H., & Zietsma, C. (2015). I Need Time! Exploring Pathways to Compliance under Institutional Complexity. *Academy of Management Journal*, *58*(1), 85–110.

Raelin, J. A. (2011). From leadership-as-practice to leaderful practice. *Leadership*, *7*(2), 195–211.

Raelin, J. A. (2016). Imagine there are no leaders: Reframing leadership as collaborative agency. *Leadership, 12*(2), 131-158.

Reinecke, J., & Ansari, S. (2016). Taming Wicked Problems: The Role of Framing in the Construction of Corporate Social Responsibility. *Journal of Management Studies*, *53*(3), 299–329.

Rhee, E. Y., & Fiss, P. C. (2014). Framing Controversial Actions: Regulatory Focus, Source Credibility, and Stock Market Reaction to Poison Pill Adoption. *Academy of Management Journal*, *57*(6), 1734–1758.

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, *4*(2), 155–169.

Roberts, N. (2000). Wicked Problems and Network Approaches to Resolution. *International Public Management Review*, *1*(1), 1–19.

Sandberg, J., & Tsoukas, H. (2015). Making sense of the sensemaking perspective: Its constituents, limitations, and opportunities for further development. *Journal of Organizational Behavior*, *36*, s6–s32.

Scott, W. R. (1995). *Institutions and Organizations.* London: Sage Publications

Scott, W.R. (2003) 'Institutional carriers: reviewing modes of transporting ideas over time and space and considering their consequences', *Industrial and Corporate Change*, 12(4), pp. 879–894.

Selznick, P. (1957) *Leadership in Administration.* Berkeley: University of California Press.

Smets, M., & Jarzabkowski, P. (2013). Reconstructing institutional complexity in practice: A relational model of institutional work and complexity. *Human Relations*, *66*(10), 1279–1309.

Smets, M., Jarzabkowski, P., Burke, G. T., & Spee, P. (2015). Reinsurance Trading in Lloyd's of London: Balancing Conflicting-yet-Complementary Logics in Practice. *Academy of Management Journal*, *58*(3), 932–970.

Smith, W.K., Erez, M., Jarvenpaa, S., Lewis, M.W. and Tracey, P. (2017) 'Adding Complexity to Theories of Paradox, Tensions, and Dualities of Innovation and Change: Introduction to Organization Studies Special Issue on Paradox, Tensions, and Dualities of Innovation and Change', *Organization Studies*, 38(3–4), pp. 303–317.

Smith, W.K. and Lewis, M.W. (2011) 'Toward a theory of paradox: A dynamic equilibrium model of organzining', *Academy of Management Review*, 36(2), pp. 381–403.

Snowden, D.J. and Boone, M.E. (2007) 'A Leader ' s Framework', *Harvard Business Review*, 85(11), pp. 68–76.

Thornton, P. H., & Ocasio, W. (2008). Institutional Logics. In *The SAGE Handbook of Organizational Institutionalism* (pp. 99–129). London: Sage Publications.

Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective: a new approach to culture, structure, and process*. Oxford: Oxford University Press.

Tourish, D. (2014). Leadership, more or less? A processual, communication perspective on the role of agency in leadership theory. *Leadership*, *10*(1), 79–98.

Tourish, D., Collinson, D., & Barker (2009). Manufacturing Conformity : Leadership Through Coercive Persuasion In Business Organisations Manufacturing Conformity : Leadership Through Coercive Persuasion in Business Organisations, *12*(4), 360–383.

Tourish, D. (2019) 'Is Complexity Leadership Theory Complex Enough? A critical appraisal, some modifications and suggestions for further research', *Organization Studies,* Vol 40(2), 219-238.

Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, *14*(3), 207–222.

Turner, N., Swart, J. and Maylor, H. (2013) 'Mechanisms for managing ambidexterity: A review and research agenda', *International Journal of Management Reviews,* 15(3), pp. 317–332.

Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*.

Uhl-Bien, M. (2006). Relational Leadership Theory: Exploring the social processes of leadership and organizing. *Leadership Quarterly*, *17*(6), 654–676.

Uhl-Bien, M., & Arena, M. (2018). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. *Leadership Quarterly*, *29*(1), 89–104.

Uhl-Bien, M., & Marion, R. (2009). Complexity leadership in bureaucratic forms of organizing: A meso model. *Leadership Quarterly*, *20*(4), 631–650.

Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era. *Leadership Quarterly*, *18*(4), 298–318.

Waddock, S., Meszoely, G. M., Waddell, S., & Dentoni, D. (2015). The complexity of wicked problems in large scale change. *Journal of Organizational Change Management*, *28*(6), 993–1012.

Weber, E. P., & Khademian, A. M. (2008). Wicked Problems, Knowledge Challenges, and Collaborative Capacity Builders in Network Settings. *Public Administration Review*, *68*(2), 334–349.

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational Response to Adversity: Fusing Crisis Management and Resilience Research Streams. *Academy of Management Annals*, *11*(2), 733–769.

Willmott, H. (1993). Strength Is Ignorance; Slavery Is Freedom: Managing Culture in Modern Organizations*. *Journal of Management Studies*, *30*(4), 515–552.

Yukl, G. (2013). *Leadership in Organizations*. *Leadership in Organizations* (8th ed.). Harlow: Pearson.

3 RESEARCH PHILOSOPHY AND DESIGN

3.1 Introduction

This chapter presents the study's underpinning research philosophy and research design plan. Whilst existing leadership theories differentiate between leadership constructs emphasizing planned, technical and directive; and emergent, adaptive and inventive actions (Probert and Turnbull-James, 2011), the literature does not adequately explain variability of an organization's response to complex problems. The SLR has confirmed the relevance and importance of the proposed research and delivered a framework model supported by 3 findings that tentatively explained how institutional forces influence actors' construction and framing of complex organizational problems, and how this framing affects organizational responses over time. However, the model needs to be refined with empirical field research in order to strengthen the claim that underlying mechanisms explain observed regularities (Blaikie, 2010).

The systematic literature review led to the review findings outlined in **Figure 2-2**, Chapter 2. A principal research question for future empirical work was proposed as:

'How and under what contextual conditions does leaders' framing of complex problems influence organizational responses over time?'

Figure 3-1 shows the connection between the four principal research elements: the research question, purpose, theoretical perspective and research design. The following section will describe the purpose of the research and how this links coherently with the research philosophy (described in terms of a theoretical perspective in Figure 3-1) and research design.

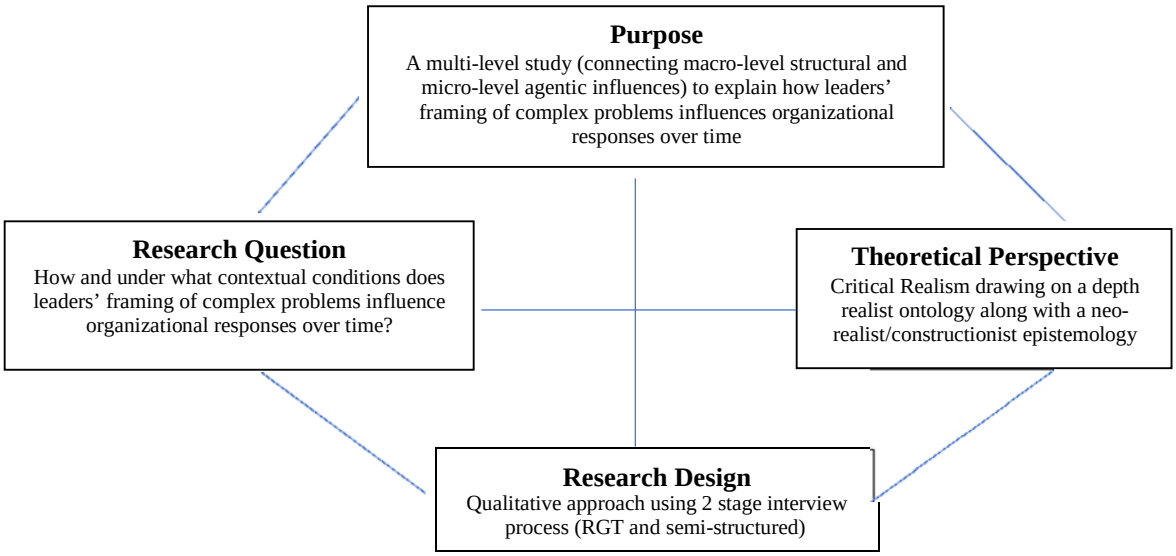


Figure 3-1: The four elements of research based on Partington (2002, p.139)

3.2 Research Philosophy

This section addresses the overarching research philosophy by outlining relevant ontological, epistemological and research strategy (RS) issues relating to the research. As Fleetwood (2005, p.197) outlines, "The way we think the world is (ontology) influences: what we think can be known about it (epistemology); and how we think it can be investigated (methodology and research techniques) ...". In this way, ontological and epistemological assumptions are inextricably linked to the RS chosen. This section will outline how the chosen ontological and epistemological lenses aligns with the RS and how this alignment leads to the specific research design plan.

3.2.1 Depth Realist Ontology: A depth realist ontology is underpinned by a critical realist philosophy (Bhaskar, 2008) and assumes that there is a reality 'out there' (Blaikie, 2007, p.16) whether or not it is being observed. Blaikie (2007, p.16) describes the three levels or domains of reality in the depth realist ontology: the *empirical* (or experienced) domain; the *actual* domain (which includes events whether or not they are observed); and the *real* domain (consisting of the processes or mechanisms that generate events). The empirical domain is observable through our senses and is the principal domain of reality

in which human actors experience reality. The actual domain is potentially observable, but has not yet been observed (once observed, the element would become part of the empirical domain). The real domain is where causal mechanisms are located, and they cannot be observed. The task of the researcher is to postulate the underlying mechanisms that account for empirical outcomes and also balance the contextual conditions affecting the action of mechanisms (Blaikie, 2007, p.87).

3.2.2 Epistemology: Blaikie (2007, p.22-27) outlines a continuum of epistemologies from *empiricism*, which accepts both the existence of an external reality and human capacity to observe this reality objectively, through to *constructionism*, which rejects the existence of an external reality, accepting instead that reality is human and either constructed in the cognitive processes of individual minds (constructivism) or, more commonly, socially constructed (social constructionism). Johnson and Duberley (2000, p113) align the constructionist epistemology with postmodernism and relativism. Whereas an empiricist, positivist lens is useful for explaining patterns in data, it is not suited to explaining causal mechanisms.

Neo-realism offers an epistemological lens that aligns with a depth realist ontology in that it accepts the existence of an external reality. However, whilst neo-realism views the real domain as being responsible for the effects experienced in the surface or empirical domain it accepts the non-linear, unpredictable outcomes of human interaction and, as such, can be aligned quite closely with an epistemology of constructionism. Johnson and Duberley (2000, p.149) note the, "...mistaken, yet only too common, view that realism and social constructionism have to be mutually exclusive." The key difference is that constructionism rejects the notion that knowledge can be regarded as real and generalisable whereas neo-realism accepts an external reality and views the empirical domain as the observable window for the identification of underlying causal mechanisms. In this way, a neo-realist epistemological lens seeks to navigate that difficult path which, "avoids the Scylla of positivism and Charybdis constituted by the incipient relativism of postmodernism." (Johnson and Duberley, 2000, p.113).

3.2.3 Research Strategy: Blaikie (2007, p8) describes the logic underpinning the four research strategies (inductive, deductive, abductive and retroductive). Inductive and deductive RS are the most well established and both have roots that can be traced back to positivism and scientific investigation. Blaikie (2007, p.60) aligns an inductive RS with a shallow realist ontology and the epistemological principle of empiricism. Essentially, social phenomena are believed to have an independent existence and can be observed in a similar way to natural phenomena. An inductive RS starts with data collection, followed by data analysis before a process of inductive logic is used to derive generalizations. Such a RS is well suited to answering 'what' questions but is limited in its capacity to answer 'why' questions satisfactorily (Blaikie, 2007, p.9). A deductive RS works in reverse to the inductive RS as it begins with a pattern or regularity that requires an explanation. The researcher must formulate a possible explanation and then seek to test the theory by deducing one or more hypotheses and then collecting appropriate data. If data do not match the hypothesis, the theory must be either modified or rejected. This RS seeks to discover knowledge through trial and error and is only appropriate for 'why' questions (Blaikie, 2007, p.9). According to Blaikie (2007, p.10), an abductive RS has a different logic to the other RS, "The starting point is the social world of the social actors being investigated. The aim is to discover their constructions of reality, their ways of conceptualizing and giving meaning to their social world, their tacit knowledge.". An abductive RS requires the researcher to enter the social actors' world in order to discover the motives and reasons behind social activities.

The Retroductive RS starts with an observed regularity but uses a different explanation from that of the deductive RS. It seeks to work back from data, to form an explanation using creative imagination and analogy. Brannan et al (2017, p.24) assert that, "unlike inductive and deductive strategies which take a closed system approach to research, the social world is an inherently open system that must be retroduced." Brannan et al (2017, p.24) explain that in open systems, "...theoretically informed claims must be framed in transfactual terms. Transfactual claims cannot, however, be empirically substantiated by testing quantitative hypotheses.". In this way, retroduction provides an alternative strategy for answering questions that seek to understand unexplained phenomena (Blaikie, 2010, p.77). The underlying logic of the retroductive RS is most appropriate for

this research project since this type of RS seeks, “To discover underlying mechanisms to explain observed regularities”. The SLR is an important element of the retroductive strategy since this approach enables the identification and analysis of existing literature and relevant theoretical perspectives in relation to the key phenomenon of interest. This description is consistent with the approach taken and the findings from the SLR (see paper 1) which presented a hypothetical model of a mechanism based on existing knowledge.

Empirical retroductive research aims to strengthen the hypothetical model by finding, “...the real mechanism by observation and/or experiment.” (Blaikie, 2007, p.8). Brannan et al. (2017, p.24) explains when the use of retroduction is most appropriate, stating, “Retroduction is used when we are relatively ignorant about the mechanisms in operation that are causing the phenomena under investigation. When there is little or no existing theory to act as a guide, we must take a voyage of discovery, make hypothetical conjectures, requiring the ‘scientific imagination’.” This is highly relevant to the author's research since there is little or no leadership theory to explain the phenomena under investigation. The model at **Figure 3-2** represents an underlying methodology for operationalising retroductive research. Empirical field research will therefore focus on uncovering evidence either to support or reject this model. At this stage, existing knowledge has supported the construction of a hypothetical model suggesting an underlying mechanism (a constitutive relationship between institutional forces and actor preferences) that might explain an observed regularity or intervention (see Denyer et al., 2008) (leaders' framing of complex problems) within the overall context of addressing complex problems, but robust (why and how) explanatory detail is not yet known. In this way, empirical research that enables mechanism based theorizing (Denyer et al., 2008; Pawson, 2000) becomes an integral part of the research design process.

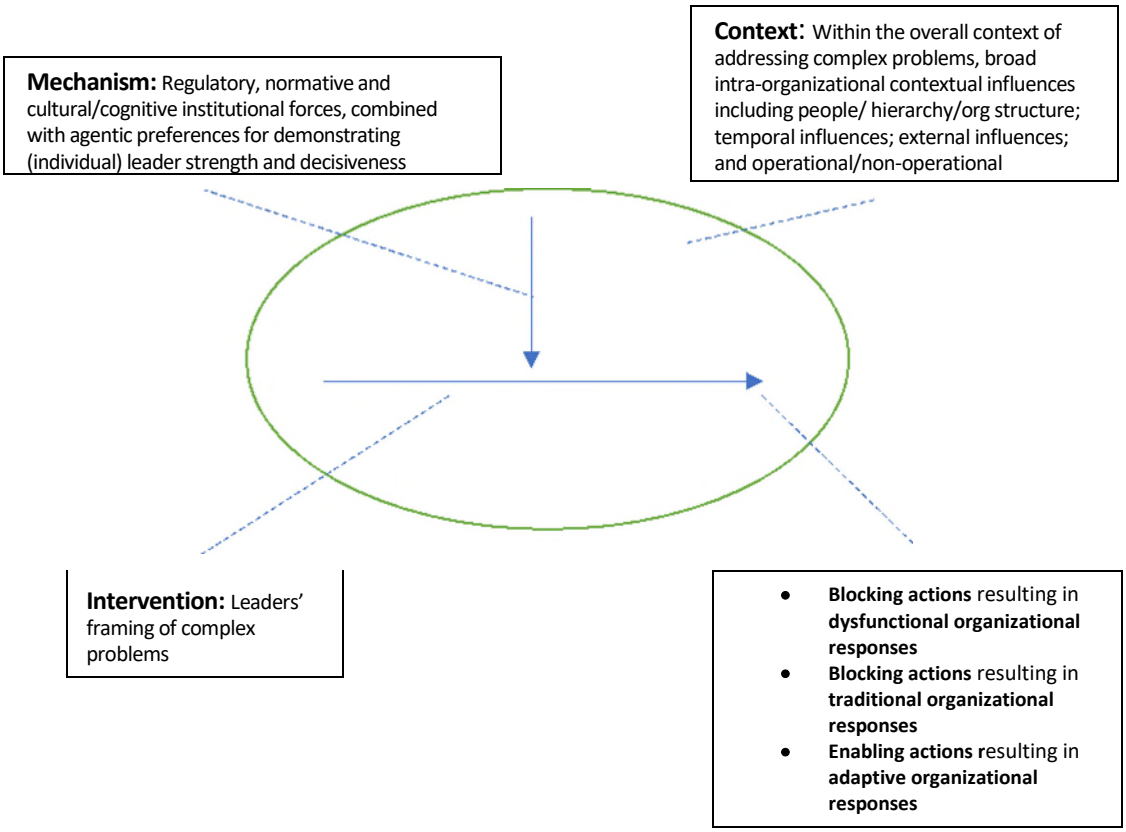


Figure 3-2: Retroductive model (based on Blaikie, 2007, p.87; Pawson, 2000; and Denyer et al., 2008).

According to Blaikie (2007), a retroductive RS is underpinned by a critical realist philosophical perspective, adopts a depth realist ontological lens and aligns with an epistemology of neo-realism, or neo-realism combined with constructionism (p.83). According to Johnson and Duberley (2000, p.162), central to a critical realist position is, "the notion that although language shapes all forms of science this does not mean that nothing exists beyond language.". In this way, "...science is neither self-referential nor objective. Rather, science is construed as social activity where people intervene and manipulate an intransitive reality which they confront and change..." (p.163). As Johnson and Duberley (2000, p.151) state, "The philosophical imperative for the critical realist is that truth must be more than the outputs of the language game yet cannot be absolute." Described in this way, critical realism can be viewed as research philosophy that treads a middle ground between the permanent, unchangeable and measurable

position of realism and the constantly changing, individual constructed reality of idealism. The next section will consider issues of ontological and epistemological coherence in more detail.

3.2.4 Ontological and epistemological issues in leadership, framing and institutional literature

A critical realist perspective adopting a depth realist ontology is well positioned to accommodate the breadth of epistemological positions taken in the literature domains relevant to this research study. A critical realist perspective privileges the ontology of depth realism. Doing so allows for a breadth of epistemological perspectives to be accommodated, since social reality may be viewed as either (unobserved) material structures of relations, or as social constructions (Blaikie, 2007, p.16). This position is helpful, since the epistemological perspectives advanced by the principal literature domains within the research project present diverse views, as is summarized in the section below.

Traditional leadership literature draws heavily on the base literature of psychology with a strong leaning towards positivism, a focus on the individual level (Alvesson and Spicer, 2012; Northouse, 2016; Yukl, 2013), and the use of deductive research strategies (see Friedrich et al., 2009; Mumford et al., 2007). More recent plural conceptions of leadership have started to draw on other base literature domains with stronger links to sociology (for example see Crevani, 2018; Crevani et al., 2010; Raelin, 2011, 2016), but these more recent developments have so far made only a limited impact within both mainstream academic research and practitioner-focused interventions.

Framing is another epistemologically diverse literature domain. Until recently, cognitive psychological perspectives dominated research at the individual level (Cornelissen and Werner, 2014). A strong leaning towards cognitive psychology led to epistemological approaches associated with traditional, natural scientific endeavour such as empiricism and rationalism. However, the last decade or so has seen a broadening of perspectives

with framing at the individual level drawing on sociological perspectives that align with a social constructionist epistemology (Purdy et al., 2019).

Institutional theory is rooted in sociology and related research draws heavily on social constructionism, although there is ontological variety with some scholars explicitly citing a depth realism (see Ocasio et al, 2015), and others referring to underpinning ‘systems’ or ‘mechanisms’ implying a depth realist perspective (see Drath et al., 2008; Thornton and Ocasio, 2008). Others adhere explicitly to an idealist perspective (see Raey and Jones, 2016).

Kelly's (1955, p.98) PCT is rooted in psychology, focuses on the individual level and adopts a constructivist epistemological lens. Blaikie (2007, p.22) describes constructivism and social constructionism as the 2 branches of constructionism; the former views the processes of construction occurring within the minds of individuals, whereas the latter views the processes as occurring through shared knowledge and interactional communication. A key motivation underpinning Kelly's research was to provide an alternative to the dominant paradigm within psychological studies of the time, which focused overwhelmingly on rational, positivist-inspired research methods and neobehavioural theories (Stam, 1998, p.194). The constructivist position of PCT is that reality is constructed in the minds of individual actors, influenced by anticipation of rather than through collective interactions.

While PCT is strongly associated with constructivism, Jankowicz (2004, p.xviii) asserts that it has much broader potential for deepening understanding of all epistemologies. Others have considered Kelly's (1955) 11 underpinning corollaries and highlighted areas where Kelly (1955) accounts for social interactional processes that influence and ultimately change individuals' construct systems (Stam, 1998, p.189). Described in this way, the difference is one of focus of attention or emphases; social constructionism emphasizes the primacy of relational, social practices and PCT's constructivism emphasizes the individual construer within a broader social context (Stam, 1998, p.199).

The constructionist epistemological lens adopted in the empirical studies (a constructivist lens in study 1 and social constructionist lens in study 2) therefore aligns with a depth realist ontology and provides the potential for complementary evidence in the search for deeper understanding of how leaders' framing of complex problems influences organizational responses over time. In the section that follows, the researcher will describe how the research design aligns with the chosen RS, ontological and epistemological approach.

3.3 Research Design

A single case study approach was taken to the empirical research plan. A retroductive RS enabled relevant theory identified in the SLR to provide an initial template on which to build appropriate field research. Thereafter, the results of Study 1 (Repertory Grid Interviews) and Study 2 (semi-structured interviews) provided insights that enabled the initial coding template to be iteratively developed. This section will explain the research design and methodology and outline the coherence underpinning the approach. Specifically, this section will outline: the rationale for a qualitative approach to explaining the new or under theorized underpinning causal mechanisms; the unit and level of analysis; and the specific data collection methods chosen.

Rejecting the absolute truth of positivism, a critical realist perspective is unlikely to accept a solely quantitative, statistical approach, since the role of research is concerned with an explanatory account of causal mechanisms affecting interactions between entities. As Miller and Tsang (2010, p.153) highlight, a critical realist perspective seeks to explain social phenomena through the theorizing of generalizable mechanisms, whilst remaining cognisant that the effects remain contingent. Consistent with this view of the chosen research strategy and ontological lens, a qualitative approach is appropriate for empirical research seeking to answer the study's principal research question and deepen understanding of causal mechanisms affecting socially constructed reality in the experienced domain.

The empirical research therefore focuses on evidence that explains leaders' framing processes when addressing complex problems AND evidence of how leaders' framing of complex problems influences organizational level responses over time. However, in contrast to a positivist quest for reliability and validity of empirical findings, resting predominantly on measurement, a critical realist perspective accepts that multiple alternative explanations are feasible (Bryman and Bell, 2015). The **unit of analysis** is *leaders' framing of complex problems* at the *meso* **level of analysis** (connecting individual to organizational level) with complex organizational problems providing the overarching contextual setting. Consistent with a critical realist perspective and further distinguishing the approach from positivist methodologies, no predetermined measures of effectiveness around perceived problem resolution will be offered, since respondents reveal their own constructs and explanations in relation to organizational responses to complex problems over time.

3.3.1 Data Collection

Data were collected using two contrasting interview techniques, with each respondent completing both interviews in a single sitting (as used by Micheli et al., 2012) as can be seen in **Figure 3-3** below. Study one used the Repertory Grid Technique (RGT) to gain broader data around the embedded constructs individuals hold for addressing complex problems and the perceived effectiveness of organizational responses. Study two employed semi-structured interviews to focus on revealing rich descriptions of leaders' perceptions of organizational responses to complex problems.

There is no universally accepted method to achieve data saturation (Francis et al, 2010). Indeed, the construct of saturation aligns with positivist conceptions of generalisability that are not fully compatible with critical realist perspectives. According to Saunders and Townsend (2016, p.849), when participants are chosen from a single organization in qualitative interview-based research, "...an initial estimate of around 30 participants..." provides a credible estimate. An initial sample size of 42 is therefore a credible sample size on which to plan. Evidence of saturation will be sought through a combination of independent check coding in NVivo, and independent reliability and construct category

checks of the RGT data set. O'Reilly and Parker (2013) suggest that a lack of saturation indicates that the phenomena has yet to be explained fully, rather than indicating invalid findings. Boddy (2016) highlights the practical limitations that exist in any research as a further limitation on the quest for data saturation.

Single Respondent:

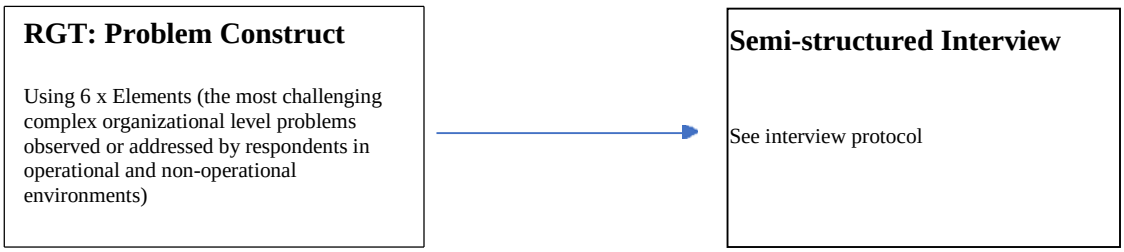


Figure 3-3: Interview construct

Prior to the main study interviews, a pilot study was conducted with 6 respondents to refine the interviewer's technique and confirm the viability of conducting both studies within a 2-hour timeframe.

3.3.1.1 Selecting Fieldwork Sites

The project was sponsored by the Director of Personnel (D Pers) within Army Headquarters, where appropriate contact was made through D Pers' office to an established point of contact within the other (five) Director pillars within Army HQ (Strategy, Capability, Resources, Information, and Sustainability) and to the (two) subordinate 3-star level headquarters (Field Army and Home Command). The researcher also established points of contact at the army's principal residential training establishments for officers (the Joint Services Command and Staff College and the Royal Military Academy Sandhurst) and conducted briefings on multiple residential career courses. After each briefing or individual contact, expressions of interest were collected, enabling the lead researcher to make follow up email contact to arrange a suitable time for an interview. Where face to face contact was not practicable, typically in the senior leader cohort, email communication to the established points of contact was used. At no

point did the sponsoring headquarters seek to influence the selection of any particular research site or interviewee.

3.3.1.2 Selecting Interviewees

In order to ensure that respondents had relevant experience of complex organizational level problems from both operational and non-operational contexts, volunteers were required to meet the following inclusion criteria: Must have deployed operational experience in the last 10 years (since 2009) AND must have worked within a Divisional Headquarters level context or equivalent whilst serving non-operationally within the last 10 years. In addition to this overarching inclusion criteria, respondents had to be volunteers and had been asked to attend the interview prepared to talk about examples of the most complex organizational problems that they had observed or addressed during their career. Young officers (Second Lieutenants and Lieutenants) were excluded from the research since this group of officers have typically served for under 3 years and lack the breadth of experiences required to meet the inclusion criteria and to reflect on the organization's most complex challenges. The lead researcher managed communication with the established points of contact and informed all parties when sufficient volunteers to participate in the research project had been identified. The specific number of interviewees along with the categorisation of organizational hierarchy is covered in the explanation of individual methods below.

A total of 42 semi-structured and 38 RGT interviews were conducted across three categories of hierarchy within the British Army: junior level (Captain to Major); middle level (Lieutenant Colonel and Colonel); senior level (Brigadier and General). Interviewing respondents from three broad categories of seniority (and avoiding a purely top team/executive level focus) enabled greater scope for revealing hierarchically nuanced explanations about organizational practices. Volunteers for the research project were cross checked by the lead researcher to balance inclusion from a range of career specialisms and to ensure a broadly representative gender balance (6 female, 36 male) contributed to the study. A full breakdown of the interviewees is provided in **Chapters 4 and 5 (empirical study 1 and 2 respectively).**

3.3.2 Study One Design - Repertory Grid Technique (RGT) Interviews

The Repertory Grid Technique (RGT) is aligned with Kelly's Personal Construct Theory (PCT) and is used in this study to gain an understanding of individual and common constructions of action to address complex organizational problems. RGT interviews were chosen as they have been used extensively in various areas of organizational behaviour focused research (Bryman and Bell 2015, p.231). Jankowicz (2004) contends that RGT is an epistemologically expansive tool that can be used as a 'non-invasive' technique to uncover respondents' thinking, without interviewer bias (Goffin and Koners, 2011).

The study applied a similar hybrid technique to that used by Micheli et al. (2012, p.693), requiring respondents to name their own elements within pre-defined categories. Respondents were asked to specify the most challenging organizational level operational and non-operational complex problems that they had experienced during their careers alongside perceived effectiveness of organizational response. Respondents' 6 most salient examples became the 6 key elements in the RGT interview. Using respondents' examples of perceived complex problems as the RGT elements allowed for entitative based constructs as well as alternative, processual or collaborative conceptions of organizational responses to complex problems. Respondents were asked to identify examples of complex problems within the specific categories outlined below:

- One operational problem which has been broadly effectively handled
- One operational problem which has been broadly ineffectively handled
- One non-operational (HQ or in-barracks) problem which has been broadly effectively handled
- One non-operational (HQ or in-barracks) problem which has been broadly ineffectively handled
- Two further examples (aligning with any of the four categories above, to fit respondents' experiences)

This categorization allowed for coherence of element categories, ensuring that data were collected relating to conceptions of effectively and ineffectively addressed complex problems in both normal and abnormal environments. The 2 free choice examples enabled some flexibility in terms of accounting for respondents' different experiences.

Each interviewee received a copy of the 2-page interview primer **(Appendix B)** a week in advance of the interview and were asked to think about and write down examples of the most complex army level problems they had observed or addressed through career, aligned with the element categories described above. Interviewees were therefore participating in the RGT interviews having had time to reflect on the nature of the problems that they perceived to have been most complex within a well framed context for addressing problem complexity at the organizational level.

The Study 1 protocol is at **Appendix C-1.** A detailed description of the interview technique is contained with **Chapter 4 (Empirical Study 1).** Although the coding of the data was already facilitated by the elicitation and definition of elements and constructs by the interviewee, all RGT interviews were fully transcribed in NVivo (version 12) to provide the basis for further qualitative data analysis.

3.3.3 Study Two Design – semi-structured interviews

Empirical study 2 employed the semi-structured interview technique. The interview protocol is provided at **Appendix C-2** and the use of the technique is described in detail in **Chapter 4.**

3.3.4 Data Analysis

Data analysis was conducted in accordance with accepted protocols specific to the research method used. RGT data followed the approach to data categorization and analysis advocated by Goffin et al. (2006) and others (Goffin and Koners, 2011; Jankowicz, 2004). Semi-structured interview data followed the qualitative data coding method recommended by Miles and Huberman (1994), supported by NVivo (version 12).

A more detailed explanation of the study specific data analysis technique used is described in papers 2 and 3 (**thesis chapters 4 and 5 respectively).**

3.3.5 Research Ethics Policy

The University's research ethic policy was followed throughout the empirical study (available of the Cranfield University website**)**. A Non-Disclosure Agreement was put in place in order to provide full confidentiality and anonymity for the data set. Each interviewee was informed of the agreement and their willingness to participate under the conditions explained (recorded anonymised interview, with full transcription and use of anonymised content including quotations). Confirmation of the researcher's ethical approval is at **Appendix D**.

REFERENCES

Alvesson, M. and Spicer, A. (2012) ‘Critical leadership studies: The case for critical performativity’, *Human Relations*, 65(3), pp. 367–390.

Bhaskar, R. (2008) *A Realist Theory of Science*. London: Routledge.

Blaikie, N. (2007) *Approaches to social enquiry: Advancing knowledge (2nd edition)* Cambridge: Polity Press.

Blaikie, N.W.H. (2010) *Designing social research : the logic of anticipation (2nd edition)* Cambridge: Polity Press.

Boddy, C.R. (2016) ‘Sample size for qualitative research’, *Qualitative Market Research*, 19(4), pp. 426–432.

Brannan, M.J., Fleetwood, S., O’Mahoney, J. and Vincent, S. (2017) ‘Critical Essay: Meta-analysis: A critical realist critique and alternative’, *Human Relations*, 70(1), pp. 11–39.

Bryman, A. and Bell, E. (2015) *Business Research Methods.*Oxford: Oxford University Press.

Cornelissen, J.P. and Werner, M.D. (2014) ‘Putting framing in perspective: A review of framing and frame analysis across the sensemaking, social movements and institutional literatures’, *Academy of Management Annals*, 8(1), pp. 181–235.

Crevani, L. (2018) ‘Is there leadership in a fluid world? Exploring the ongoing production of direction in organizing’, *Leadership*, 14(1), pp. 83–109.

Crevani, L., Lindgren, M. and Packendorff, J. (2010) ‘Leadership, not leaders: On the study of leadership as practices and interaction’, *Scandinavian Journal of Management*, 26(1), pp. 77–86.

Denyer, D., Tranfield, D. and van Aken, J.E. (2008) 'Developing Design Propositions through Research Synthesis', *Organization Studies*, 29(03), pp. 393-413.

Drath, W.H., McCauley, C.D., Palus, C.J., Van Velsor, E., O’Connor, P.M.G. and McGuire, J.B. (2008) ‘Direction, alignment, commitment: Toward a more integrative ontology of leadership’, *Leadership Quarterly*, 19(6) Elsevier Inc., pp. 635–653.

Fleetwood, S. (2005) ‘Ontology in organization and management studies: A critical realist perspective’, *Organization*, 12(2), pp. 197–222.

Francis, J.J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M.P. and Grimshaw, J.M. (2010) ‘What is an adequate sample size? Operationalising data saturation for theory-based interview studies’, *Psychology and Health*, 25(10), pp. 1229–1245.

Friedrich, T L. Vessey, W. (2009) ‘A framework for understanding collettive leadership: The selettive utilization Of leader and team expertise with networks’, *The Leadership Quarterly*, 20(6), pp. 933–958.

Goffin, K. and Koners, U. (2011) ‘Tacit Knowledge, Lessons Learnt, and New Product Development’, *Journal of Product Innovation Management*, 28(2), pp. 300–318.

Goffin, K., Lemke, F. and Szwejczewski, M. (2006) ‘An exploratory study of “close” supplier–manufacturer relationships’, *Journal of Operations Management*, 24(2), pp. 189–209.

Jankowicz, D. (2004) *The Easy Guide to Repertory Grids*. Chichester: John Wiley and Sons, Limited.

Johnson, P. and Duberley, J. (2000) *Understanding Management Research*. London: Sage Publications.

Kelly, G.A. (1955) *The Psychology of Personal Constructs*. New York: Norton.

Micheli, P., Jaina, J., Goffin, K., Lemke, F. and Verganti, R. (2012) ‘Perceptions of industrial design: The “means” and the “ends”’, *Journal of Product Innovation Management*, 29(5), pp. 687–704.

Miles, M.B. and Huberman, M.A. (1994) *Qualitative Data Analysis*.second. Thousand Oaks: Sage Publications.

Miller and Tsang (2010) ‘Testing Management Theories: Critical Realist Philosophy and Research Methods’, *Strategic Management Journal*, 32(August), pp. 139–158.

Mumford, M.D., Friedrich, T.L., Caughron, J.J. and Byrne, C.L. (2007) ‘Leader cognition in real-world settings: How do leaders think about crises?’, *Leadership Quarterly*, 18(6), pp. 515–543.

Northouse, P. (2016) *Leadership*. 7th edn. London: Sage Publications.

Ocasio, W., Loewenstein, J. and Nigam, A. (2015) ‘How Streams of Communication Reproduce and Change Institutional Logics: the Role of Categories.’, *Academy of Management Review*, 40(1) Academy of Management, pp. 28–48.

O’Reilly, M. and Parker, N. (2013) ‘“Unsatisfactory Saturation”: A critical exploration of the notion of saturated sample sizes in qualitative research’, *Qualitative Research*, 13(2), pp. 190–197.

Partington, D. (2002), *Essential Skills for Management Research*, Sage, London.

Pawson, R (2000) 'Middle-range realism', *European Journal of Sociology*, 41(02), pp 283-325.

Probert, J. and Turnbull James, K. (2011) ‘Leadership development: Crisis, opportunities and the leadership concept’, *Leadership*, 7(2), pp. 137–150.

Purdy, J., Ansari, S. and Gray, B. (2019) ‘Are Logics Enough? Framing as an Alternative Tool for Understanding Institutional Meaning Making’, *Journal of Management Inquiry*, 28(4), pp. 409–419.

Raelin, J. (2011) ‘From leadership-as-practice to leaderful practice’, *Leadership*, 7(2), pp. 195–211.

Raelin, J.A. (2016) ‘Imagine there are no leaders: Reframing leadership as collaborative agency’, *Leadership*, 12(2), pp. 131–158.

Reay, T. and Jones, C. (2016) ‘Qualitatively capturing institutional logics’, *Strategic Organization*, 14(4), pp. 441–454.

Saunders, M.N.K. and Townsend, K. (2016) ‘Reporting and Justifying the Number of Interview Participants in Organization and Workplace Research’, *British Journal of Management*, 27(4), pp. 836–852.

Stam, H.J. (1998) ‘Personal-construct theory and social constructionism: Difference and dialogue’, *Journal of Constructivist Psychology*, 11(3), pp. 187–203.

Thornton, P.H. and Ocasio, W. (2008) ‘Institutional Logics’, in *The SAGE Handbook of Organizational Institutionalism*. London: Sage Publications, pp. 99–129.

Yukl, G. (2013) *Leadership in Organizations*. 8th edn. Harlow: Pearson.

4 EMPIRICAL STUDY 1

"Exploring embedded agents' construction of complex problems: Towards greater understanding about the microfoundations of organizational responses"

Abstract

Using a study of British Army officers, this paper seeks a deeper understanding of the micro-foundations of organizational responses to complex problems. This empirical study examines the relationship between deeply embedded constructs individuals hold for addressing problems and the perceived effectiveness of organizational response. Using repertory grid technique, the data reveal that individuals' constructions are bound in a constitutive relationship with structural and contextual influences, which affect adaptive practices. Despite recognition of the need for empowerment and initiative to enhance adaptive practices, the findings suggest that the dominant problem frame tends towards the familiar and influences collective perceptions of effective actions that suggest a strong cultural-cognitive legitimacy for mechanistic and procedural, or crisis-style responses, regardless of problem context.

Keywords: complex problems, wicked problems, adaptive practices, adaptive responses, leadership, repertory grid, army,

4.1 Introduction

Organizations are facing competing, overlapping and, for some, increasingly complex problems (Anderssen and Törnberg, 2018; Augier, 2001; Smith et al., 2017; Uhl-Bien et al., 2007; Uhl-Bien and Arena, 2018). Complex problems are non-reducible and since they cannot be objectively solved are ill suited to mechanistic procedural responses (Grint, 2005; 2010b; Heifetz, 1994; Heifetz et al., 2009). Complex problems manifest as both sudden and slow-onset (Meyer, 1982). Some challenge the prevailing narrative of organizations and societies grappling with *increasing* complexity citing twentieth century challenges in the post war period that included the implementation of the Marshall Plan to regenerate Europe, the cold war, the establishment of NATO and the UN, and in the UK, the establishment of the NHS (Tourish, 2019). Nevertheless, perceptions of increasing complexity endure with advances in technology enabling faster and more visible communication of complex intractable issues (Smith et al., 2017). Rather than claiming *increasing* complexity, the present study simply asserts that some problems have complexity running through them and are non-reducible in nature. Technology has not yet been able to solve the largely people based, messy, non-reducible organizational and societal problems termed here as complex (Head and Alford, 2015; Smith et al, 2017).

Adaptive responses are commonly cited as critical to maintaining organizational effectiveness in the face of complex problems (Heifetz, 1994; Heifetz et al., 2009; Uhl-Bien and Arena, 2018; Uhl-Bien and Marion, 2009). Heifetz et al. (2009, p. 14) refer explicitly to 'adaptive leadership' asserting that it involves, "mobilizing people to tackle tough challenges and thrive." Others associate adaptive leadership with an outcome of collaborative endeavour and emergence through dynamic interactions (Lichtenstein et al., 2006; Lichtenstein and Plowman, 2009; Uhl-Bien and Marion, 2009). However, in line with more recent work from Uhl-Bien (see Uhl-Bien and Arena, 2018) and others **(**Tourish, 2019), this study resists the use of 'adaptive' as an adjective to describe a type of leadership, preferring to consider conditions that enable and constrain adaptive organizational responses without predetermining the responses as wholly explained in terms of leadership.

While the study does not seek to prescriptively describe all adaptive organizational responses in terms of leadership, the study does nevertheless seek to deepen understanding of leaders' role in the emergence of adaptive practices, since very little research has been conducted to explain the micro-foundations of this adaptive organizational outcome.

A recent focus on the microfoundations of institutions has led to a greater focus on individuals as the "sites for interpretation, maintenance, and change of institutionalized practices" (Raaijmakers et al., 2015, p.88). The present study takes a multi-level approach and seeks a deeper understanding of the microfoundations of institutionalized organizational responses to complex problems. The study examines the constructs individual leaders hold for addressing problems perceived to be complex, how these are framed by macro institutional and contextual influences, and the perceived effectiveness of meso level organizational responses. The author utilises a repertory grid technique with key leaders in the British Army charged with addressing both rapid disruptions and crises, and long standing, intractable problems.

Before describing the empirical research in detail, a review of relevant literature will set the context for the study. The review will first consider the socially constructed nature of problems, highlighting the macro institutional and contextual influences that are bound in a constitutive relationship with organizational actors. The review will then consider the relevance of leadership to the constitutive relationship influencing individuals' perceptions of the effectiveness and legitimacy of actions within organizational settings.

4.2 Theoretical Background

Grint (2005) makes the crucial point that it is not whether or not the environment is actually stable or volatile, or a problem is truly tame or wicked that is important, it is how people perceive their environment that shapes individual and organizational action. Further, a "persuasive account of the context renders it as a specific kind of problem that, in turn, legitimates a certain form of authority" (Grint, 2005, p. 1490). The social construction of problems will have both individual and idiosyncratic elements as well as shared elements, influenced by structural, institutional forces (Purdy et al., 2019). Berente and Yoo (2012, p.378) describe this embedded agency as emphasising the rationality of actors, but with this rationality, "embedded in a context of goals and taken-for-granted assumptions that are situated within a particular institutional context." Described in this way, organizational leaders are conceptualised as embedded agents, situated in a context that plays a constitutive role in shaping action (Drath et al., 2008).

4.2.1 The social construction of problems

The way in which contexts and problems are framed influences individual and collective action over time (Murphy et al., 2020). When problems are perceived to be complicated or tame, organizations tend to employ administrative, or technical practices (Andersson and Törnberg, 2017; Grint, 2010b; Rittel and Webber, 1973; Uhl Bien et al., 2007). However, adaptive practices are required to cope effectively with the longer term, complex, intractable or wicked challenges (Heifetz, 1994; Grint, 2005; 2010b; Rittel and Webber, 1973). With complicated problems optimization and efficiency are the core approaches, but in the realm of complexity, rapidly changing environments, interdependencies and fragmentation, fundamentally new approaches are required (Whittington et al., 1999). Organizational responses in the face of such problems requires the flexibility to adjust to environmental conditions (Folke et al., 2010). Thus, an adaptive organizational response involves implementing new learning, embracing change and generating transformations for innovative pathways (Gunderson and Holling 2002; Westley et al., 2011).

When a challenge is perceived to be complex, the literature suggests the solution is unlikely to be found in assertive, hierarchically bound practices since, “the problem lies in the people, the solution lies in them, too.” (Heifetz et al., 2009, p.73-74). Problems perceived as complex are non-reducible, making them ill-suited to mechanistic processes and introducing uncertainty into the implementation of planned responses (Head and Alford, 2015). An organization that recognises the complexity of the most challenging organizational problems – the ones that require change and new ways of doing things - is more likely to be one that has the potential to develop and enact adaptive and collaborative practices and is therefore an organization with greater adaptive capacity (Head and Alford, 2015). However, organizational responses can be compromised when individuals and organizations treat complex problems as reducible, complicated ones (see Grint, 2005; 2010b). Indeed, Heifetz et al. (2009, p.19) assert that a defining cause of leadership failure in organizations, “is produced by treating adaptive challenges as if they were technical problems.”

Grint (2005) adds a third category to Rittel and Webber’s (1973) wicked and tame typology, which he labels critical problems. Problems constructed as critical privilege time-critical action and align with a well-defined hierarchy for decision-making and the execution of well-practised drills or procedures (Buchanan and Denyer, 2013). A critical problem may well be complex in nature, but the complexity is over-ridden by a legitimized perception that immediate or near immediate action is required by the decision-maker(s). Grint (2005) aligns a critical problem with coercive power due to the perceived requirement for decisive, authoritative action. The temporal distinction between complex problems and crises is important since a crisis aligns with the dominant traditional narrative of individual, time-critical decisive action – the antithesis of the organizational dynamic required for the adaptive organizational practices associated with addressing (non-time critical) complex problems (see Uhl-Bien et al., 2007; Uhl-Bien and Marion, 2009). Organizational responses to problems framed as crises may lead to adaptive, innovative or novel ways of doing things but only within a highly time constrained and hierarchically prescribed dynamic that is unlikely to unlock the full adaptive capacity of the organization (Snowden and Boone, 2007).

Complexity Leadership Theory (CLT) usefully distinguishes between individual *leading* and *leadership,* with leadership described as the collective, emergent and interactive dynamic that is productive of adaptive outcomes (Uhl-Bien et al., 2007, p.299). Leaders are described as individuals who act in ways to influence this dynamic and outcomes. Construed in this way, complexity is embedded within individual leaders' everyday interactions, with these interactions serving to enable or constrain adaptive responses within organizational settings. Exploring problem examples where complexity is salient in the minds of organizational leaders therefore provides an opportunity to deepen understanding of the relationship between individuals' deeply embedded problem constructs and the perceived effectiveness of organizational responses in promoting adaptive practices. The next section will review relevant elements of leadership theory and demonstrate why individual leaders' conceptions of leadership are so relevant to the embedded constructs they hold for addressing problems.

4.2.2 The relevance of leadership to individuals' embedded constructs for addressing complex problems

Distinguishing precisely between what does and what does not constitute individual acts of leadership is an often debated subject in literature. Some organizational actors either claim or are given leader status which, if accepted by a sufficient number of others within an organizational setting, normalises the leader's status within that organization (Tourish, 2014, p.86). Traditional hierarchical organizations have highly normalised leader roles across different levels of seniority. (Gordon, 2011; Tourish et al., 2009).

Dominant conceptions of leadership see a process of influence exerted over others to guide activity towards some sort of goal (Yukl, 2013, p.18). The leadership tripod, first described by Bennis (2007), is a commonly used label, describing a dynamic of leader, follower(s) and outcome (Crevani et al., 2010; Drath et al., 2008). Interest in leadership as an area of scholarship has continued to grow to the extent that even specialist scholars struggle to maintain currency (Collinson et al., 2011). The breadth of literature suggests that the importance of defining leadership is more to do with clarifying a position and

understanding others' perspectives than it is in seeking universal agreement (Grint, 2010a).

Throughout the explosion of 150 years of leadership writing, and despite periods of dominance by opposing schools of thought, the overwhelmingly dominant narrative - from the Great Man theories espoused by Thomas Carlyle, to the influential late twentieth century work of transformational leadership – has fitted with the leadership "tripod". Grint (2011) offers an insightful description of the two principal schools of thought, describing an ebb and flow of influence between normative and rational schools. Normative schools focus on qualities in people (for example, trait theories, transformational, charismatic and authentic schools); and rational schools focus on scientific or objective skill sets required to operate effectively (for example, functional, situational and contingency schools). Both normative and rational schools conform to the dominant paradigm of decisive, leader-led actions - leaders identify problems, set priorities and engage in effective decision making (Friedrich et al., 2009). This is important since these dominant conceptions are institutionalized within organizational settings, legitimising behaviours associated with traditional, heroic individual leadership (Currie et al., 2009a; 2009b). In this way, institutionalized conceptions of individual leadership are likely to cause inherent tension in the form of constraining structural influences on adaptive practices in the minds of actors addressing problems perceived to be complex.

More recently, leadership literature has challenged the assumptions of the tripod, describing leadership in ways that are more aligned with collaborative endeavour and emergence through dynamic interactions, consistent with the descriptions of adaptive practices (Lichtenstein et al., 2006; Lichtenstein and Plowman, 2009; Uhl-Bien and Marion, 2009). CLT views leadership as an emergent phenomenon, achieved through a balance of administrative, enabling and adaptive processes (Hazy and Uhl-Bien, 2015). However, as Tourish (2019, p. 223) points out, CLT tends to find its way back to traditional conceptions of leadership where the onus for enabling adaptive responses adds to an already exhaustive list of responsibilities assigned to 'special' organizational actors, unconstrained by structural influences.

In their comprehensive and frequently cited review, Denis et al., (2012, p.211) plot the development of leadership conceptions that challenge purely individual forms back almost 100 years, identifying four categories that move progressively towards processual conceptions within an overarching category label of "plural leadership" (p.211). Their category, "producing leadership through interactions" incorporates the new theories of leadership emergence and, "...problematizes the *individuality* of leadership." (p.254), paying attention to its processual nature. Their work demonstrates that ideas around the entitative or processual nature of leadership are perhaps better viewed as a continuum than a binary distinction. Their work also introduces an interesting tension; emergent leadership processes associated with achieving adaptive practices - espoused in the most processual category of plural leadership - are furthest away from the dominant leadership paradigm. This tension was evident in a rare empirical study of institutionalized leadership, where plural leadership practices (described as distributed leadership in the study) were identified as an emerging, but not yet established form of institutionalized leadership, competing alongside the established and dominant institutionalized form of individual leadership. (Currie et al., 2009a; 2009b).

A core group of critically orientated leadership scholars have consistently challenged the lack of attention paid to power and hierarchy dynamics prevalent in organizational settings - with traditional theories privileging individual heroic agency and plural theories adopting an unhindered vision of collective agency. According to critical leadership scholars this agentic focus backgrounds structural influences that are unavoidable within organizational settings (Alvesson and Spicer, 2012; Collinson et al., 2017; Gordon, 2011; Grint 2005; Tourish, 2014; 2019; Willmott, 1993).

Drath et al. (2008) introduced an alternative leadership ontology with leadership reconceptualised within an outcome-based tripod of Direction, Alignment and Commitment (DAC). A DAC ontology allows for both entitative and processual conceptions of leadership to co-habit, focusing attention on the relationship between direction, alignment and commitment in the achievement of purposeful activity. Whilst the DAC ontology has received criticism for ignoring power (Collinson, 2017),

privileging linear, positive action (Crevani et al., 2010) and for expanding conceptions of leadership activity so broadly so as to render the term almost meaningless (Alvesson and Spicer, 2012), DAC nevertheless offers a way to consider the leadership dynamic in an inclusive and integrative way.

Presently, few studies have explored empirically how actors' social construction of problems at the micro (individual) level influences organizational responses. This empirical study argues that individuals' construction of problems are embedded in a constitutive relationship with structural and contextual influences that include dominant institutionalized conceptions of leadership, and that these influences affect organizational responses. This study asks the question: *What is the relationship between the deeply embedded constructs individuals hold for addressing problems and the perceived effectiveness of organizational responses?*

4.3 Research Methods

The British Army is the chosen context for the empirical study for three principal reasons. Firstly, the British Army offers a rare opportunity to research an organization that has to cope with both rapid disruptions and crises, and long standing, intractable, problems. It operates in normal, non-operational; and abnormal, operational contexts using the same hierarchical personnel. This operating model offers the potential to reveal similarities and differences in actors' constructs associated with addressing complex problems in normal, non-operational and abnormal, operational contexts. Secondly, the lead researcher has 25 years' experience as a career army officer with deep professional knowledge about relevant organizational nuances required to unlock access to a cross section of the organization's hierarchical actors up to and including the most senior level. This is important since empirical studies based on the uniformed public services are rare primarily because access to respondents is difficult. Finally, the British Army was chosen because it represents an organization with a distinctly unambiguous view about the role of leadership; put simply, the British Army views almost all agentic action through the lens of 16 layers of hierarchical leadership (from the first rung of the leadership ladder at Lance Corporal rank up to the most senior General (4 star)). Organizational actors across the hierarchical spectrum therefore perceive themselves, and are perceived by others, to be acting as leaders. The unambiguous nature of the British Army's perception of leadership is captured in the following illustrative quotes, taken from Army Leadership Doctrine and the army's highest-level doctrine publication, ADP Land Operations:

"*Leadership is everywhere. It is the lifeblood of any organization...*" (Army Leadership Doctrine, p.9)

"*Land forces rely completely on the strength of their leadership at all levels*." **(ADP Land Ops, p.309)**

"*In battle, it is leaders who break the paralysis of shock amid fear, uncertainty, death and destruction. Their vision, intellect, communication and unceasing motivation paves the path through chaos and confusion. They inspire the force through boldness, courage,*

personal example, compassion and resolute determination to win. Then, and at all other times, it is leaders who shape and control the conduct of the force, for good or ill." **(ADP Land Ops p. 3-10)**

In order to ensure that respondents had relevant experience of complex organizational level problems from both operational (abnormal, deployed) and non-operational (normal, headquarters) contexts, volunteers were required to meet the following inclusion criteria: Must have deployed operational experience in the last 10 years (since 2009) AND must have worked within a Divisional Headquarters level context or equivalent whilst serving non-operationally within the last 10 years. In addition to this overarching inclusion criteria, respondents had to be volunteers who could provide examples of problems in accordance with the categories outlined in the repertory grid technique section below. Young officers (Second Lieutenants and Lieutenants) were excluded from the research since this group of officers have typically served for 3 years or fewer and lack the breadth of experiences required to meet the inclusion criteria and reflect on the organization's most complex challenges.

A total of 38 Interviews were conducted across three categories of hierarchy within the British Army: 15 x junior level (Captain to Major); 11 x middle level (Lieutenant Colonel and Colonel); 12 x senior level (Brigadier and General). A full list is provided at **Appendix E.** Interviewing respondents from three broad categories of seniority (and avoiding a purely top team/executive level focus) enabled greater scope for revealing hierarchically nuanced explanations about organizational practices. Volunteers for the research project were cross checked by the lead researcher to balance inclusion from a range of career specialisms and to ensure a representative gender balance (6 female, 32 male) contributed to the study.

To address our research question, the author draws on Kelly's (1955) constructive alternativism, which asserts that people's experiences of the world around them, including events that take place or people's understanding of them, are open to an immense variety of interpretations. Kelly argued that no one construct is a final or definitively accurate way of grasping the world. Instead, we can always create alternative

constructs to explain better or represent that which we observe. Personal Construct Theory (PCT) claims that people develop personal constructs about their lived experiences. Each construct that individuals rely on to make sense of their lived experiences, is bipolar (Kelly 1955), with one side often being preferred over the other. Kelly (1955) described a construct as a way of considering things that are construed as being alike and yet different from others. Beyond accessing these micro-level constructs, Kelly (1955) also argued that it is possible to examine empirically the constructs that are common and shared within a collective. Examining these common constructs can also help us examine the macro (structural) influences on how people come to shared understanding of their social context and the perceived effectiveness of meso (organizational) level practices.

4.3.1 The Repertory Grid Technique

The Repertory Grid Technique (RGT) is aligned with Kelly's PCT and is used in this study to gain an understanding of individual and common constructions of action to address complex organizational problems. RGT has been used extensively in various areas of organizational behaviour focused research (Bryman and Bell 2015, p.231). Jankowicz (2004) contends that RGT is an epistemologically expansive tool that can be used as a ‘non-invasive’ technique to uncover respondents’ thinking, without interviewer bias (Goffin and Koners, 2011).

Respondents were asked to specify the most challenging organizational level operational and non-operational problems that they had experienced during their careers and the effectiveness of the organizational response, as specified below, which became the elements in the RGT interview:

- One operational problem which has been broadly effectively handled
- One operational problem which has been broadly ineffectively handled
- One non-operational (HQ or in-barracks) problem which has been broadly effectively handled
- One non-operational (HQ or in-barracks) problem which has been broadly ineffectively handled

- Two further examples (aligning with any of the four categories above, to fit respondents' experiences)

Having established that each of the elements represented problems that were relevant at the organizational (British Army) level and had complexity running through them, a standard RGT process was followed (see Goffin and Koners, 2011; Jankowicz, 2004) to select 3 elements, a 'triad', for the interviewee. The interviewer placed the triad of cards out in front of the interviewee before asking the unifying question, *'please think about how two of these problems were similar and different from the third, in terms of how you observed or experienced the problems being addressed*'.

The interviewer remained silent and 'non-invasive' throughout the entirety of the interview, to enable the interviewee to form a response about a specific idea that they felt formed a relevant relationship between the three elements (drawn from the four categories of complex problem as outlined above). Upon the elicitation of the construct that the respondent used to compare and contrast three of the six elements, a laddering question (Jankowicz 2004) of 'In what way is this [construct] important to you in regards to addressing complex problems' was posed to elicit greater detail about the expression of the construct.

Having clarified the meaning of the construct, the interviewee was then asked to identify the opposite or 'pole'. As with the construct, care was taken to elicit the interviewee's pole description since the pole cannot be objectively deduced (for example, one might assume the pole of 'tall' is 'short', but it could instead be 'broad'). Once elicited, the pole, along with a short description, was written on the RGT interview sheet.

Interviewees were then asked to score each element of the triad from 1 to 5, with 5 representing an extreme example of the construct and 1 representing an extreme example of the pole. Once completed, the interviewees were issued with the remaining 3 elements from the full group of 6 and asked to rate them against the construct and pole using the same scale. Having completed the ratings, the first iteration of the RGT interview was complete and the next stage of the interview commenced with a different triad, taken from

the 6 element cards, being passed to the interviewee (an extract from the raw RGT data spreadsheet is provided at **Appendix G-1**).

Although the coding of the data was already facilitated by the elicitation and definition of the interviewees' elements, constructs and construct poles, all RGT interviews were fully transcribed to provide the basis for further qualitative data analysis.

4.3.2 Data Categorisation

In total, the data collection provided over 850 (38 interviews x 6 elements x 3.8 being the average number of constructs per interview) quantitative data points in addition to the transcribed interviews. This dataset underwent a core-categorisation procedure (Jankowicz, 2004). To minimise the influence of researcher bias, a one-day workshop was convened, consisting of two teams of researchers. Two sets of construct cards were prepared by the lead researcher. Each card contained a single construct and construct pole and an explanatory quote for both. Each team worked independently to categorise the constructs into coherent groupings. The workshop concluded with a joint session to show workings in order to provide each pair with an insight into the ways of working of the other pair before dispersing. After the workshop, the lead researcher collated the two sets of categories in a reliability table (see Micheli et al., 2012). A common construct was placed in a highlighted cell where both teams agreed on a common category for that construct. The ‘commonality ratio’ of the common constructs in relation to the total number of constructs is an indicator of data reliability (Goffin et al., 2012).

The first version of the table revealed a commonality ratio of only 60%. It was soon realised that team B had created higher order categories, whereas team A had subcategorized theirs. A key tool to assist with agreeing category boundaries and definitions was the ‘word cloud’ facility in NVivo (an example is provided at **Appendix G-2**). Relevant constructs were loaded into NVivo as discrete files and the resulting word cloud proved particularly useful, not only in agreeing category definitions, but more fundamentally in identifying areas of category overlap and therefore reducing the total number of agreed categories. The result was an agreed alignment around a total of 11

categories. Further check-coding discussions between team members and the lead researcher (as recommended by Jankowicz, 2004) resulted in an aligned set of categories and a recategorization of a number of constructs within these categories. In this way, a commonality ratio of 83% was achieved, exceeding the example 80% reliability suggested by Miles and Huberman (1994). An extract from the data reliability spreadsheet is at **Appendix G-3**.

The resulting data set consisted of 144 ‘common constructs’ in 11 categories each made up of a number of aligned individual constructs. These data were now submitted for further analysis. At this stage, it was important to ensure scoring consistency within each construct category. To achieve this, constructs were individually checked and, where required, scores were reversed in order to ensure that the scoring of constructs and construct poles was consistent for all common constructs within a construct category.

4.3.3 Key constructs

In order to identify which of the construct categories were more important than others, a combination of Unique Frequency (UF) and Average Normalised Variability (ANV) were used (Goffin et al., 2006; Goffin & Koners, 2011; Lemke et al., 2011; Lemke et al., 2003; Raja et al., 2013; Shcheglova, 2009). As Goffin et al. (2006) point out, UF provides only one type of indicator of the importance of a construct (across multiple grids). In addition to the calculation of the UF, ANV is used to describe the variability in element scores of a common construct category that have been normalised to account for the different numbers of constructs returned by individual respondents' grids and then averaged across all the occurrences of the construct within a given common construct category (Goffin et al., 2006; Raja et al., 2013). The greater the variability, or spread, the greater interviewees use the constructs within a given construct category to differentiate between the elements. To aid differentiation between elements, interviewees were required to align their RGT interview problem examples with 4 element categories (effective operational; ineffective operational; effective non-operational; and ineffective non-operational), providing at least one problem example for each category. The 2 remaining problem examples that made up the 6 elements were assigned to one of the

categories by the interviewee, to best fit their own experiences of observing or addressing complex organizational problems.

Using a combination of %UF (how often constructs were mentioned) and variability (in terms of element scores compared with the element scores of other constructs within a given grid) therefore provides a more complete assessment of the level of importance of constructs. In line with other studies a %UF of above 25% was used, to limit the construct categories to ones that were salient to a significant proportion of respondents. The ANV criterion used by Goffin et al. (2006) was an ANV of 'above average' which in this study equates to an ANV of 26.4. Of note, there was a relatively narrow spread in ANV across the construct categories, ranging from 23.6 to 29.7.

Table 4-1 below shows the final 11 common construct categories. It can be seen that 3 of the 11 categories failed to achieve a %UF of greater than 25% and were therefore not taken forward for further analysis. It was decided that the remaining 8 construct categories should be taken forward, since the ANV criteria appeared to show relatively little difference between construct categories. Those that met both %UF and ANV criteria were labelled key common construct categories. The remaining 4 categories, which met %UF but not the ANV criteria, were labelled hygiene common construct categories.

Table 4-1: Construct Categories

Category Name	Construct Definition	Construct Pole Definition	%UF >25% Req'd	ANV >26.4	Key Common Construct (KCC) or Hygiene Construct (HC)*
Policy Framework Compliance	The approach is strongly influenced by complying with existing policy frameworks	The approach is able to innovate or change existing policy frameworks	47	No	**HC**
Process Freedom	A high level of choice or freedom of process to think about and address a problem from the bottom up	A low level of choice or freedom of process to address a problem from the bottom up	34	No	**HC**
Willingness to address problem	High Individual and/or organizational commitment to change and/or willingness to	Low Individual and/or organizational commitment to	42	Yes	**KCC**

/commitment to change	address or own the problem	change and/or willingness to address or own the problem			
Time Pressure	A dominant or highly bounded timeframe for action	An enduring or longer timeframe for action	39	No	**HC**
Clarity - Outcome	A high level of clarity around defined or required problem outcomes	Ambiguity around problem outcomes	39	Yes	**KCC**
Clarity - Understanding problem	A high level of clarity of understanding or recognition of problem complexity	A low level of clarity of understanding or recognition of problem complexity	39	Yes	**KCC**
Engagement of Stakeholders	A high level of engagement and alignment of stakeholder requirements	Divergent or competing stakeholder requirements	37	No	**HC**
External vs Internal	Perceptions of problem are highly influenced by internal organizational pressures	Perceptions of problem are highly influenced by external pressures or threats	29	Yes	**KCC**
Clarity – How to address problem	A high level of clarity in relation to activity to address the problem	A low level of clarity in relation to the process or way to address the problem	18	NA	
Decision Making - Rational and Objective vs Intuitive, Personal and Subjective	Decision making aligned strongly with science/evidence/policy/ objective indicators	Decision making aligned strongly with intuitive/personal interest/subjective processes	18	NA	
Resourcing the Plan	A high level of resource (financial, time, people) constrains on actions	A low level of resource (financial, time, people) constrains on actions	16	NA	

4.3.4 Analysis of the Findings

The analysis of the findings is structured in four parts: the social construction of complex problems; The differences between problem constructs in normal and abnormal settings; the conflict between compliance and freedom in shaping action to address complex

problems; and the perceived effectiveness of organizational responses to complex problems.

4.3.4.1 The social construction of complex problems

The data set yielded notably high %UF scores, with 5 of the 8 common construct categories scoring between 37% and 47% UF. This is far higher than the 25% UF suggested by Goffin et al. (2006) (generally considered to be a relatively high bar for common construct inclusion) and suggests a high degree in commonality of thinking about complex problems across the participant group. The narrow spread of ANV is particularly interesting since it suggests that in general, there was not much discrimination in leaders' scoring of elements within a construct, relative to other constructs.

The four hygiene common construct categories were: *Policy Framework Compliance, Process Freedom, Time pressure, and Engagement with stakeholders*. Within an overall narrow spread of ANV, these were the common construct categories that offered the lowest discriminatory value. Whilst these categories were salient in the minds of a significant number of leaders in the study, they were most lacking in discriminatory power, in the minds of respondents, to differentiate between the elements in a construct. In other words, the constructs within hygiene common construct categories were typically deemed ‘salient’ by the respondent, without offering strong differentiation in the scoring of elements relative to the scoring for other constructs. These hygiene common construct categories are therefore relatively less able to distinguish between effectively or ineffectively addressed problems within a particular operational (abnormal) or non-operational (normal) setting.

Figure 4-1 below provides a visual representation of the average scores, calculated as the mean element score given to each of the 4 element categories (effectively addressed normal context; ineffectively addressed normal context; effectively addressed abnormal context; and ineffectively addressed abnormal context) within each common construct category. Once the %UF and ANV analysis has determined which of the common construct categories are important to respondents, relative to other construct categories,

analysis of average scores helps to provide greater granularity about perceptions of effectiveness in both normal and abnormal settings.

The results are displayed as a % score preference towards the construct across the 8 common construct categories. The top half of the visual presents average scores for perceived effectively addressed problem elements and the bottom half of the visual presents average scores for perceived ineffectively addressed problem elements. For example, an average score of 3.1 (based on Likert scale scoring of 1-5) on the top half of the visual under the *Policy Framework Compliance* category translates to a 53% alignment between construct category definition - "The approach is strongly influenced by complying with existing policy frameworks" (Table 4-1) - and perceived effectiveness in addressing complex problems in a non-operational setting. Similarly, an average score of 2.2 on the bottom half of the visual under the *Clarity - Understanding the problem* category equates to a 37% alignment with the construct category definition and perceived ineffectiveness in addressing complex problems in an operational setting. A score below 50% indicates a stronger alignment with the construct pole which, in this case, aligns perceived ineffectiveness in addressing complex problems in an operational setting with "a low level of clarity of understanding or recognition of problem complexity" (Table 41).

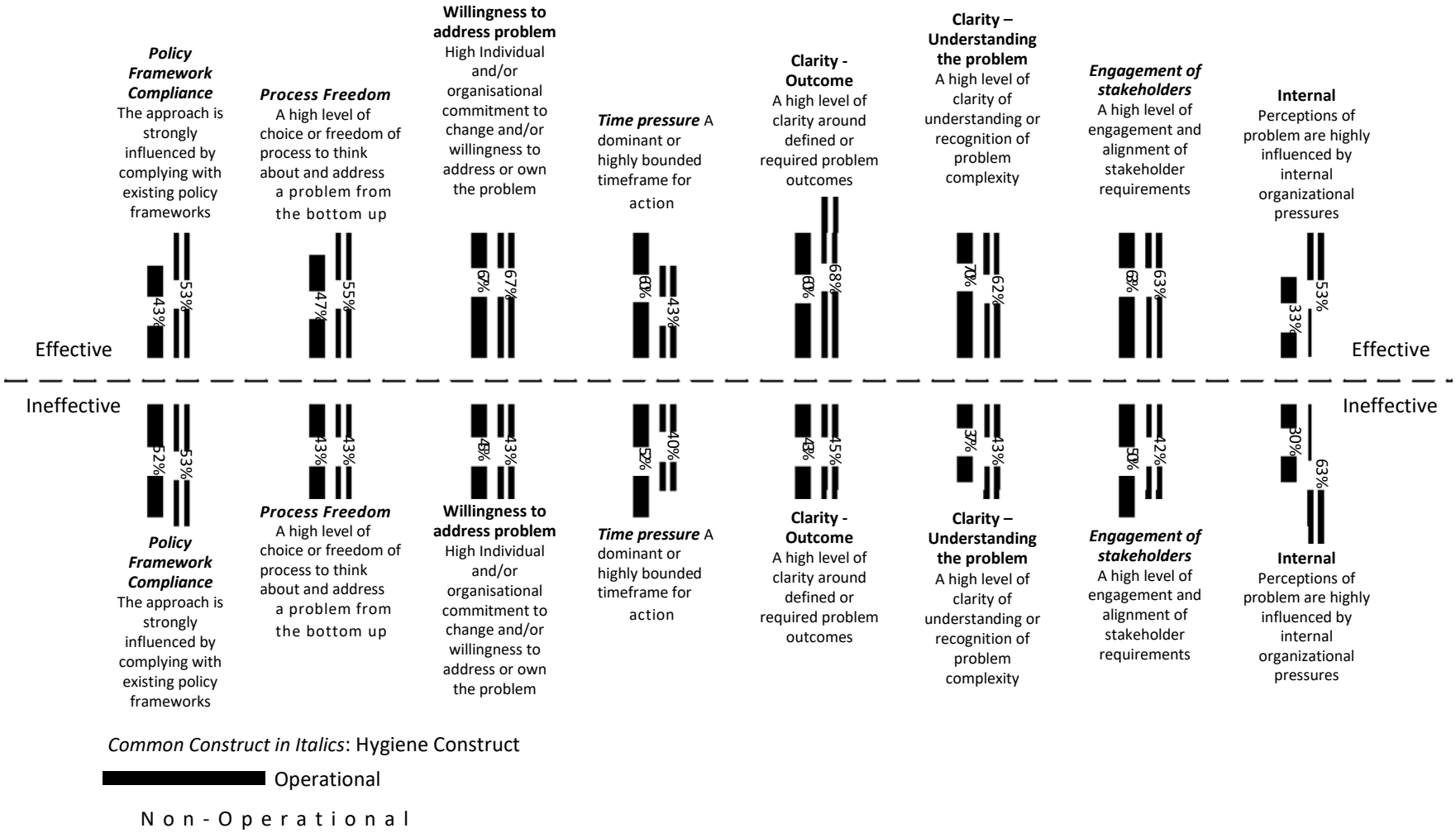


Figure 4-1: Average Scores of Common Constructs

The data were broken down by hierarchical cohort (junior, middle and senior groups) at **Appendix G-4**. It can be seen that there was little difference in perceptions of effectiveness and differentiation by normal or abnormal setting across the hierarchical levels. Whilst it is acknowledged that the sample size within each hierarchical group (15 junior, 11 middle and 12 senior) is insufficient for any strong conclusions to be drawn, it is nevertheless interesting that there was so little differentiation across the hierarchical groups. Taken together - high %UF scores; low ANV spread; and lack of differentiation across hierarchical groups - reveals 2 key insights. Firstly, the findings provide compelling evidence to suggest a strong institutionalized influence on the constructs shared amongst individual leaders in the case study organization. Secondly, whilst the findings suggest a high level of commonality of constructs across the participant group, they also suggest that individual leaders find it difficult to find discriminatory value in their salient constructs for complex problems. In summary, the similarity in individual leaders' constructs, combined with the limited discriminatory powers associated with these shared constructs suggests a dominant structurally influenced organizational dynamic whereby individual leaders' psychological constructs are aligned in strikingly similar ways. In other words, individual constructions of problem frames are influenced by dominant socially constructed problem frames consistent with broader organizational group norms. The next section will consider the differences between problem constructs in different environmental settings.

4.3.4.2 The differences between problem constructs in normal and abnormal settings

Unsurprisingly, complex problems in abnormal contexts (operationally deployed military environments) were significantly more associated with *time pressure* and *external pressures* than normal contexts. Abnormal contexts were associated with problems that had shorter timeframes for action and increased external pressures to deal with a problem beyond organizational boundaries, as described in the following illustrative quotes: *"Actually it was a reaction to an event, if that makes sense? So that's time limited."* (P22-3)*; "Where it's attracting external scrutiny, media attention. Where it's, where it's an issue that's in the shop window."* (P-26-6). This aligns the types of complex problems

experienced in an abnormal (operational) context with ‘disruptive events’ (Turner et al., 2020) that are perceived to require time-sensitive, purposeful actions to address them effectively. Examination of the qualitative data provides examples of time pressure associated with both positive and negative manifestations of addressing complex problems. For some of the problems perceived to have been effectively addressed, time pressure is associated with a productive tension that acts as a positive catalyst in line with Heifetz’s assertion that, “Urgency, well framed, promotes adaptive work.” (1994, p.116). One respondent remarked, *"The outcomes of [problems] A and C were tangible, time-bound, you know, and deliverable in terms of measure of effects."* (P-32-1*).* However, many of the problem examples cited from an abnormal context – from both effectively and ineffectively addressed categories - describe time pressure in a way that effectively reframes the problem as crisis, thus, privileging and legitimising time-sensitive decision making above all else (see Grint, 2005; 2010b), *“[Problem] C and A are time bound. A decision needs to be made.”* (P-13-4); *"...it's the pressures bearing down on these decision makers to say, you've got to do something."* (P-02-3)

Regardless of how effectively the problem was perceived to have been addressed, the data reveal that complex problems addressed in an abnormal context were perceived to be more strongly associated with external rather than internal influences, for example, *"...external factors on the army were very apparent in how...the Army as an institution reacted..."* (P-23-3). Abnormal contexts – operationally deployed military environments – are therefore strongly associated with influences beyond the boundaries of the organization, *"And my sense is that no one really knew what they were getting into, why they wanted to do really do it. It just felt like the right thing to do and politically it felt right, but no real understanding of with what you're going to do it with."* (P-03). External influences were considered to be associated almost equally strongly with perceived effective and ineffectively addressed problems, demonstrating that external influences are not associated with effectiveness per se. Whilst the data do not explain the nuances associated with effective external influences, it is noteworthy that abnormal contexts are so strongly associated with influences beyond organizational boundaries.

Contrastingly, and perhaps counter-intuitively, the findings vary markedly in a normal context, with the data showing that internally bounded complex problems were associated strongly with ineffectiveness, "*I don't think organizationally, we feel there's enough of a problem to do anything about it*." (P-10-2). A close analysis of the qualitative data in relation to this common construct category reveals a strong association with external pressure or scrutiny providing the catalyst for action and an unavoidable momentum to "fix the problem" (Bundy et al., 2017). The following illustrative quotes highlight this issue, *"External scrutiny influenced resolution or lack thereof."* (P-08-4); *"So this is external, slash political pressure to act."* (P-14-5). This finding offers an interesting insight, revealing where the organization is most structurally influenced and where agency is most constrained in terms of developing adaptive practices - where the problem is in a normal context and highly internally bounded. It would appear that without an external catalyst for action, the enduring, intractable complex problems faced in a normal organizational context generate highly constraining influences on agency which are likely to block the development of new or novel approaches. In summary, time bounded and externally driven influences, manifesting as a pressure to act and do something appear to be much stronger in an abnormal context, with time pressure, in particular, positively linked to effectiveness. In a normal context, an internally bounded problem appears to be associated with constraining structural influences that inhibit the organization's ability to respond in ways that are perceived to be effective.

4.3.4.3 The conflict between compliance and freedom in shaping action to address complex problems

The common construct categories relating to organizational frameworks and processes for addressing problems reveal an inherent tension between adherence to *policy framework compliance* and *process freedoms* in individuals' constructions linked to the effectiveness of organizational responses. Respondents commonly associated rigid rules with ineffectiveness, *"...constrains the application of the process. Rigid rules constraining the application of the process and solution."* (P-03-4). However, respondents also commonly associated policy frameworks with effectiveness, *"...all three of them have a policy dictated by the army; in two of the occasions the policy was*

followed...they were followed to the letter." (P-15-3). It is noteworthy that in regard to both of these constructs, there are only minor indications in the data that either the construct or construct pole is perceived to be more effective or ineffective. In an abnormal context, effectiveness is slightly more associated with a lack of compliance, *"[Problem] F sought to think of the problem and the solution through innovative lenses."* (P-39-2); whereas in a normal context, effectiveness is slightly more associated with process freedoms, "*It was still done within a process, but it incorporated a new aspect in how you applied it*". (P-08-7).

Whilst acknowledging the relatively weak association between perceived effectiveness and freedom from existing policy frameworks (in abnormal contexts), and perceived effectiveness and process freedoms (in normal contexts), the findings nevertheless do provide tentative evidence of a dynamic consistent with descriptions of adaptive practices (Uhl-Bien and Marion, 2009) where novel approaches are employed to address complex problems (Grint 2010b; Head and Alford, 2015; Heifetz et al., 2009). However, the modest level of alignment in the findings suggests that this adaptive dynamic is far from an embedded norm, with dominant structural influences more commonly aligning with traditional policy and process compliant activity. The contrasting perceptions around compliance and process freedoms can be seen in the following quotes; the first associating policy compliance with effectiveness, and the second associating the need to find new ways of doing things with effectiveness: *"This is about the approach that we take... there's a particular set of variables...we have, we have guidance and things on there, we have law."* (P-17-3) *"...people were willing to do something outside of the box that made them and others feel really uncomfortable."* (P-08-7).

In summary, whilst the contextual detail that shapes action is not revealed in the findings, the common construct categories of *Policy Framework Compliance* and *Process Freedoms* reveal an inherent tension in leaders' minds about the balance between compliance and freedom in relation to addressing complex problems. The findings cannot reveal the specific conflicting influences on individual leaders - Should rules and procedures be followed or not? Do 'new' rules need to be defined to address complex or novel problems or not? - nevertheless, the findings do provide evidence that leaders are

grappling with issues relating to the requirement for novel or adaptive approaches to problems.

4.3.4.4 The perceived effectiveness of organizational responses to complex problems

Four of the eight common construct categories stood out as being significantly more associated with the perceived effectiveness of organizational responses to complex problems in both normal and abnormal contexts. *Willingness to address, clarity of outcome, clarity of understanding problem* and *engagement of stakeholders* score highly and show the greatest average score differentiation between problems perceived to have been effectively rather than ineffectively addressed. Illustrative examples of respondents' descriptions of these constructs are as follows:

"...within both problems A and C I saw a willingness to change." (Willingness P-36-1); *"I think the problem was framed in a way that suggested it could be one hundred percent achieved."* (Clarity of outcome P-06-4); "*So A and C are different from E. A and C both spent a lot of time identifying the problem in the first place. And describing the problem in the first place. E jumped to a solution.*" (Clarity of understanding P-39-1); and *"...what makes these similar is the requirement, dominating requirement for very careful and nuanced stakeholder engagement."* (Engagement of stakeholders P-37-1).

These finding suggest a mixed picture in terms of the organization's potential for promoting adaptive responses. For example, the construct category *willingness to address* a problem is clearly important to leaders across the organization. Combining a *willingness to address* with establishing a *clarity of outcome* that resists a dominant mechanistic process may unlock the potential for adaptive responses. For example, one respondent noted, "*Clear targets, a clear end state, a clearly defined end state that's commonly understood, which then drives mission command and the ability to unlock complexity*." (P-27-5). Mission command is the British Army's command philosophy and describes an approach that empowers junior decision makers and promotes initiative alongside freedom of action (ADP Land Operations, pp. 6-4). This freedom of action, which is associated with both motivated individuals and a clarity of purpose, suggests the potential

for adaptive practices that produce new or novel approaches, consistent with descriptions in literature (see Daviter, 2017; Grint, 2005; 2010b; Head and Alford, 2015; Heifetz, 1994; Heifetz et al., 2009).

However, consideration of all four common construct categories associated with effectiveness suggests the potential for less adaptive responses. When *willingness to address* a problem is considered alongside *clarity of outcome*, *clarity of understanding problem* and *engagement of stakeholders* it is apparent that a powerful mix of willingness, clarity and agreement stand out as the key perceived effectiveness criteria. Considered holistically, this suggests an alignment with more technical and mechanistic organizational responses to complex problems (see Grint, 2010b; Heifetz et at 2009; Uhl-Bien and Marion, 2009); particularly when a legitimized perception for the need for time-critical action dominates the problem frame (Grint, 2005; 2010b). For example, leaders aligning *clarity of understanding problem* and *clarity of outcome* with effectiveness suggests a desire to be in control of the problem-solution link. As one leader stated, "*...it's an issue that needs to be resolved. And there's only one way that we know of, or I know of that can resolve it*." (P-12-3). Literature suggests that adaptive responses to complex problems requires an acceptance of ambiguity and a lack of mechanistic control over linear processes rather than an elegant alignment of willingness, clarity and alignment. (Grint, 2005; Head and Alford, 2015; Heifetz et al., 2009; Uhl-Bien and Marion, 2009).

In summary, the four common construct categories associated with effectiveness in this study would appear to support the potential for adaptive responses to complex organizational problems. The findings also suggest the existence of an institutionalized organizational response to complex problems that is more aligned with mechanistic processes and a dominant problem frame (both in terms of what the problem is and in terms of desired outcome). The discussion section that follows will pick up on the key themes identified in the analysis of the findings.

4.4 Discussion

Paying attention to the embedded nature of individual leaders' constructs for addressing complex problems enabled the researcher to explore the structural influences and the perceived effectiveness of meso (organizational) level responses in promoting adaptive practices. The repertory grid study helps to elucidate individuals' context-specific reproduction and reconstruction of deeply embedded mental schema, revealing a constrained agency at the individual level.

In seeking to connect Kelly's (1955) constructivist PCT with broader, structural influences, it is helpful to consider the corollaries on which PCT is based. Several of the PCT corollaries recognise explicitly that individuals' mental schema influence and are influenced by social interactions with other actors. For example, the **sociality corollary (Kelly, 1955)** suggests that people play a role in others' construction processes through the role relationships they form and through their ability to understand other people's constructs. A focus on this social process within PCT indicates a recognition of the normative influences that impact on people's individual cognitive processes of meaning making. The **commonality corollary (Kelly, 1955)** states that people are similar in that they construe similar meaning in events rather than they encounter the same events. A dominant and recognisable organizational culture therefore has the potential to influence individuals such that they construe events similarly. Despite choosing examples of complex problems most salient to their personal experiences, respondents appeared to construe meaning, and to present constructs in relation to complex problems in strikingly similar ways. Lastly, the **range corollary (Kelly, 1955)** states that a construct has a limited "range of convenience" in terms of its perceived usefulness to the person using it.

Taken together, these corollaries suggest that the notably narrow ANV spread is likely to have been as a result of respondents grouping complex and less complex; broadly successful and broadly unsuccessful problems within the same range, using similar constructs. This narrow range of convenience therefore implies that in the minds of respondents, 'complex' problems are insufficiently distinguished from other types of problems (for example, crises and complicated problems), and effectiveness criteria are

insufficiently distinct from ineffectiveness criteria to create a more distinct range of constructs and element scores within constructs.

Framing literature provides several powerful insights into why dominant structurally influenced individual constructs may constrain adaptive organizational responses. Cornelissen and Werner (2014) provide one such insight, stating "...the overreliance on a pre-existing cognitive frame has been suggested as an important source of failure in the context of novel, unprecedented, or changing circumstances that require inferential flexibility and alternative conceptualizations." (p.190). Henisz and Zelner (2005) offer some explanatory detail in support of this view, arguing that individuals judge emerging institutions in the context of reference points with established legitimacy. When individuals are forced to make choices or judgements involving both established and emerging institutions it is generally harder for individuals to match the emerging institutional influence with existing benchmarks and, without the same level of "cognitive legitimacy" (p.362), actors tend to rely on existing benchmarks.

Despite the mantra of mission command that under certain contextual conditions may empower local decision making and initiative alongside freedom of action, the data reveal that the common construct categories – representing the most important categories of constructs held collectively across the respondent group - evidence a common, institutionalized response to complex problems that are not meaningfully differentiated from other problem types. This lack of differentiation suggests organizational responses that are likely to conform with institutionally familiar and legitimate responses (Pazzaglia et al., 2018) that involve either planned, mechanistic; or time-critical collective action to address an immediate deadline. The strong association of external pressure with complex problems in abnormal contexts provides further evidence of a legitimizing forcing function for action (Hällgren et al, 2018), although external pressure appears to be equally significant in problems perceived to have been both effectively and ineffectively addressed.

Thus, the findings are consistent with descriptions of embedded agents, where individual constructs have some individual and idiosyncratic elements alongside dominant structural

elements that typically lead to shared conceptions (Berente and Yoo, 2012; Purdy et al, 2019). Cornelissen et al. (2014, p.699) examine how individuals, as part of a collective group commit to a single, dominant frame, supporting the notion that institutional forces provide strong frames of reference that encourage a commitment to the collectively familiar. Pazzaglia et al. (2018, p.427) provides support for this view in their examination of the banking crisis in Ireland, finding that, "The reinforcement of a shared frame dulls the emerging cues of changing market conditions and weakens perception of the risks...". This recent work has explored framing to understand the constitutive relationship between processes of institutionalization and the agency through which actors can influence institutions (Purdy et al., 2019). Described in this way, examining the social construction of problems and the emergence of dominant frames (Murphy et al., 2020) moves us beyond communicative descriptions of sensegiving described by Rhee and Fiss (2014) and also broadens beyond dominant cognitive schema based conceptions of individual sensemaking (see Cornelissen and Werner, 2014; D'Andreta et al., 2016). In doing so, framing literature is able to incorporate the full range of regulative, normative and cultural-cognitive institutional influences on individual actors (Scott, 1995; see also Gray et al., 2015; Ocasio et al., 2015; and Purdy et al., 2019).

Complex organizational level problems rarely conform to neat category labels, often containing elements requiring time-critical responses, interspersed with elements suited to reducible processes. Nevertheless, complex problems, or at least problems perceived to be complex, pose particular challenges for leaders (see Head and Alford, 2015; Heifetz, 1994; Heifetz et al, 2009). The literature suggests that effective organizational responses to these challenges require the interplay of both administrative, or technical practices (Andersson and Törnberg, 2017; Grint, 2010b; Rittel and Webber, 1973; Uhl Bien et al., 2007) and adaptive practices (Heifetz, 1994; Grint, 2010b; Rittel and Webber, 1973; Uhl-Bien and Arena, 2018; Uhl-Bien and Marion, 2009) to respond effectively to long-term, complex, intractable or wicked challenges. Adaptive organizational responses involve decentralised control for decision making (Heifetz et al., 2009; Roberts, 1990), acceptance of messy ambiguity (Head and Alford, 2015), the ability to adjust and change (Folke et al., 2010) in generating innovative new pathways (Gunderson and Holling,

2002; Westley et al., 2011) and the "amplification" of new problem frames (Purdy et al., 2019, p,411).

Given the messy ambiguity (Head and Alford, 2015) associated with addressing complex problems with innovative new pathways (Westley et al., 2011), it is somewhat surprising that the findings show such elegant common construct categories associated with effectiveness – actor willingness; clarity of understanding the problem; clarity of outcome; and engagement of stakeholders. These construct categories align closely with the DAC ontology (Drath et al., 2008), providing support to the assertion that leaders' conceptions of leadership outcomes are closely associated with the DAC framework's categories of purposeful endeavour. However, the results cannot reveal whether these common construct categories necessarily align with adaptive practices since the evidence only tells us that individual leaders associate these construct categories most strongly with effective action, not what constitutes effective action. These positive, purposeful and DAC aligned key construct categories may well therefore be aligned with traditional, heroic conceptions of effective leader actions (see Northouse, 2016; Yukl, 2013) rather than emergent and adaptive ones (see Denis et al., 2012; Hazy and Uhl-Bien, 2015).

It is also surprising that power, influence and authority do not appear either in their own right, or as identifiable aspects within any of the common construct categories in our study of a notably hierarchical organization. Tourish et al. (2009, pp 361) describes "coercive persuasion" manifesting as internalised, subconscious attachment to dominant cultural norms, noting that traditionally hierarchical organizations are particularly susceptible to these conforming influences. Future research that pays attention to exploring the largely subconscious influence of coercive persuasion would enhance further our understanding of the inherent tensions experienced by embedded agents within organizational settings. This study suggests that left unchallenged, the dominant problem frame tends towards the familiar (Cornelissen et al., 2014) and, over time, influences collective perceptions of effective actions (Murphy et al., 2020) that suggest a strong cultural-cognitive legitimacy (Scott, 1995) for either a mechanistic and procedural, or crises style response to problems, regardless of problem context.

4.5 Conclusions

The repertory grid study explores the way experienced individual leaders think about the most challenging and complex organizational problems they have faced, the influence of macro-level structural influences and the perceived effectiveness of meso-level organizational responses. RGT allows us not only to understand how individuals construe their context but also enables us to gain broad insights into the institutionalized problem frame (Murphy et al., 2020). The combination of notably high %UF and narrow spread of ANV within the common construct categories suggests that, to a large extent, individuals' constructs are shared and influenced by institutional forces, rather than individual and influenced by idiosyncratic factors. The study therefore contributes to a deeper understanding of adaptive responses by revealing the extent to which individual leaders' constructs, in relation to addressing complex problems, are embedded in institutionalized norms of problem solving that are likely to inhibit the amplification of new and innovative problem frames.

Future research aimed at unpacking the particular contextual factors that enable or constrain adaptive responses at the organizational level, would benefit from a multi-methods approach that enables the results from RGT interviews to be combined with other qualitative methods (for example ethnographic study or semi-structured interview). Such an approach would help to explain the contextual nuances that account for how and under what conditions traditional institutionalized responses can be overcome. In particular, ethnographic or semi-structured qualitative research would enable power and hierarchical influences to be explored.

REFERENCES

Alvesson, M., & Spicer, A. (2012). Critical leadership studies: The case for critical performativity. *Human Relations*, *65*(3), 367–390.

Andersson, C., & Törnberg, P. (2017). Wickedness and the anatomy of complexity. *Futures*, *95*(September 2017), 118–138.

Augier, M., Shariq, S. Z., & Thanning Vendelø, M. (2001). Understanding context: its emergence, transformation and role in tacit knowledge sharing. *Journal of Knowledge Management*, *5*(2), 125–137.

Bennis, W. (2007). The challenges of leadership in the modern world: Introduction to the special issue. *American Psychologist*, *62*(1), 2–5.

Berente, N., & Yoo, Y. (2012). Institutional Contradictions and Loose Coupling: Postimplementation of NASA's Enterprise Information System. *Information Systems Research*, *23*(2), 376–396.

Bryman, A., & Bell, E. (2015). *Business Research Methods. Methods. 4th edition*.

Buchanan, D. A., & Denyer, D. (2013). Researching tomorrow's crisis: Methodological innovations and wider implications. *International Journal of Management Reviews*, *15*(2), 205–224.

Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). *Crises and Crisis Management: Integration, Interpretation, and Research Development*. *Journal of Management* (Vol. 43).

Collinson, D., Bryman, A., Collinson, D., & Grint, K. (2011). *The Sage handbook of leadership*. *Handbook of leadership*. London: Sage Publications.

Collinson, D., Smolović Jones, O. and Grint, K. (2017) '"No More Heroes": Critical Perspectives on Leadership Romanticism', *Organization Studies*, p. 1-23.

Cornelissen, J. P., Mantere, S., & Vaara, E. (2014). The contraction of meaning: The combined effect of communication, emotions, and materiality on sensemaking in the stockwell shooting. *Journal of Management Studies*, *51*(5), 699–736.

Cornelissen, J. P., & Werner, M. D. (2014). Putting framing in perspective: A review of framing and frame analysis across the sensemaking, social movements and institutional literatures. *Academy of Management Annals*, *8*(1), 181–235.

Crevani, L., Lindgren, M., & Packendorff, J. (2010). Leadership, not leaders: On the study of leadership as practices and interaction. *Scandinavian Journal of Management*, *26*(1), 77–86.

Currie, G., Lockett, A., & Suhomlinova, O. (2009a). Leadership and institutional change in the public sector: The case of secondary schools in England. *The Leadership Quarterly*, *20*(5), 664–679.

Currie, G., Lockett, A., & Suhomlinova, O. (2009b). The institutionalization of distributed leadership: A "catch-22" in English public services. *Human Relations*, *62*(11), 1735–1761.

D'Andreta, D., Marabelli, M., Newell, S., Scarbrough, H., & Swan, J. (2016). Dominant Cognitive Frames and the Innovative Power of Social Networks. *Organization Studies*, *37*(3), 293–321.

Daviter, F. (2017). Coping, taming or solving: alternative approaches to the governance of wicked problems. *Policy Studies*, *38*(6), 571–588.

Denis, J. L., Langley, A., & Sergi, V. (2012). Leadership in the Plural. *Academy of Management Annals*, *6*(1), 211–283.

Director Leadership. Army Leadership Doctrine (2016).

Drath, W. H., McCauley, C. D., Palus, C. J., Van Velsor, E., O'Connor, P. M. G., & McGuire, J. B. (2008). Direction, alignment, commitment: Toward a more integrative ontology of leadership. *Leadership Quarterly*, *19*(6), 635–653.

Folke, C., S.R. Carpenter, B.H. Walker, M. Scheffer, F.S. Chapin III, and J. Rockström. 2010. Resilience thinking: integrating resilience, adaptability and transformability. *Ecology and Society* 15: 20.

Friedrich, T L., Vessey, W., Schuelke, M.J., Ruark, G.A., and Mumford, M.D. (2009) 'A framework for understanding collettive leadership: The selettive utilization of leader and team expertise with networks', *The Leadership Quarterly*, 20(6), pp. 933–958.

Goffin, K., & Koners, U. (2011). Tacit knowledge, lessons learnt, and new product development. *Journal of Product Innovation Management*, *28*(2), 300–318.

Goffin, K, Lemke, F., & Szwejczewski, M. (2006). An exploratory study of 'close' supplier–manufacturer relationships. *Journal of Operations Management*, *24*(2), 189–209.

Goffin, K., Raja, J.Z., Claes, B., Szwejczewski, M. and Martinez, V. (2012). Rigor in qualitative supply chain management research. *International Journal of Physical Distribution & Logistics Management, 42(8/9), 804-827.*

Gordon, R. (2011). Leadership and Power. In D. Collinson, A. Bryman, K. Grint, J. Brad, & M. Uhl-Bien (Eds.), *The SAGE Handbook of Leadership* (pp. 195–202). London: Sage Publications.

Gray, B., Purdy, J. M., & Ansari, S. (Shaz). (2015). From Interactions to Institutions: Microprocesses of Framing and Mechanisms for the Structuring of Institutional Fields. *Academy of Management Review*, *40*(1), 115–143.

Grint, K. (2005). Problems, problems, problems: The social construction of 'leadership.' *Human Relations*, *58*(11), 1467–1494.

Grint, K. (2010a). *Leadership: A Very Short Introduction*. Oxford University Press.

Grint, K. (2010b). The cuckoo clock syndrome: Addicted to command, allergic to leadership. *European Management Journal*, *28*(4), 306–313.

Gunderson, L., & Holling, C. (2002). Panarchy Synopsis: Understanding Transformations in Human and Natural Systems.

Hällgren, M., Rouleau, L., & de Rond, M. (2018). A Matter of Life or Death: How Extreme Context Research Matters for Management and Organization Studies. *Academy of Management Annals*, *12*(1), 111–153.

Head, B. W., & Alford, J. (2015). Wicked Problems. *Administration & Society*, *47*(6), 711–739.

Heifetz, R. A. (1994). *Leadership without easy answers*. London: Harvard University Press.

Heifetz, R. A., Linsky, M., & Grashow, A. (2009). Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World. *Harvard Business School Press*

Horne III, J. and Orr, J. (*1998*) Assessing Behaviors That Create Resilient Organizations. *Employment Relations Today*, 24, 29-39.

Jankowicz, D. (2004). *The Easy Guide to Repertory Grids*. Chichester: John Wiley and Sons, Limited.

Kelly, G. A. (1955). *The Psychology of Personal Constructs*. New York: Norton.

Land Warfare Development Centre. *Army Doctrine Publication: Land Operations*. Army Doctrine Publication AC 71940.

Lemke, F., Clark, M., & Wilson, H. (2011). Customer experience quality: an exploration in business and consumer contexts using repertory grid technique. *Journal of the Academy of Marketing Science*, *39*(6), 846–869.

Lichtenstein, B. B., & Plowman, D. A. (2009). The leadership of emergence: A complex systems leadership theory of emergence at successive organizational levels. *Leadership Quarterly*, *20*(4), 617–630.

Lichtenstein, B. B., Uhl-bien, M., Marion, R., Seers, A., Douglas, J., & Schreiber, C. (2006). on Leading in Complex Adaptive Systems. *Emergence: Complexity and Organization*, *8*(4), 2–12.

Lemke, F., Goffin, K., & Szwejczewski, M. (2003). Investigating the meaning of Supplier-Manufacturer Relationships - an Exploratory Study. *International Journal of Physical Distribution and Logistics Management*, *8*(1), 12–35.

Meyer, A.D. (1982). Adapting to Environmental Jolts. Administrative Science Quarterly, 27(4), pp. 515-537.

Micheli, P., Jaina, J., Goffin, K., Lemke, F., & Verganti, R. (2012). Perceptions of industrial design: The "means" and the "ends." *Journal of Product Innovation Management*, *29*(5).

Miles, M. B., & Huberman, M. A. (1994). *Qualitative Data Analysis* (second). Thousand Oaks: Sage Publications.

Murphy, J., Denyer, D., & Pettigrew, A. (2020). The Role of Framing Mechanisms in Explaining System-Wide Change: The Case of the Northern Ireland Conflict and Peace Process. *British Journal of Management*.

Northouse, P. (2016). *Leadership* (7th ed.). London: Sage Publications.

Ocasio, W., Loewenstein, J., & Nigam, A. (2015). How streams of communication reproduce and change institutional logics: The role of categories. *Academy of Management Review*, *40*(1), 28–48.

Pazzaglia, F., Farrell, M., Sonpar, K., & Martin de Holan, P. (2018). Keeping up with the Joneses: Industry rivalry, commitment to frames and sensemaking failures. *Human Relations*, *71*(3), 427–455.

Purdy, J., Ansari, S., & Gray, B. (2019). Are Logics Enough? Framing as an Alternative Tool for Understanding Institutional Meaning Making. *Journal of Management Inquiry*, *28*(4), 409–419.

Raaijmakers, A. G. M., Vermeulen, P. A. M., Meeus, M. T. H., & Zietsma, C. (2015). I Need Time! Exploring Pathways to Compliance under Institutional Complexity. *Academy of Management Journal*, *58*(1), 85–110.

Raja, J. Z., Bourne, D., Goffin, K., Çakkol, M., & Martinez, V. (2013). Achieving customer satisfaction through integrated products and services: An exploratory study. *Journal of Product Innovation Management*, *30*(6), 1128–1144.

Rhee, E. Y., & Fiss, P. C. (2014). Framing Controversial Actions: Regulatory Focus, Source Credibility, and Stock Market Reaction to Poison Pill Adoption. *Academy of Management Journal*, *57*(6), 1734–1758.

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, *4*(2), 155–169.

Roberts, K. H. (1990). Some Characteristics of One Type of High Reliability Organization, California Management Review

Scott, R. W. (1995). *Institutions and Organizations.* London: Sage Publications

Shcheglova, M. (2009). *An Integrated Method to Assess Consumer Motivation in Difficult Market Niches: A Case of the Premium Car Segment in Russia*. *Analysis*.

Smith, K, W., Erez, M., Jarvenpaa, S., Lewis, M.W. and Tracey, P. (2017) 'Adding Complexity to Theories of Paradox, Tensions, and Dualities of Innovation and Change: Introduction to Organization Studies Special Issue on Paradox, Tensions, and Dualities of Innovation and Change', *Organization Studies*, 38(3–4), pp. 303–317.

Snowdon, D. J. and Boone, M. E. (2007). A Leader's Framework for Decision Making. *Harvard Business Review*

Tourish, D. (2014). Leadership, more or less? A processual, communication perspective on the role of agency in leadership theory. *Leadership*, *10*(1), 79–98.

Tourish, D. (2019) 'Is Complexity Leadership Theory Complex Enough? A critical appraisal, some modifications and suggestions for further research', *Organization Studies*, Vol. 40(2) 219-238.

Tourish, D., Collinson, D., & Barker, J. R. (2009). Manufacturing Conformity : Leadership Through Coercive Persuasion in Business Organisations. *M@n@gement*, *12*(5), 360–

Turner, N., Kutsch, E., Maylor, H., & Swart, J. (2020). Hits and (near) misses. Exploring managers' actions and their effects on localised resilience. *Long Range Planning*, 50(3), 1-17.

Uhl-Bien, M., & Arena, M. (2018). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. *Leadership Quarterly*, *29*(1), 89–104.

Uhl-Bien, M., & Marion, R. (2009). Complexity leadership in bureaucratic forms of organizing: A meso model. *Leadership Quarterly*, *20*(4), 631–650.

Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era. *Leadership Quarterly*, *18*(4),

Westley, F., Olsson, P., Folke, C., Homer-dixon, T., Vredenburg, H., Loorbach, D., ... van der Leeuw, S. (2011). Tipping Toward Sustainability: Emerging Pathways of Transformation. *Ambio*, *40*(7), 762–780.

Whittington, R., Pettigrew, A., Peck, S., Fenton, E., & Conyon, M. (1999). Change and Complementarities in the New Competitive Landscape: A European Panel Study, 1992–1996. *Organization Science*, *10*(5), 583–600.

Willmott, H. (1993). Strength Is Ignorance; Slavery Is Freedom: Managing Culture in Modern Organizations*. *Journal of Management Studies*, *30*(4), 515–552.

Yukl, G. (2013). *Leadership in Organizations*. *Leadership in Organizations* (8th ed.). Harlow: Pearson.

5 EMPIRICAL STUDY 2

Leaders' framing of complex problems: the everyday institutional work that enables and constrains adaptive responses in organizational settings

Abstract

Complex problems require new organizational responses since they are non-reducible and cannot be objectively solved with either linear planning or by assertive leader-led calls to action. The present study seeks to explore organizational responses in the face of complex problems and asks the question:

How and under what contextual conditions does leaders' framing of complex problems influence organizational responses over time?

The author uses framing to understand the constitutive relationship between processes of institutionalization and the agency through which leaders can influence institutions. The findings suggest that dominant institutional forces aligning with agentic preferences for leaders framing decisions around fixing problems manifest within seven key contextual categories that typically lead to blocking responses, preventing the emergence of adaptive practices. Evidence was found to support the potential for the emergence of adaptive practices, but only within a context of credible senior leader permission and support, suggesting that power and hierarchical influences are highly contextually relevant to organizational responses to complex problems.

5.1 Introduction

Organizations face exposure to competing and overlapping problems across different timeframes for action. For some, these problems are both increasingly frequent and complex (see Anderssen and Törnberg, 2018; Augier, 2001; Uhl-Bien, 2006; Uhl-Bien and Arena, 2018). Others challenge the prevailing narrative of increasing complexity citing twentieth century events that included two world wars, a great depression and a flu pandemic (see Tourish, 2019). Nevertheless, complex problems when they are encountered present particular challenges within an organizational context. Complex problems require new approaches since they are non-reducible and cannot be objectively solved with either linear planning or by assertive leader-led calls to immediate decisive action (Grint, 2005; 2010a; 2010b; Heifetz 1994; Heifetz et al., 2009; Uhl-Bien, 2007). This is a problem within an organizational context because dominant conceptions of leadership result in strong prescriptions for decisive and unambiguous direction by leaders (Alvesson and Spicer, 2012; Weber and Khademian, 2008). As a result, problems, however complex, tend to be framed in one of two ways; either as reducible problems with identified linear paths to solutions, or as crises where time criticality acts as a legitimizing forcing function for action (Grint, 2005; 2010b).

The focus of this empirical qualitative study is on understanding how and under what conditions micro-level (individual) framing processes relating to leaders becoming aware of and deciding on action to address complex problems, come to influence organizational responses over time. Recent advances in institution theory and framing literature has enabled more nuanced perspectives of macro-level structural and micro-level agentic influences on individual actions to be developed. Framing literature now offers an ideal lens through which to view the maintenance and transformation of institutions through the everyday activities of individuals (see Cornelissen et al., 2014; Purdy et al., 2019). Aligning with Purdy et al.'s, (2019) interactional view of framing, the present study uses a framing lens to elucidate how the everyday institutional activity of individual leaders influences organizational responses to complex problems over time. Interactional communication "...offers a powerful way to connect top-down and bottom-up processes of meaning making." (Purdy et al., 2019, p.410). The study therefore seeks to understand

in greater detail *how and under what contextual conditions leaders' framing of complex organizational problems typically leads to organizational responses that block the emergence of adaptive practices.*

This research is important because the dominant leadership paradigm within organizations conforms to a 'Tripod' (Bennis, 2007) consisting of leaders and followers, bound together in a relationship focused on the achievement of desired outcomes (see Collinson et al., 2011; Head and Alford, 2015; Northouse, 2016; Plowman et al., 2007; Yukl, 2013). This paradigm backgrounds structural influences, privileges the individual acts of leaders doing purposeful things to 'fix problems' (Bundy et al., 2017, Tourish, 2019) and empowers leaders both to set the course and plot the route to the desired destination. Whilst this dominant paradigm is somewhat suited to an organizational dynamic seeking an efficient means to organise work around objectively reducible tasks and also to the time critical coordinated actions associated with crises, it seems poorly aligned to purposeful organizational activity to address complex problems.

Recent, plural theories of leadership have challenged the dominant 'heroic' leadership paradigm (Lichtenstein et al., 2006; Lichtenstein and Plowman, 2009; Murphy et al., 2017; Raelin, 2011; 2016; Uhl-Bien and Marion, 2009; Uhl-Bien et al., 2007; Uhl-Bien and Arena, 2018) focusing on the emergence of leadership in the space between individuals, but in doing so these theories have adopted utopian perspectives of unhindered collective agency, and almost entirely ignored the influence of power and hierarchy within organizational structures (see Collinson and Tourish, 2015; Tourish, 2019).

Before describing the empirical research in detail, a review of relevant literature will set the context for the research project. The review will first consider traditional and more recent, plural theories of leadership, paying attention to the key concerns highlighted in critical leadership studies. The review will then consider literature addressing problems and the challenge associated with facing multiple problem types within organizational contexts. It will conclude with an introduction to recent institutional and framing literature that present new possibilities to study the activity of individuals and to use the

lens of framing to deepen comprehension of the construction, maintenance and change of organizations within institutions that is supported in literature (see Purdy et al., 2019, p.410) but, as yet, rarely empirically researched.

5.2 Theoretical Background

A growing and diverse body of literature is developing around the central idea that organizations need to manage problems of an increasingly complex nature (see Anderssen and Törnberg, 2018; Augier, 2001) with 'adaptive' practices (Hazy and Uhl-Bien, 2015; Heifetz, 1994; Heifetz et al., 2009; Lichtenstein et al., 2006; Lichtenstein and Plowman, 2009; Marion and Uhl-Bien, 2001; Murphy et al., 2017; Uhl-Bien and Marion, 2009; Uhl-Bien et al., 2007). The review will consider literature in three sections: first, literature covering traditional and more recent, plural theories of leadership; second, a broad overview of literature addressing problems; and third, framing literature as a lens through which to view the everyday institutional activity of individual leaders.

5.2.1 Leadership literature

Whilst an adaptive response to complex problems is relevant across levels - from the societal down to individual level - leadership literature typically focuses its attention on the individual leader level. Traditional leadership theory accounts for adaptive responses within a paradigm that leaves the agentic focus largely unchallenged (for example, the considerable body of literature on transformational leadership: Bass, 1990). Leaders sit at the top of the leadership "tripod" (Bennis, 2007) and are those who can identify problems and engage in effective decision making (Friedrich et al., 2009). From their privileged position, leaders embrace the challenge of increasing complexity, to frame the problem and pursue a vision (Head and Alford, 2015). Heifetz et al. (2009, p.73/4) assert that when facing adaptive challenges, traditional leadership literature falls short in its explanatory potential since, “Because the problem lies in the people, the solution lies in them too.”. Traditional leadership literature also falls short of fully explaining variability of response, backgrounding structural influences and conceptualising context as something to be understood and controlled by individual, heroic leaders rather than as the constitutive fabric that shapes and is shaped by structurally embedded actors over time (see Berente and Yoo, 2012).

New theories of leadership challenge these traditional conceptions, drawing distinctions between an entitative, individual leader focus; and collective, processual leadership. In their comprehensive review, Denis et al. (2012) offer a 4-category typology (leadership shared in teams; pooling leadership at the top of the hierarchy; spreading leadership across boundaries; and producing leadership through interactions). Their categories move progressively further away from entitative conceptions, towards leadership seen as something that happens “in the space between” individuals (Lichtenstein et al., 2006, p.2) and where leadership is seen as a collective rather than individual leader responsibility (Uhl-Bien, 2006). These new theories move conceptions of leadership beyond skilled, heroic individuals towards a concept of emergence through dynamic interactions that align conceptually with the type of adaptive response required when facing a complex problem (Lichtenstein et al., 2006; Lichtenstein and Plowman, 2009; Murphy et al., 2017; Uhl-Bien and Marion, 2009.). The considerable body of literature around Complexity Leadership Theory (CLT) is at the forefront of this work (see Hazy and Uhl-Bien, 2015; Lichtenstein et al., 2006; Marion and Uhl-Bien, 2001; Plowman et al., 2007; Uhl-Bien and Marion, 2009). Whilst some plural leadership literature, and CLT in particular, claim to describe leadership processes embedded in context (Uhl-Bien and Marion, 2009, p. 632) others have criticised these new theories for adopting a utopian view of unhindered collective agency that, as with traditional, heroic entity-based theories, ignore structural influences (see Alvesson, 2017; Alvesson and Spicer, 2012).

Drath et al.'s (2008) outcome-based tripod of Direction, Alignment and Commitment (DAC) offers a way to consider the leadership dynamic in an inclusive and integrative way, allowing for both entitative and processual conceptions of leadership to co-habit. These inclusive aspirations, focusing attention on the achievement of purposeful activity, have nevertheless received criticism for ignoring power (Collinson et al., 2017), privileging linear, positive action (Crevani et al., 2010) and for expanding conceptions of leadership activity so broadly so as to render the term almost meaningless (Alvesson and Spicer, 2012).

The lack of attention paid to power in leadership literature is a prominent theme (Alvesson & Spicer, 2012; Collinson, 2005; Collinson and Tourish, 2015; Denis et al., 2012;

Gordon, 2011; Tourish, 2019). Alvesson and Spicer (2012) assert that recent theories of plural leadership have made matters worse by broadening conceptions of leadership even further, without meaningfully advancing research into the impact of power and domination within the leadership dynamic. Consequently, new, plural theories of leadership appear to fall short in their explanations of how and under what contextual conditions leadership processes emerge to produce adaptive responses to complex problems. A core of scholars have developed critical approaches to leadership (for example, Alvesson and Spicer, 2012; Collinson, 2005; 2014; Grint, 2005; Tourish, 2014; Tourish, 2019; and Willmott, 1993) that seek to examine power and politics within the leadership dynamic and relate it to institutional context. Paying attention to the role of power within an organization when considering complex problems is important, "...because the nature of the problem demands that followers have to want to help." (Grint, 2010b, p.308).

5.2.2 Problems literature

Problems rarely conform to neat category labels. Problems are often "entangled" (Murphy et al., 2017) with organizations facing simultaneous, overlapping and sometimes contradictory challenges. A consistent theme in literature addressing complex organizational problems is that, in such circumstances, approaching the problems as "both/and" dualities rather than "either/or" dualisms is desirable (Murphy et al., 2017, p.701; Smith et al., 2017). Some organizational problems are likely to be familiar, reducible and objectively solvable, and somewhat suited to traditional bureaucratic responses. Others will be non-reducible, demanding new approaches and new learning (Heifetz, 1994; Heifetz et al., 2009). In addition to leadership theory, several other literature domains address the issue of entangled or contradictory problems within organizational contexts. For example, **Paradox** literature describes attempts to manage the contradictions between two poles (see Calabretta et al., 2017, p.368). Smith et al. (2017, p.304) assert that theories of paradox offer much promise for leaders facing tension as a result of complexity. **Ambidexterity** literature effectively adopts a paradox lens (Smith and Lewis, 2011, p.388). At the core of ambidexterity literature is tension, with the central premise being that, practiced effectively, an ambidextrous response creates

positive conditions for action out of conflicting forces – enabling organizations to explore and exploit simultaneously (see Uhl-Bien and Arena, 2018, p.90; see also Greenwood et al., 2011; Smets et al., 2015; Turner et al., 2013). Greenwood et al. (2011) see many similarities with **institutional complexity** but highlight a fundamental difference for organizations; institutional complexity places attempts to achieve external legitimacy at its core; whereas ambidexterity seeks to achieve improved internal capability.

Notwithstanding the messy and entangled nature of problems within organizational settings, the theoretical focus of the present study is on non-reducible problems with complexity running through them since these are the problems that demand new approaches. There is no universally agreed typology of problems. Whilst complex problems are associated with ambiguity and divergent or conflicting demands (Head and Alford, 2015, p.716), category labels such as “wicked problem” (Rittel and Webber, 1973; see also Grint, 2005); and “Adaptive Challenge” (Heifetz, 1994; Heifetz et al., 2009) are also commonly used. Wicked problems are often associated with macro level intractable issues that cannot ever be definitively solved (Rittel and Webber, 1973), whereas adaptive challenges are typically framed within organizational or other contextual boundaries and are often associated with problems that can be overcome or solved. (Heifetz, 1994; Heifetz et al., 2009). However, complex problems, wicked problems and adaptive challenges are also commonly treated as essentially the same phenomenon in literature (Head and Alford, 2015, p.729; see also Crowley and Head, 2017; Daviter, 2017; Lagreid and Rykkja, 2015). For consistency, the term complex problem will be used throughout.

Perhaps surprisingly, very little scholarly attention has been given to considering temporality alongside complexity. VUCA, short for volatility, uncertainty, complexity and ambiguity, is an acronym rooted in military thinking (Tourish, 2019) often associated with problem complexity. VUCA is a term, “increasingly used by those who share the conviction that we live in times of unprecedented turmoil and change.” (Tourish, 2019, p. 234). The term VUCA therefore aligns well with the type of complexity that demands urgent attention. Indeed, much of the literature aligns addressing complexity with highly time sensitive activity. For example, Heifetz (1994, p.116) asserts, “Urgency, well

framed, promotes adaptive work". However, aligning complexity with time sensitivity or urgency within an organizational context may legitimise traditional hierarchical, leader-led behaviours that are perceived to be necessary when immediate action is required (Grint, 2005). Paying attention to temporal factors is therefore highly relevant since time sensitive action has the potential both to enable *and constrain* adaptive responses when addressing complex problems, depending on the immediate organizational context.

In common with leadership theories, literature addressing problems associated with complexity typically leave context undertheorized, with Augier et al. (2001, p.128) noting, "...existing theories concerned with complex problem solving...demonstrated that none of them provides an in-depth understanding of what context is." The focus of the present study is on leaders' framing processes in relation to complex, organizational level problems, and how the framing of these problems influences organizational responses over time. The final section of theoretical background will introduce institutional and framing literature as promising areas of theoretical and empirical study, foregrounding context and enabling attention to be paid to the manifestations of embedded agency at the individual leader level within organizational settings.

5.2.3 Framing – a lens through which to view the everyday institutional work of individual leaders

It has been over 10 years since Currie et al. (2009a; 2009b) called for further work to examine the conceptual and empirical links between institutions and leadership. Cardinale (2018, p.137) describes institutions simply as, "Forms of social structure that are reproduced through relatively self- activating processes". In his seminal book, Scott (1995) describes in detail the 3 principal pillars through which these self-activating processes are produced – regulative, normative and cultural-cognitive. Currie et al. (2009b, p.1737) asserted that, "Leadership fits perfectly with the definition of an institution...", finding deeply embedded self-activating processes in the form of individual leadership consistent with the definition of an established institution, operating alongside an emergent institution of distributed leadership. Described in this way,

institutionalized leadership is closely aligned with the dominant traditional leadership paradigm of individual, 'heroic', time-sensitive decision-making, set alongside an emerging (but not yet institutionalized) form of plural leadership that is more closely associated with the type of adaptive practices suitable for addressing complex problems.

Framing literature provides an ideal lens to view the enabling and constraining, contextual and institutional influences affecting embedded agents – perhaps better described within the context of the present study as *embedded leaders* - when addressing complex organizational problems. Initially and traditionally privileging the cognitive domain (Cornelissen et al., 2011, p.1703), the use of framing has expanded to the extent that it is commonly used as an umbrella term to describe the purposeful use of communication (Cornelissen and Werner, 2014). At the micro-level, framing remains largely rooted in cognitive perspectives, "...framing research has mostly looked at the priming and activation of knowledge schemas, which then guide individual perceptions, inferences, and actions in context." (Cornelissen and Werner 2014, p.183). More recently, descriptions of micro-level framing processes as interactional construction rather than as knowledge structures that are cognitive schema driven have broadened conceptions of framing processes at the micro-level (Cornelissen and Werner, 2014; Ocasio et al., 2015, p.29; Purdy et al., 2019).

The more expansive view of framing in recent literature has also paid attention to both the affective and cognitive domains (see Heaphy, 2017; Maitlis and Sonenshein, 2010; Sandberg and Tsoukas, 2015). As Gray et al. (2015) explain, "The framing mechanisms available to an interactant at any given point in time depend on how that interactant interprets the larger context for his or her actions..." (p.118). Recent developments in framing literature have advanced the idea of using framing to understand the constitutive relationship between processes of institutionalization and the agency through which leaders can influence institutions (see Purdy et al., 2019). In doing so, framing moves beyond communicative descriptions of sensegiving described by Rhee and Fiss (2014) and also broadens beyond dominant cognitive schema- based conceptions of individual sensemaking (see Cornelissen and Werner, 2014; D'Andreta et al., 2016; Gray et al., 2015; Ocasio et al., 2015; and Purdy et al., 2019). Viewed in this way, framing provides

a window to observe embedded agency at the individual level, revealing the constitutive manifestations of institutional forces (Scott, 1995). Whilst these forces are most commonly associated with cultural-cognitive influences (Scott, 2003, p.880), recent developments advancing the bottom-up, micro-level perspective on framing and institutional change sees this association broadened to incorporate normative and regulative institutional influences over time (see Cornelissen and Werner, 2014, p.212; Ocasio and Radoynovska, 2016, p.297).

So far under-theorized, the significance of specific organizational context is recognised in framing literature, since, "...analogies and metaphors that managers use, as part of their framing, can be familiar and conventional or wholly novel and creative in the context of their organization." (Cornelissen et al, 2011, p.1709). Consequently, this study aligns with Purdy et al.'s (2019, p.410) assertion that framing literature is ideally suited to capturing the recursive process through which, "...institutions are produced and reproduced through the everyday activities of individuals."

Using a framing lens through which to study the activity of embedded agents and to comprehend the construction, maintenance and change of organizations is therefore supported in literature (see Purdy et al., 2019, p.410) but rarely empirically researched. The present empirical research project sought to uncover how framing enabled or constrained the emergence of adaptive organizational responses to complex problems, paying particular attention to the specific contextual conditions under which these everyday activities manifested. A framing lens reveals the influence of deeply embedded institutional forces that are likely to result in leaders' prescriptions for action.

Literature suggests that individuals' responses to problems tend towards the familiar (Pazzaglia et al., 2018) manifesting as traditional, perceived legitimate micro-level actions that constrain the emergence of adaptive responses to complex problems at the organizational level. Over time and regardless of problem complexity, problems are likely to be framed for clear decisive action, with a commitment to a dominant problem frame at the organizational level – either through rational plans or through crisis style time-critical command actions (Grint, 2005; 2010b; Heifetz, 1994; Heifetz et al., 2009;

Pazzaglia et al., 2018). A traditional organizational response has institutional legitimacy (Currie et al., 2009a; 2009b) with individual actors cohering around a dominant problem frame (Pazzaglia et al., 2018). On occasions, enduring contestation and divergent problem framing leads to a dysfunctional organizational response with the potential to lead to organizational demise (Pache and Santos, 2010). However, over time an initial period of divergent framing, characterized by "framing contests" (Cornelissen and Werner, 2014), typically leads to alignment around the most salient problem frame and results in a traditional organizational response (Pazzaglia et al., 2018). Literature suggests that divergent problem framing has the potential to lead to an adaptive organizational response, in circumstances where divergent views are accepted and used productively to "amplify" new problem frames with sufficient resonance (Purdy et al., 2019, p.411) to promote collaborative and innovative action (Ansari et al., 2013; Daviter, 2017; Grint, 2005; Fincham and Forbes, 2015; Head and Alford, 2015).

Figure 5-1 below, captures three key findings developed from the review of existing leadership, problems, institutional and framing literature domains. Whilst the review findings have distinguished between underlying mechanisms, it is not yet possible to explain under what specific contextual conditions and why a particular mechanism prevails in influencing leaders and how this affects the organizational response to a complex problem. This empirical study will therefore address the research question: ***How and under what contextual conditions does leaders' framing of complex problems influence organizational responses over time?***

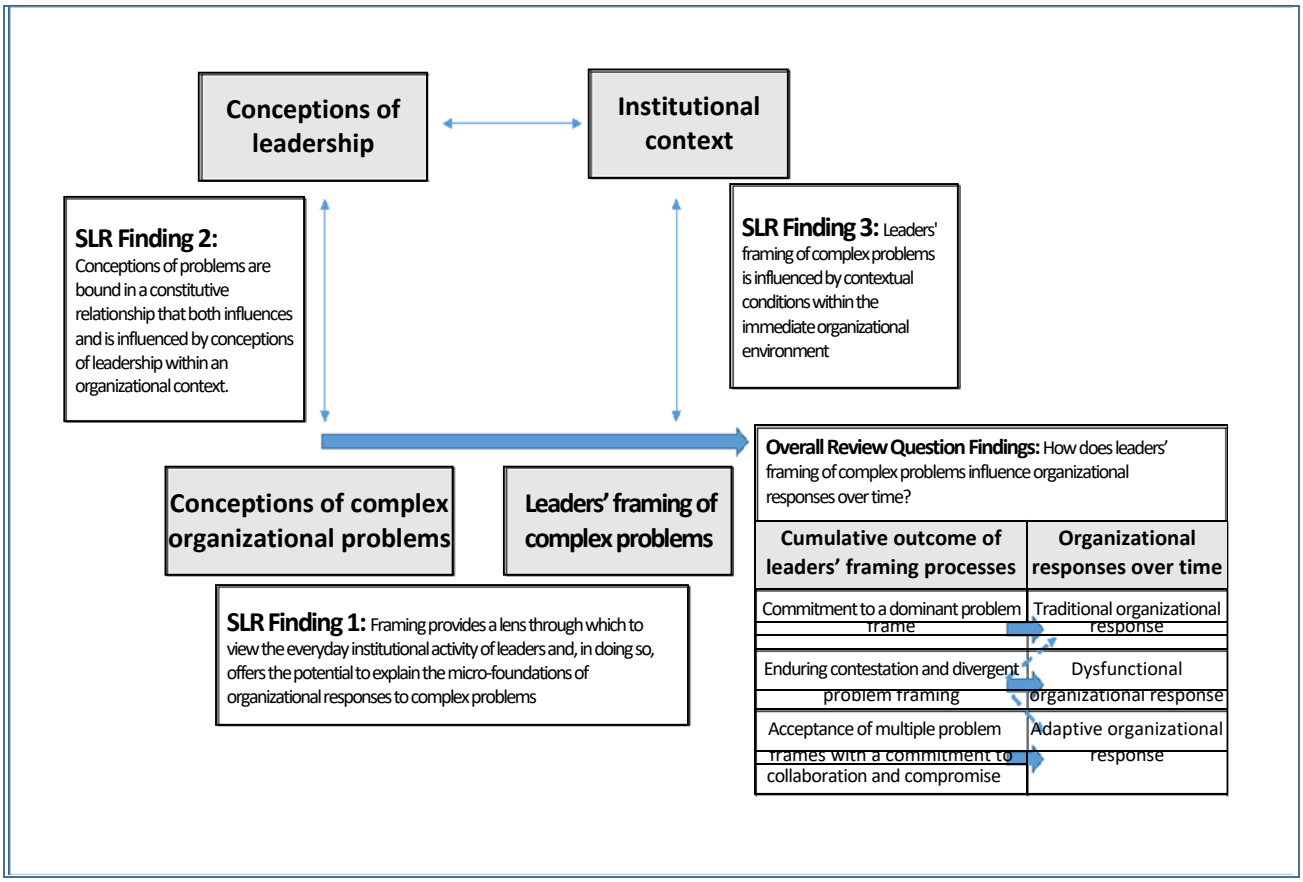


Figure 5-1: Systematic Literature Review Findings (originally presented at Figure 2-2)

5.3 Research Method

5.3.1 Case Study Organization

The British Army is the chosen context for the empirical study for three principal reasons. Firstly, the British Army offers a rare opportunity to research an organization that has to cope with both rapid disruptions and crises, and long standing, intractable, problems. Secondly, the lead researcher has 25 years' experience as a career army officer with deep professional knowledge about relevant organizational nuances required to unlock access to a cross section of the organization's hierarchical actors up to and including the most senior level. This is important since empirical studies based on the uniformed public services are rare primarily because access to respondents is difficult. Finally, the British Army was chosen because it represents an organization with a distinctly unambiguous view about the role of leadership; put simply, the British Army views almost all agentic action through the lens of 16 layers of hierarchical leadership (from the first rung of the leadership ladder at Lance Corporal rank up to the most senior General (4 star)). Organizational actors across the hierarchical spectrum therefore perceive themselves, and are perceived by others, to be acting as leaders. The unambiguous nature of the British Army's perception of leadership is captured in the following illustrative quotes, taken from Army Leadership Doctrine and the army's highest-level doctrine publication, ADP Land Operations:

"*Leadership is everywhere. It is the lifeblood of any organization...*" (**Army Leadership Doctrine, p.9**)

"*Land forces rely completely on the strength of their leadership at all levels.*" **(ADP Land Ops, p.309)**

"*In battle, it is leaders who break the paralysis of shock amid fear, uncertainty, death and destruction....Then, and at all other times, it is leaders who shape and control the conduct of the force, for good or ill.*" **(ADP Land Ops p. 3-10)**

5.3.2 Selecting fieldwork sites

The lead researcher liaised with the army's principal residential training establishments for officers (the Joint Services Command and Staff College and the Royal Military Academy Sandhurst) and conducted briefings on multiple residential career courses. Points of contact were established within the army's headquarters and its two principal subordinate commands (the field army and home command). After each briefing or individual contact, expressions of interest were collected, enabling and the lead researcher to make follow up email contact to arrange a suitable time for an interview. Where face to face contact was not practicable, typically in the senior leader cohort, email communication to the established points of contact was used.

5.3.3 Selecting interviewees

In order to ensure that respondents had relevant experience of complex organizational level problems from both operational and non-operational contexts, volunteers were required to meet the following inclusion criteria: Must have deployed operational experience in the last 10 years (since 2009) AND must have worked within a Divisional Headquarters level context or equivalent whilst serving non-operationally within the last 10 years. In addition to this overarching inclusion criteria, respondents had to be volunteers and had been asked to attend the interview with ready to talk about examples of the most complex organizational problems that they had observed or addressed during their career. Young officers (Second Lieutenants and Lieutenants) were excluded from the research since this group of officers have typically served for under three years and lack the breadth of experiences required to meet the inclusion criteria and to reflect on the organization's most complex challenges. The lead researcher managed communication with the established points of contact and informed all parties when sufficient volunteers to participate in the research project had been received.

5.3.4 Data collection

A total of 42 Interviews were conducted across sites with experienced leaders in the British Army that offered a broad selection of career specialisms and backgrounds, ensuring a representative group of the organization's leadership. Leaders were categorized into one of three hierarchical groups: 15 x junior level leadership (Captain to Major); 12 x middle level leadership (Lieutenant Colonel and Colonel); 15 x senior leadership (Brigadier (1-star level) and above). Interviewing respondents from three different hierarchical groups (and avoiding a purely top team/executive level focus) enabled greater scope for developing explanations for the what plays out in organizational practices across levels and over time.

5.3.5 The semi-structured interview method

The Interview protocol at **Appendix C-2** was used to provide a general structure to the interview based around three themes: making sense of complex problems; taking action in relation to complex problems; and outcomes related to complex problems. The interviews were conducted using open questions, with probing questions employed to explore initial responses in more detail or to elicit a fuller response. Interviewees were encouraged to explain their ideas and give example anecdotes where helpful. A list of interviews conducted is provided at **Appendix E.**

5.3.6 Data Analysis

Interviews were transcribed in full and loaded into NVivo (version 12). A template based on the interview protocol and informed by the SLR was used as an initial structure to inform data coding. The process was therefore one of starting with a picture informed by existing research and developing the template iteratively, based on emerging evidence from the coded data. This iterative modification of the template utilizing a cycle of abductive and retroductive reasoning and frequently referring back to literature identified in the SLR is consistent with the approach described by Miles and Huberman (1994, p.61).

A process of checking the coded data was completed with the assistance of an experienced doctoral researcher. A selection of transcripts **(N=3)** were coded independently and results were then discussed to identify any significant differences in output. These discussions revealed numerous differences in the allocation of data to specific coding categories, although these differences were almost exclusively minor differences within categories. Initial inter-coder reliability was approximately 70%. The discussions proved extremely valuable, enabling agreement on a large number of the minor differences, with one partner being persuaded by the other's insight and choosing to align their coding accordingly. Where agreement was not found, the difference was often down to codes that were similar in meaning. Two further cycles transcript check-coding then took place (**N=4 followed by N=4)** with the same process as described above repeated each time. Overall, two days of check-coding workshop activity achieved inter-code reliability approaching 90%, which is a desirable benchmark for qualitative data of this nature (see Miles and Huberman, 1994, p.64).

After many cycles of iteration and completion of the check-coding process described above, the final coding template emerged **(see Table 5-1 below).** It can be seen from the final coding results table that data is given for number of respondents who contributed to each code and for the total coded references for each code. The data in each section are ordered by number of respondents who contributed to each code. Ordering in this way does not suggest that the codes with higher numbers of contributions are necessarily more important, rather coding has been ordered in this way to provide consistent structure and to give an indication of which nodes within each section were most commonly referenced by research participants.

5.4 Results

The results of the coding are summarised below. The coding is grouped into four key areas: conceptions of leadership, conceptions of complex organizational problems, institutional contextual categories, and organizational responses. In order to make sense of the results, the rich description and textual meaning derived from the coding results have been incorporated as illustrative quotes into the Findings section to follow.

Table 5-1 – Overall Coding Results Summary

Name	Number of Respondents	Total number of References
1 Conceptions of Leadership	-	-
1.1 - Demonstrate 'special' leader quality	13	21
1.2- Clarity or Vision	13	17
1.3 - Act Decisively	10	13
1.4 - Provide direction	8	11
1.5 - Plural leadership conceptions	3	4
2 Conceptions of Complex Organizational Problems	-	-
2.1 - Recognition of planning guidelines or rules	19	27
2.2 - Desire to get on with or solve problem	15	21
2.3 - Recognition of external or policy constraints on action	11	13
2.4 - Recognition of broad stakeholder groups	10	13
2.5 - Recognition of hierarchical power structure for decision making	7	10
2.6 - Desire to define and fix understanding of problem	7	8
3 Institutional Context Categories	-	-
3.1 - Willingness to address problem influences	42	72
3.2 - Hierarchy-Power influences	38	96
3.3 - Operational and non-operational influences	30	60
3.4 - Individual leader behaviour influences	29	66
3.5 - Temporal influences	26	49
3.6 - Inter-department influences	13	18

Name	Number of Respondents	Total number of References
3.7 - External influences	11	16
4 Organizational responses	-	-
4.1 Blocking conditions	-	-
4.1.1 - Rigid problem framing	32	82
4.1.1.1 - Crises response	8	12
4.1.1.2 - Linear response	23	45
4.1.2 - Lack of willingness	19	27
4.1.3 - Weak stakeholder engagement or alignment	17	24
4.1.4 - Overly rigid practices or directives for action	16	22
4.1.5 - Collaboration or challenge suppressed	11	13
4.1.6 - Key leader churn	7	8
4.1.7 - Exaggerated dysfunctional processes	7	8
4.1.8 - Exaggerated structural misalignment	2	4
4.1.9 - Exaggerated self-interest	4	4
4.2 Enabling conditions	-	-
4.3.1 - Acceptance of compromise and uncertainty to provide a safe place for collaboration	19	33
4.3.2 - Strong senior leader support or permission	12	13
4.3.3 - Clarity of purpose	9	12
4.3.4 - Productive tension or catalyst for action	6	8

Full Coding Results broken down by hierarchical group at Appendix F

5.5 Findings

Interviews were based on the most challenging and complex problems that respondents had experienced over the course of their careers. The interview protocol explained that the focus was on problems that had complexity running through them, differentiating the problem type from complicated problems and crises. Interviewees also received a primer a week in advance of the interview and were asked to think about and write down examples of the most complex army level problems they had observed or addressed through career. Interviewees were therefore participating in the semi structured interviews within a well framed context for addressing problem complexity at the organizational level.

5.5.1 Conceptions of leadership and complex organizational problems

The data in **Table 5-2** are grouped around respondents' conceptions of leadership within the context of addressing complex organizational problems. Respondents aligned overwhelmingly to traditional conceptions of leadership with *demonstrate 'special' leader qualities, clarity of vision; act decisively; and provide direction;* emerging as the most common themes. As can be seen in the table, very few respondents provided descriptions of leading consistent with new, plural leadership conceptions.

Table 5-2: Conceptions of leadership

Theme (No of Respondents)	Conceptions of leadership in relation to complex organizational problems
Demonstrate 'Special' leader qualities (13)	*"if you're the leader, you are the leader, because of your wisdom and your experience, and therefore where you're best placed to be is probably providing that intuition to help them navigate through the complexity." (P-27 senior)*
Clarity of vision (13)	*"And you may be, you may be really struggling to make sense of the complexity yourself, but don't pass that on to others...if the leader has a vision, to see through the complexity, then that that is a vital ingredient to inspire others...". (P-37 senior)*
Act Decisively (10)	*"Because as you know, I think as a military, we like, you know, decisiveness and, you know, we like we're sort of taught dogmatic processes and you...want to come in and say, right, there's the situation, here's our options, this is what we're going to do about it. Let's get on with it." (P-02 middle)*

Provide Direction (8)	*"...sometimes you do need to provide direction, because some of these problems are going to be so complex. Doesn't matter how good you are, you just don't know what to do. And therefore, you've got to resort back to the whole directive piece of somebody up there has got to provide the direction...You cannot make this shit up. You've got to get after it. (P-27 senior)*
Plural leadership conceptions (3)	*"There is something really rewarding as a leader when you find out that things are going on in your organisation, that are absolutely what you want to happen, and you knew nothing about it."* (P-38 senior)

The data in **Table 5-3** are grouped around respondents' conceptions of becoming aware of, making sense or understanding complex problems. Nearly half of all respondents aligned becoming aware of the problem with a recognition that organizational practices are linked to *planning guidelines or rules*, suggesting the cognitive legitimacy of rule compliance. As can be seen in the table below, respondents also commonly acknowledged a strong sense of *wanting to get on with or solve the problem*, highlighting a time sensitivity to problem solving. The other themes consisted of *a recognition of external or policy constraints on action; recognition of broad stakeholder groups; recognition of hierarchical power structure for decision making; and a desire to define and fix the understanding of the problem.*

Table 5-3: Conceptions of complex organizational problems

Theme (No of Respondents)	Conceptions of complex organizational problems
Recognition of planning guidelines or rules (19)	*"...needs to make sure that the process or a process is followed, which reaches a conclusion in a manner, which later on is justifiable, so that they're not just winging it." (P-04 middle)*
Desire to get on with or solve the problem (15)	*"...the military, and the army particularly is full of people who want to get things done. And we like to, we pride ourselves on getting things done." (P-08 junior)*
Recognition of external or policy constraints on action (11)	***"****It's also procedurally very policy constrained" (P-26 senior)*
Recognition of broad stakeholder groups (10)	*"we need to influence our politicians or public, our gatekeepers, so on and so forth. If we don't, if we don't own the narrative, then we're less likely to be able to control the outcomes." (P-29 senior)*

Recognition of hierarchical power structure for decision making (7)	*"But ultimately, it's through the guidance of that commander at the time that would direct the level of interest and input of how to take it further." (P-24 junior)*
Desire to define and fix understanding of the problem (7)	*"...we are uncomfortable with ambiguity. And we want to compartmentalise everything into known, defined, bracketed arenas, which we can, which we can, which we can frame in an exquisite way..." (P-26 senior)*

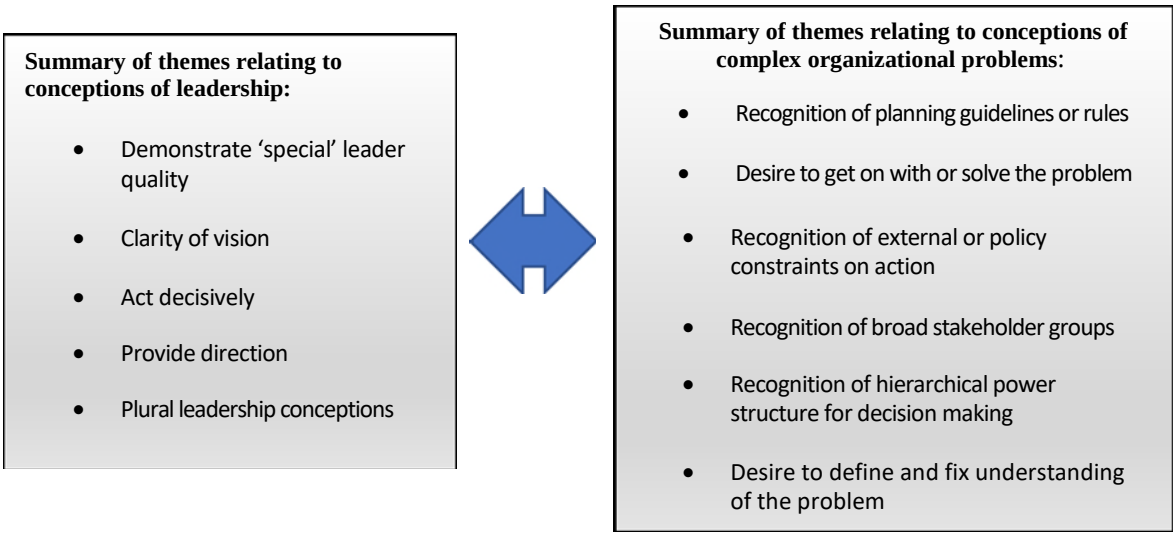


Figure 5-2: Summary of conceptions of leadership and complex organizational problems

In summary, the findings in relation to leadership within the context of complex organizational problems revealed conceptions of leadership that align closely with the traditional notions of leading described in the theoretical background. Awareness of complex organizational problems was linked with traditional problem-solving paradigms associated with guidelines or rules and a sense of needing to get on with solving them. The key insight from these finding is that dominant prescriptions for problem solving and leading are bound in a constitutive relationship that aligns with traditional leadership paradigms regardless of the specifically framed context of addressing non-reducible, non-crises type complex problems.

The next section will consider the institutional context within the immediate organizational environment that helps to elucidate some of the deeply embedded structural influences on leaders' responses to complex organizational problems.

5.5.2 The intra-organizational contextual conditions that illuminate the everyday institutional work of individual leaders

The review of literature revealed a recognised lack of attention paid to context in the literature domains of leadership (Fischer et al., 2017; Tourish, 2019) and problems (Augier et al., 2001; Berente and Yoo, 2012). Whilst versions of the contextual category labels used in this section are all recognisable in existing literature - for example literature on power (hierarchy/power category) and leadership (individual behaviours) - the approach taken was to allow the categories to emerge from the data, since it was not possible to identify a commonly agreed framework to focus attention on the particular contextual conditions most relevant to the research question. The contextual categories were refined during many iterations of the coding process in order to illuminate the institutional forces influencing leaders set within the overarching context of addressing organizational level complex problems.

5.5.2.1 Institutional context – Willingness to address problem influences. All respondents **(n=42)** contributed to this category, with data telling a mixed story. Respondents across the hierarchically grouped cohorts described a high level of willing agreement around actions to address complex organizational problems. However, perceptions about the reasons for willingness varied. Several implied a strongly leader-led or even coercive power dynamic around reaching agreement. Another theme emerged around individual leaders' personal interests, with a common desire to progress and conform to particular job types and behaviours, suggesting strong normative influences underpinning leaders' willingness. A linked finding emerged centred around personal risk and reward with several respondents acknowledging their desire for recognition. A number of respondents referred to a 'fix the problem' mentality, aligned to individual and organizational desire to get on with 'doing'. However, a theme of 'unwillingness' also emerged. Several respondents differentiated between individual and organizational willingness, highlighting an organizational reluctance related to bureaucratic constraints on action or structural misalignment. Linked to unwillingness, a few respondents highlighted a 'consent and evade' dynamic constraining action to address complex

problems. Several others used the terminology of 'culture' to describe normative organizational influences stifling individual willingness.

5.5.2.2 Institutional context - Hierarchy/power influences. Perhaps unsurprisingly within a military organization, the strong influence of the hierarchical chain of command was cited by almost all respondents (**n=38)** as a key factor influencing the way the organization comes to frame complex problems. Several respondents described deeply embedded conceptions of seniority-based decision making as both necessary and effective within a military context. The coherence around descriptions of the role of hierarchical seniority linked to superior ability suggest deeply embedded normative and cultural-cognitive influences on leaders' perceptions of both how things should be done and what good looks like. Perhaps most compellingly of all, the final quote within this category in **Table 5-4 below,** by a senior leader, suggests that adaptive 'bottom-up' practices (see Murphy et al., 2017; Uhl-Bien and Marion, 2009) are far from an accepted norm.

5.5.2.3 Institutional context – Operational and non-operational influence. A high number of respondents (**n=30)** across all three hierarchical groups reported perceptions of a more productive and purposeful dynamic in relation to addressing complex problems when in an operational environment. However, interviewees citing the operational context typically described problems in terms of short timeframes and assertive, decisive action. Aligning a sense of urgency with purposeful endeavor to address complex problems suggests embedded normative influences around problem solving aligned to traditional notions of leadership that are particularly strong in an operational environment.

5.5.2.4 Institutional context – Individual leader behavior influences. Respondents' (**n=29)** perceptions of the impact of individual leader behaviours were inextricably linked to hierarchical seniority. This category was highly salient to respondents across all three leadership cohorts (junior=11; middle=9; senior=9). The hierarchically enabled power to influence aligned with expectations of being able to illuminate the way ahead and it was recognised across the hierarchical groups that leaders in positions of seniority provided

the catalyst for a change of direction. According to several respondents, this dominant senior leader influence empowered these individuals to reframe the problem in line with their own perceptions and preferences.

5.5.2.5 Institutional context – Temporal influences. The majority of respondents (**n=26)** across all three cohorts highlighted time as an important contextual category. The most prominent subcategory relating to time centred around time pressure to deliver 'something'. One senior leader explained how time pressure could be used to generate productive tension and overcome organizational inertia to address complex problems. Use of time in this way is consistent with Heifetz's (1994, p.116) claim that urgency can promote adaptive work. Another dimension of time, expressed by a senior leader, described the significance of time in relation to hierarchy and career progression. Lastly, several participants articulated perceptions of time in relation to an unmanageable workload. Overall, the data revealed that time was a highly relevant contextual category influencing the way that complex organizational problems were both framed and addressed, with multi-faceted perceptions of constraints on time typically acting to strengthen the perceived need for decisive action.

5.5.2.6 Institutional context - Inter-department influence. The data in this category **(n=13)** revealed that respondents across the hierarchical groups reported either a dominant hierarchical influence or an inter-departmental influence that was entangled with hierarchical influences. Several respondents highlighted the perceived importance of this interrelationship, recognising the role of hierarchy in establishing the right dynamic. According to literature (Head and Alford, 2015), a productive tension between hierarchical and inter-departmental influences is more likely to lead to the sort of productive, clumsy organizational dynamic associated with effective activity in relation to complex problems. However, several respondents referred to dominant tribal influences associated with more unproductive in-fighting activity.

5.5.2.7 Institutional context – External influences. Analysis of the hierarchical breakdown of the data revealed that this category was much more salient to the senior leaders, with six of the 10 respondents who referred to this contextual category coming

from the senior cohort. The data revealed a mixed picture. External influence was commonly associated with the sort of regulative institutional forces that constrain and regulate behaviours (see Scott, 1995, p.35) and were described in terms of limitations on leaders' agency. Other respondents noted enabling influences in relation to collaboration with external actors or organizations. One senior leader provided an example of institutional influences consistent with Baum and McGahan's (2013) study into the legitimization processes within the military context, "*...examples of external consultants coming in. And I have seen that used very successfully, often not when the conclusions are difficult to come to. But when the conclusions are difficult to say.*" (P-39 senior). Describing external consultants in this way - credibly delivering bad news where the organization's own leadership felt unable - implies a normatively and cognitively accepted position for external actors within the senior hierarchy.

Table 5-4: Addressing Complex Problems - Institutional context categories	
Willingness to address the problem Influences (*N*=42)	**Leader-led or coerced agreement:** *"I think, once the senior leader has determined what they believe to be right, then there's usually very quickly agreement." (P-03 senior).* **Advance personal interests:** *"...I think people are very focused on progress. I think we are we, we drive institutionalism, in terms of what job you need to do, when you need to do it, how you need to do it, where you need to do it." (P-07-middle).* **Fix the problem mentality:** "*Because by nature of it being a problem it needs to be, it needs to be solved, or resolved. And I think its inherent within most military people that you want to fix a problem.*" (P-12 junior) **Unwillingness:** "*I think culturally, we're hugely willing, individually. I think we're not willing organisationally and institutionally*." (P-26 senior). "**…***and there's so much bureaucracy around it that that that willingness to change, it just translates, just effectively turns into frustration...*". (P-16 middle)
Hierarchy/ Power Influences (*N=38)*	**Necessary and effective hierarchy:** *"And so our hierarchy...tends to respect both rank and experience. So, the senior person knows what the answer is." (P-38-senior).* *"...I would rather personally would rather have firm direction of where we're going then try and have some wishy-washy way of how we're going to do things." (P-19-junior).* **Hierarchy associated with Superior ability***: "...in a hierarchy, if you're promoted within that hierarchy. You, your belief is you're promoted to make a decision where others couldn't so, and because your ability to make decisions is better than the next man or woman." (P-16-middle cohort).*

	Top-down valued over bottom-up practices: *"I think the army way for most things is a top down approach ... I haven't worked in a tech start-up, you know, that espouses those kinds of values. And I'm not, it's a great idea on paper, whether it would actually work within the military, I don't know." (P-05-senior cohort).*
Operational and non-operational influences (*N=30)*	**More productive and purposeful dynamic in operational environments***: "And if we can bottle some of the clarity of purpose and the dynamism of decision making that we actually do pretty well on Ops. And if we could recreate that in in non-operational circumstances, we'd be in a good place." (P-37 senior)* **Shorter timeframes in operational environments:** "*Operational versus non-operational...it is the time or the imperative to do something now versus not now, I guess is my view on that.*" (P-10-junior).
Individual leader behaviour Influences (*N*=29)	**Leaders expected to illuminate the way:** *"...and particularly when problems are ambiguous, particularly when problems are complex, because people are looking for leadership, they're looking for somebody to point them in the right direction." (P-02 middle)* **Senior leader as catalyst to change direction:** "...it [policy] generally changes when someone new comes in...the direction will change when newer people get put into more senior, into that same senior position as someone who has moved on." (P-19 junior) **Senior leader reframing complex problem as something else:** *"...There are those [senior officers] that that want to...see them as complicated problems...there are others that effectively recognise the complex problems but then deliberately kick the can down the road. And I've seen very few that want to see a complex problem..."* (P-16 middle).
Temporal Influences (*N*=26)	**Pressure to deliver:** "*We're in an organisation that's about delivery and getting on with it. And sometimes the, the granularity and explanation is, is kind of lost, because we are simply under pressure to, to deliver something and get after it."* (P34 senior). **Time generating productive tension:** *"And there's a time factor in this isn't there? You know, there is some of these complex problems you can only unlock by being fast. And that requires agility, agile mindset..." (P-27 senior).* **Time linked to career progression:** "*So your very brightest and very best are always aiming to spend the least time possible in the rank and get promoted...people come in to deal with a complex problem, and see it as an opportunity to move swiftly through...there is a tendency, I think, to want to get quick wins to solve the problem to...*" (P-36-senior). **Time related to workload:** "*I just feel we are we are over loaded. And we're trying to do too much.*" (P-10 junior cohort).
Inter-department Influences (N=13)	**Entangled with hierarchical influence:** *"The horizontal context is, is incredibly important as well. Because that's about understanding the situation and the environment...So it's combination of the two. And so that's a horizontal and vertical influence." (P-02 middle)***.**

	Unproductive tribal in-fighting: *"I suppose inter-department rivalry...shaped how a problem is perceived by the organisation...which one was sort of primus inter pares of the two...I think because both sides believed that theirs's was more important." (P-16 middle)*
External Influences (*N=10)*	**Constrain, limit or regulate action:** "*So there's a top down pressure because of the nature of our, of our democracy, ultimately, and legal. I think legal and political pressures, often create these knee jerk policy and process actions.*" (P-09 junior). **Enabling action:** "*I think one of the things the army is getting better at and utilises quite a lot is civilian authorities for advice and guidance*." (P-30 junior).

The seven categories of institutional context identified in this section are summarised in **Figure 5-3** below:

Summary of institutional context categories

- **Willingness to address problem influences** *Either normative and cultural-cognitive influences to coerce agreement, advance personal interests and fix the problem OR manifestations of individual and/or organizational unwillingness*
- **Hierarchy/power influences** *Strong institutional influences linking hierarchy with effectiveness, superior ability and appropriate top-down processes*
- **Operational and non-operational influences** *Institutional influences aligning the operational environment with a more productive/purposeful dynamic and shorter timeframes*
- **Individual leader behavior influences** *Strong cultural-cognitive and normative influences linking leader impact to seniority with leaders illuminating the way, providing the catalyst for change and reframing problems*
- **Temporal influences** *Strong institutional influences prescribing actions to 'deliver', generate productive tension, and deliver quick wins to secure career progression. Time pressure occasionally manifests as uncomfortable workload*
- **Inter-department influences** *Typically entangled with hierarchical influences and occasionally manifesting as tribal in-fighting*
- **External influences** *Either influences that constrain, limit or regulate action OR influences to enable action*

Figure 5-3: Summary of institutional context categories

This section has highlighted the contextual categories that enable a nuanced understanding of the immediate organizational environment to be developed. Whilst this improves understanding of the contextual factors that are most organizationally salient, the identification of these categories does not tell us under which specific contextual conditions particular mechanisms prevail in influencing leaders' framing. The next

section will draw together the findings, informed by sections 1 and 2. Section 1 revealed dominant prescriptions for problem solving and leading aligned to traditional paradigms, regardless of the overarching context of addressing non-reducible, non-crisis type complex problems. Section 2 identified seven principal categories of institutional context most salient to leaders within the overarching contextual setting of addressing complex organizational problems. Analysis of these categories enables a more nuanced understanding to emerge that helps to deepen comprehension of particular mechanisms leading to either 'blocking' or 'enabling' organizational responses to complex problems prevailing over time.

5.6 How and under what contextual conditions does leaders' framing of complex problems influence organizational responses over time?

The research question asks how and under what contextual conditions leaders' framing of complex problems influences organizational responses over time. The final element of the findings, presented in section 3, will align the answer to this question around 'blocking' conditions, leading to traditional organizational responses that conform to dominant institutionalized conceptions of leadership; and 'enabling' conditions leading to 'adaptive' responses that overcome these dominant conceptions to develop new thinking or collaborative actions as responses to complex problems.

5.6.1 Response Category 1: Blocking conditions resulting in traditional organizational responses. Drawing on the findings from sections 1 and 2, six conditions were identified that act to block adaptive responses to complex problems.

5.6.1.1 Blocking condition 1a – Rigid problem framing: a crisis response. Action to reconstitute a complex problem as a crisis was a notable theme **(n=8)** and has been recognised in literature (see Grint, 2005; 2010b). Framing for crises was described in two distinct ways. Firstly, the problem could be ignored until it became urgent**.** Alternatively, the problem could be reconstituted as a crisis upfront. A crises response was more commonly associated with an operational environment, with respondents

across the hierarchical cohorts associating the operational environment with a legitimized sense of urgency across all problem-solving activities.

5.6.1.2 Blocking condition 1b - Rigid problem framing: a linear response. The data revealed that many respondents **(n=23)** across the hierarchical groups aligned perceptions of actions to linear responses, describing a process of reconstituting the complex as complicated in line with Heifetz et al.'s (2009, p.19) key insight about a common cause of organizational failure. A significant subtheme emerged around a desire for a reducible, solvable problem. A second subtheme emerged in relation to the timing of the problem framing, suggesting that whilst divergent thinking is common within the understand and planning phase, it is when the plan is implemented that pressure to 'toe the line' takes hold.

5.6.1.3 Blocking condition 2 – Lack of willingness. Analysis of data related to a lack of willingness **(n=19)** revealed nuanced subthemes that illuminated how the unwillingness manifested. This theme was far more salient to the junior (**n=10),** and middle **(n=6)** hierarchy, revealing a tension of which the senior leaders may be unaware. A number of respondents referred to organizational norms that rejected novel approaches or looked to apportion blame. Another subtheme emerged around a perception that problems could not be raised unless solutions were available. Several respondents identified the importance of senior leader support or permission to address the problem. Finally, a subtheme relating to a lack of broader organizational buy-in was described by several respondents.

5.6.1.4 Blocking condition 3 – Weak stakeholder engagement or alignment. Section 2 revealed that external influences could either constrain or enable productive work in relation to complex problems. Analysis of the data related to constraining or limiting influences revealed a blocking condition focused on stakeholder engagement. Over a third of all respondents (**n=15)** commented on challenges associated with stakeholder engagement or alignment with working in stovepipes and lack of inclusion of the full range of stakeholders emerging as common subthemes. A third subtheme was captured

by one senior leader, who highlighted the challenges of having too many or divergent stakeholder groups.

5.6.1.5 Blocking condition 4 – Overly rigid practices or directives for action. Blocking condition 4 was informed by data linking leading to a strong association with planning guidelines or rules identified in section 1, combined with data in section 2 relating to individual leader behaviours within the ever present hierarchical dynamic. **15** respondents across the three hierarchical cohorts provided data relevant to this category. A number of respondents referred to a perceived requirement to follow process, frame solutions or measure results, often aligned to a recognition of the failings of an overly mechanistic approach in the face of complexity. A second subtheme emerged around highly prescriptive directives for action, described as 'something has to be done' moments.

5.6.1.6 Blocking condition 5 – Collaboration or challenge suppressed. The power of the senior leader's influence within a rigid hierarchical dynamic was highlighted in section 2. Data in blocking condition 5, emerged from analysis of section 2 data, revealing examples of where a leader's influence suppressed collaboration and challenge **(n=11)**. Interestingly, nearly half the responses came from the senior leaders **(n=5).** Several responses implied a dominant frame can manifest as a form of Abilene paradox, with the group pursuing ends that were not sought by any of the individuals within the group (Drath et al., 2008, p. 647). A second subtheme emerged around the coercive influence of hierarchical power**.**

5.6.1.7 Blocking condition 6 – Key leader churn. The final blocking condition, emerging from **7** respondents across the hierarchical groups, revolved around key leader churn. Several respondents described how change initiatives often fell apart when the senior leader moved on. One respondent described the army's 2-year assignment cycle as presenting a brief window of opportunity for a change in approach before the course of action once again became rigidly set. The perception of longer-term action plans being tightly linked to individual senior leaders aligns with traditional notions of a top-down

hierarchical power dynamic poorly aligned with the emergence of collaborative and adaptive practices.

Table 5-5: Response category 1 – Blocking conditions resulting in traditional organizational responses	
Blocking condition 1 Rigid problem framing: a crisis or linear response (*N=32)*	**Crises response: Ignore problem until urgent:** *"...we tend to kick the can down the road until there's a point where we've got to deal with it, which...helps you turn something from a complex problem into a crisis...". (P-16 middle)* **Crises response: Reconstitute the timeline for action or invoke sense of operational imperative:** *"So what I'm saying is a tyranny of the urgent, regularly defeats the important... very few places...where there are people given time to think."*. (P-41 senior). **Linear response**: **A desire for a reducible problem**: *"I think a lot of Army officers try to make complex problems, not complex, they want an answer." (P-15 junior)* **Linear response: Normative pressure to toe the line**: *"I think, I think forming divergent opinions in the planning process is absolutely fine...But I think then when it comes to the execution of the approach to the problem, then I think at that point, people need to toe the line."* (P-08-junior)
Blocking condition 2 Lack of willingness *(N=19)*	**Rejection of novel approaches:** *"...there is something cultural that doesn't like novel and civilianized thinking practices."* (P-06 middle) **Blame culture or fear of failure** *"...when we see a complex problem, we like to blame someone or something...* (P-18 junior) **Solution required up front:** *"...it's almost like we're told now you can't raise a problem without recommending a solution."* (P-18 junior) **Lack of senior leader support:** *"because it goes back to the hierarchical structure that you know, the leader at the top...If he doesn't or she doesn't see it as a problem, then people don't put any effort into that." (P-35 junior)* **Lack of broader organizational buy-in:** *"Sometimes it takes time for that to be, like any changes, sometimes it takes a bit of time ... sometimes you're flogging a dead horse." (P-01 middle).*
Blocking condition 3 Weak stakeholder engagement or alignment (*N=15)*	**Working in stovepipes:** *"Quite often people will work in stovepipes, probably tackling the same problem, but not always pulling in the same direction." (P-01 middle).* **Lack of inclusion:** *"Where I'll tell you where we're not there is...we haven't got the broad scope of all the stakeholders that need to be in it." (P-17 junior)* **Too many or divergent stakeholder groups***: "...there's so many more stakeholders and influences that it is like being clogged, like an Agile bubble in a Waterfall thing that just keeps locking us down everywhere I turn." (P33 senior).*

Blocking condition 4 Overly rigid practices or directives for action *(N=15)*	**Overly rigid practices:** *"...need to make sure that the process or a process is followed, which reaches a conclusion in a manner, which later on is justifiable, so that they're not just winging it.*" (P-04 middle) **Directives for action:** *"Quite often, there will be a knee jerk reaction to something that happens...that echo wave of that panic, reverberates down the chain of command, and then suddenly, there's the something must be done moment..."*. (P-09 Junior).
Blocking condition 5 Collaboration or challenge suppressed (*N=11)*	**Abilene paradox:** *"And that unquestionable, unquestioning loyalty...means that we just get on and do it. And therefore, we get on do it and we all agree it's the right thing to do. But then, interestingly, when the new leader changes, and they change direction, we will agree that the last thing wasn't the right thing to do...*" (P-03 senior) **Coercive hierarchical influence**: *"...I think, because we tend to believe what we're told, and it's all rather hierarchical, we're led to believe that we should believe what we're being told about the solution." (P-05 senior)*
Blocking condition 6 Key leader churn *(N=7)*	**A disruptive 2-year assignment cycle:** *"But there's a horrendous disconnect with a lot of these problems tied to the two-year posting cycle." (P-13 junior)*

5.6.2 Response Category 2: Blocking conditions resulting in dysfunctional organizational responses

Whilst blocking responses are unlikely to lead to the sort of adaptive practices aligned with effective actions to address complex organizational problems, they are typically aligned with purposeful activities where targets are met, problems are framed as 'solved' and people get on with 'doing'. Analysis of the data in section 2 revealed a subcategory of dysfunctional response, where there appeared to be signs of particular contestation or divergence in the activities being delivered. A few respondents across all three hierarchical groups reported organizational contestation that led to dysfunctional responses in relation to addressing complex problems. Almost all interviewees described a highly motivated workforce throughout the leadership structure suggesting a strong 'commitment' to purposeful activity. However, three subthemes emerged around dysfunctional activity. The first subtheme centred around dysfunctional processes, the second subtheme focused on dysfunctional structural misalignment and the third

subtheme centred around dysfunctional self-interest as described in the explanatory quotes in **Table 5-6** below.

Table 5-6: Response category 2 - Blocking conditions resulting in dysfunctional organizational responses	
Blocking condition 7 **Dysfunctional processes** **(*N=7*)**	**Dysfunctional processes:** "*...a painful, iterative approach, through the Army's executive board...the papers are brought to the board, and we sort of wrestle around with them and reach some sort of slightly inconclusive conclusions. Or often if we don't like the solution, there's a requirement maybe for another review of the review that we just had.*" (P-38 senior)
Blocking condition 8 **Dysfunctional structural misalignment** **(*N=3*)**	**Dysfunctional structural misalignment:** *"...an organisational structure that is built on, ultimately on securing hierarchical structures, ranks, as opposed to being built around the best business process to deliver the output..." (P-41 senior).* *"...we weren't able to talk or communicate properly. And both were slavishly, beholden to their own policies." (P-16 middle).*
Blocking condition 9 **Dysfunctional self-interest** **(*N=3*)**	**Dysfunctional self-interest** "*...I've seen plenty of examples where individual ambition...and organizational jealousies and perceived organizational priorities in terms of who's more important, who's less important, I've seen all of those things play out...*" (P-07 middle)

The six blocking conditions are summarised in **Figure 5-4** below. Individual micro-level actions are difficult to align explicitly with outcomes that prevent the emergence of adaptive organizational responses. Indeed, most of the micro-level blocking actions when taken individually can probably be linked to a personal objective or purposeful organizational output. It is only through the reproduction of multiple blocking actions across a number of blocking conditions that the impact on organizational actions can be seen in the form of responses that tend towards the familiar (Cornelissen et al., 2014). Consequently, over time micro-level actions combine and reproduce across the blocking conditions in ways that align with traditional institutionalized leadership responses that constrain adaptive leadership practices. It can also be seen that exaggerated forms of blocking actions can lead to dysfunctional responses.

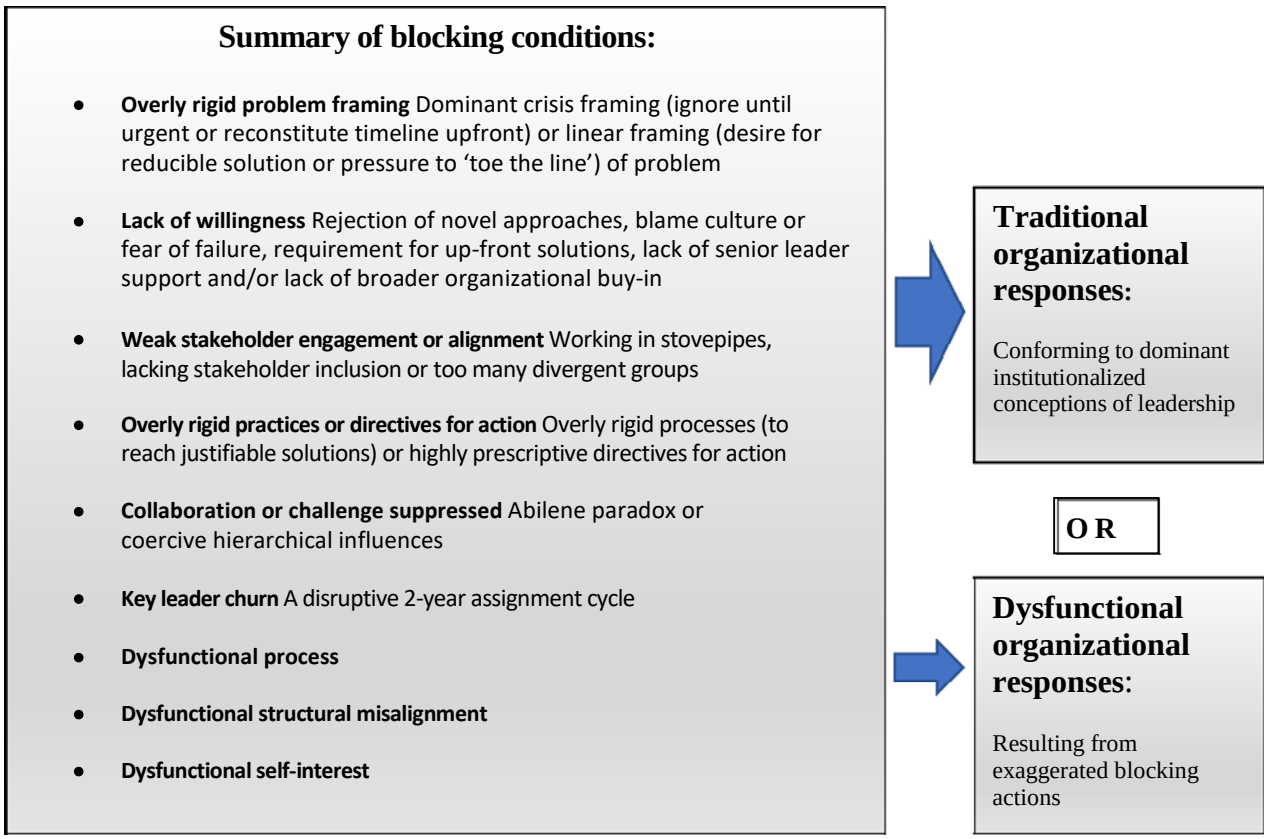


Figure 5-4: Summary of blocking conditions leading to traditional or dysfunctional organizational responses

5.6.3 Response Category 3: Enabling conditions resulting in adaptive organizational responses. Drawing on the findings from sections 1 and 2, four conditions were identified that act to enable adaptive responses to complex problems.

5.6.3.1 Enabling condition 1 – Acceptance of compromise and uncertainty to provide safe place for collaboration. Nearly half of all respondents contributed to this theme, with 16 of the 19 respondents coming from the middle **(n=8**) and senior **(n=8)** leadership cohorts. The data revealed two subthemes. The first focused on the need to accept variations of uncertainty, compromise and loss of control and the second centred on willingly accepting mistakes in promoting adaptive practices. Interviewees commonly asserted that adaptive responses were more common on operations, *"I think on operations, we're pretty good. I think we are very tuned to mission command. And I think mission command, genuinely is the only way we're going to unlock complex problems."* (P-27 senior cohort). However, further probing questions typically revealed a 'crisis response' version of adapting whereby time acted as the overriding catalyst for action.

5.6.3.2 Enabling condition 2 – Strong senior leader support or permission. Adaptive responses to complex problems were overwhelmingly linked to senior support or permission. Three key subthemes emerged from respondents **(n= 11)** across the hierarchical cohorts in relation to setting the conditions for the emergence of adaptive practices. Firstly, the leader required sufficient seniority to have influence. Second, the senior leader needed to actively provide support/permission to the broader group and third, the leader required credibility to do things differently.

5.6.3.3 Enabling condition 3 – Clarity of purpose. The importance of having clarity of purpose was a common observation amongst respondents **(n=9)** and particularly salient to senior leaders **(n=5)**. A subtheme emerged around the perceived need to resist the development of a dominant problem frame. Achieving a clarity of purpose whilst resisting a dominant problem frame provides an insight into the important nuance that differentiates adaptive and blocking responses – the former aiming to provide clarity around a destination whilst resisting the urge to rigidly define the route; and the latter

looking to lock down the route with defined measures, processes and time critical outputs (see Blocking conditions 1 and 4).

5.6.3.4 Enabling condition 4 – Productive tension or catalyst for action. Several contributions emerged from across the hierarchical cohorts around the idea of there being a productive tension or catalyst to promote adaptive practices **(n=5)**. First, a subtheme emerged around establishing belief in and an emotional connection to the problem. Second, a subtheme emerged around the influence of external interest or stakeholders acting as a productive catalyst. Third, a temporal subtheme emerged around having the longer timeframe tenacity to promote adaptive practices.

Table 5-7: Response category 3 – Enabling conditions resulting in adaptive organizational responses

Enabling condition 1 Acceptance of compromise and uncertainty to provide a safe place for collaboration *(N=19)*	**Accepting compromise, uncertainty and loss of control:** "*I can think of a number of problems, where we've done slightly better, not perfectly, where we just accepted that it's not one coherent outcome...Accepting that there will be a degree of compromise in order to in order to deliver the totality of the best outcome against a complex problem*." (P-26 senior) **Willingly accepting mistakes:** *"...there is something about giving people who are trying to solve the problem the freedom to try and make mistakes along the way..." (P-06 middle)*
Enabling condition 2 Strong senior leader support or permission (*N=11*)	**Sufficient seniority:** *"So I think it does, it does need command buy-in at the highest level, sometimes it really forces issues through and then to get some sort of action, rather than just talking about it."* (P-01 middle) **Sufficient support:** "*That is the degree to which we encourage dissonance or challenge, because I think people do, but the nature of our hierarchy tends to suppress that. And you've got to work really hard to encourage it." (P-38 senior).* **Sufficient credibility:** "*So if you are the maverick, there's no space for that alternative thinker or that Maverick to exist, unless he is, you know, in the top 2, 3%, who are considered brilliant by everyone...."* (P-07-middle cohort).
Enabling condition 3 Clarity of purpose *(N=9)*	**Establishing clarity of purpose:** *"...what is more important than anything else, is clarity of purpose." (P-38 senior)* **Resisting a dominant problem frame:** *"...providing a seed that can grow to frame the problem, rather than having a fully framed problem. Because the chances are, the leader doesn't understand the problem fully." (P-06 middle)*
Enabling condition 4	**Belief in problem / emotional connection:** *"...you certainly play to people's emotional reaction rather than intellectual reaction. And if you*

Productive tension or catalyst for action (*N=5*)	*can get an emotional reaction, it becomes really, really powerful."* (P-38 senior) **External interest or pressure as a productive catalyst:** *"And I think when you look at it in those, through those lenses, there is often pressure and support for the external, you know, for the external problem, for something to be done..." (P-36 senior)* **Longer timeframe adaptive tenacity:** *"...not giving up on either trying to define the problem, or not giving up on trying to come to a solution. And not just repeatedly trying the same thing, which has failed again, tenaciously looking for other ways to solve it...." (P-39 senior)*

The four enabling conditions are summarised in **Fig 5-5** below. Adaptive responses emerged over time through a combination of four enabling conditions. Interestingly, adaptive organizational responses were only identified within conditions enabled by senior leaders. However, senior leader support was insufficient in itself, for the generation of adaptive practices. To be effective, senior leaders' 'seniority', 'active support' and 'credibility' to break from the expected routine in the minds of other actors were all seen to be important. It was only through this effective mix of senior leader involvement, combined with actions across the other three conditions that the conditions for adaptive organizational responses with the potential to overcome dominant patterns of traditional institutionalized leadership were produced.

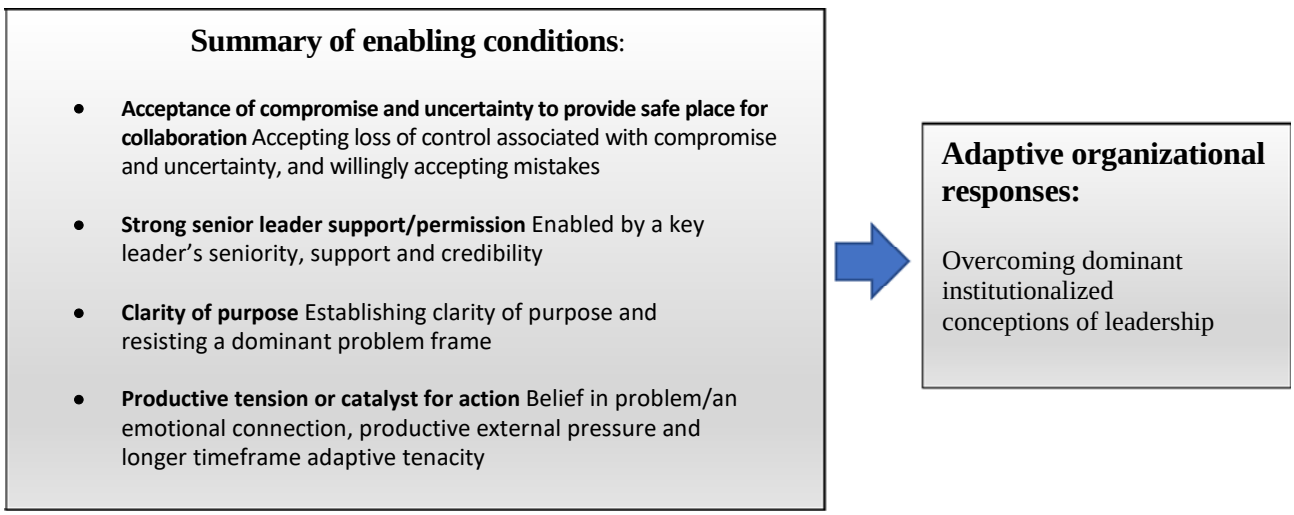


Figure 5-5: Summary of enabling conditions leading to adaptive organizational responses.

The highly contextualized nature of micro-level framing processes leading to traditional and adaptive organizational responses provides supporting evidence that relates to the research question**,** as portrayed in **Fig 5-6** below:

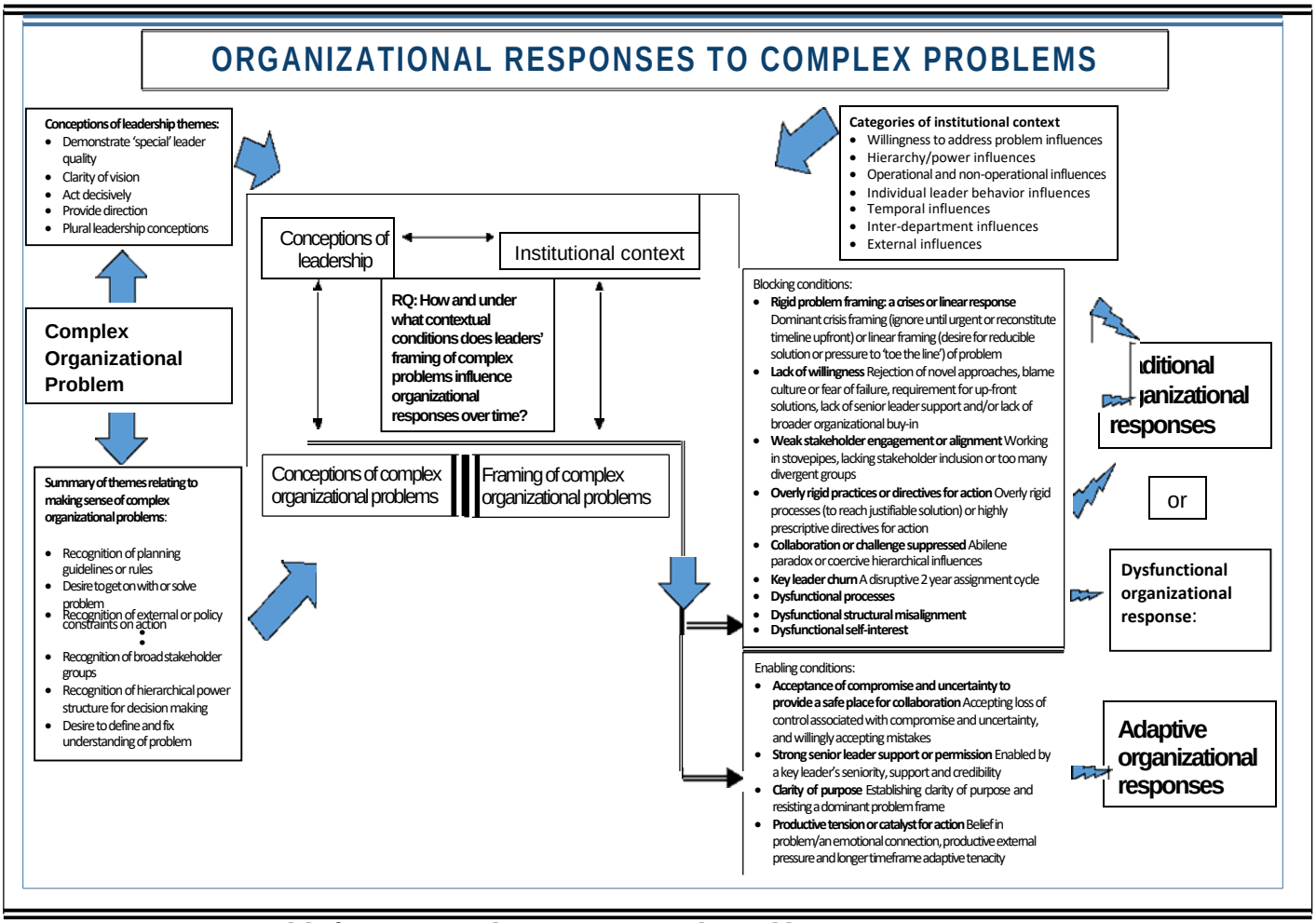


Figure 5-6: Summary model of organizational responses to complex problems

Drawing on an analysis of the findings, the discussion section that follows will draw together the key insights and identify how they make a contribution to theory within existing literature.

5.7 Discussion

The aim of the present study was to gain insights into ***how and under what contextual conditions leaders' framing of complex problems influence organizational responses over time.***

5.7.1 The importance of context

The findings shed light on the centrality of understanding context, providing strong support for Currie et al.'s (2009b, p.1735) assertion that, "...leadership more generally, cannot be divorced from its institutional context and that the relative influence of divergent institutional forces depends upon the immediate organizational environment." It was found that organizational response categories could not be separated from the specific intra-organizational contextual conditions in which they occurred. Within an overall context of leaders' activity to address complex organizational problems, seven intra-organizational contextual categories were identified that helped to elucidate the everyday institutional work of individual leaders (Purdy et al., 2019). Consideration of leaders' actions across these contextual categories improved understanding of how and under what conditions leaders' framing of complex problems influenced organizational responses over time. Two principal categories of organizational response were identified. Firstly, and most commonly 'traditional responses' which aligned with the dominant institutionalized form of individual leadership and where 'blocking conditions' inhibited the emergence of adaptive responses. Secondly, 'adaptive responses' where 'enabling conditions' challenged and overcame the dominant patterns of traditional institutionalized leadership response.

5.7.2 The importance of structure

Consideration of the immediate organizational environment found support for the increasingly prominent assertion in recent institutional literature that both agency and structure matter (Cardinale, 2018). In doing so, the study extends work on the integration of institutional and leadership theory (Currie et al., 2009a; 2009b). The dominant

narrative in leadership theory remains one of ‘heroic’ individual agency (Bennis, 2007; Collinson et al., 2011; Northouse, 2016; Yukl, 2013)**.** Whilst recent advances in the form of plural theories (see Denis et al., 2012) have challenged the traditional individual paradigm, they have continued to privilege agency, albeit in an emergent and collaborative manifestation, that similarly backgrounds structural influences. The findings show that whilst agency undoubtedly matters to organizational responses, particularly in more senior hierarchical positions, structural influences play a significant role in influencing the framing processes through which leaders come to make decisions and prescribe actions.

The study extends recent framing literature, providing empirical evidence in response to Purdy et al.’s (2019) call for research that applies a framing lens and offers “...a recursive perspective where institutions are produced and reproduced through the everyday activities of individual.” (Purdy et al., 2019, p.410). In line with the conceptual approach encouraged by Purdy et al. (2019, p.409), the study used framing to understand the constitutive relationship between processes of institutionalization and the agency through which leaders can influence institutions. A broad, interactional interpretation (Purdy et al., 2019), moves framing beyond communicative descriptions of sensegiving described by Rhee and Fiss (2014) and also broadens beyond dominant cognitive schema based conceptions of individual sensemaking (see Cornelissen and Werner, 2014; D’Andreta, 2016) to incorporate normative and regulative elements (see Scott, 1995) of institutional influence (see Gray et al., 2015; Ocasio et al., 2015; and Purdy et al., 2019).

The approach advocated by Purdy et al. (2019) enabled dominant institutional influences to be rendered visible and aligned to typically blocking type responses to complex organizational problems. The strongest identifiable condition was in the rigid problem framing that emerged over time to act as 'blocking responses' to complex organizational problems. This rigid framing is consistent with descriptions of "framing contests" (Purdy et al., 2019, 412), where dominant frames typically prevail and supports the findings reported by Grint (2005, 2010b) and Heifetz et al. (2009, p.19) in relation to framing for linear, technical problems (Heifetz, 1994; Heifetz et al., 2009) or time-critical crises (Grint, 2005; 2010b) regardless of problem complexity. However, the study also found

evidence of ‘adaptive responses' where enabling conditions challenged and overcame the dominant patterns of traditional institutionalized leadership response, consistent with descriptions of "frame amplification" where a new frame wins over a number of key proponents, takes root over time, and amplifies with sufficient resonance and support to enable new institutional meanings to emerge (Purdy et al., 2019, p.411). In this way, a framing perspective revealed how and under what contextual conditions deeply embedded conceptions of leadership are bound in a constitutive relationship with structurally embedded context that influence organizational responses to complex problems over time.

The study provides empirical support for the principal claim of critical leadership scholars; that the power dynamic influencing leadership is woefully ignored (Alvesson & Spicer, 2012; Collinson, 2005; Collinson and Tourish, 2015; Denis et al., 2012; Gordon, 2011; Tourish, 2019). The study shows that the constitutive relationship between structure and agency typically leads to dominant institutionally influenced framing processes that align with traditional, decisive, leader-led responses (see Grint 2005; Grint 2010b) bound in a hierarchical power dynamic that inhibits and constrains adaptive responses at the organizational level. The application of a framing lens to elucidate the institutional forces influencing leaders extends the narrative around leaders and power. The findings suggest that the hierarchical power dynamic within the case study organization was hugely influential in blocking adaptive responses to complex problems. However, the findings also suggest that the impact of hierarchical privilege by leaders to ‘block’ was often more as a result of the combination or multiple micro-level instances of perceived purposeful endeavour to achieve ‘legitimate’ task-orientated outcomes aligned with “fixing the problem” (Bundy et al., 2017) and therefore more to do with structurally influenced conceptions of legitimate leader actions than intentional agentic domination. The way that the institutionalized role of hierarchical seniority linked to leadership actions, aligns with Tourish et al.’s (2009) work on coercive persuasion - a largely subconscious attachment to dominant cultural norms - rather than the use of coercive power which relates to forced compliance (p.361). These strong normative institutional forces point to a less agentic and more structurally influenced form of coercion than is perhaps sometimes suggested in critical leadership literature.

Nevertheless, the findings suggest that hierarchical position and an asymmetric power dynamic amongst organizational leaders is inextricably linked with organizational responses that block adaptive practices over time.

The centrality of the organizational power dynamic to micro-level leader framing activities also supports previous claims of limitations in the DAC ontology (Drath et al., 2008). There is much to be admired in an approach that seeks to offer a more integrative vocabulary that transcends and includes traditional tripod-based conceptions whilst also including emerging (plural) research on leadership. However, the findings suggest that DAC provides insufficient scope to distinguish between 'blocking conditions' that prevent the emergence of adaptive organizational responses and 'enabling conditions' that overcome dominant traditional leadership paradigms. As such, support is found for Collinson et al.'s (2017, p.12) claim that, in common with leadership literature in general, notions of power and position are both central to and largely absent from the DAC ontology.

5.7.3 The importance of agency

Agency still matters - purposeful actions by motivated individuals remains at the heart of organizational problem solving. By integrating analyses on conceptions of leadership in relation to complex organizational problems; intra-organizational contextual factors; and organizational response categories, the findings extend traditional (Bass, 1990; Northouse, 2016; Yukl, 2013) and plural (Denis et al., 2012) leadership literature in relation to the emergence of adaptive practices in several ways.

Adaptive responses were only identified within conditions enabled by senior leaders. However, in terms of enabling adaptive responses, the findings revealed that senior leader support was insufficient in itself, for the generation of adaptive practices. Put simply, adaptive practices cannot be prescribed by leader-led declarations, however ‘heroic’ or decisive they are. In addition, the type of senior leader support required to foster the conditions in which adaptive practices grow were associated not just with a leader’s ‘seniority’ and active ‘support’ but also with the leader’s ‘credibility’ to break from the

expected routine in the minds of other actors. It was only within this particular senior leader enabled context that adaptive practices were seen to emerge. The findings therefore found evidence to support the notion that formal leaders' agency matters. Traditional rational or normative (see Grint, 2010a) paradigms focused on aspects of identifying or developing leader skill sets, remain highly relevant to developing knowledge. However, traditional, individual agency dominated paradigms are insufficient as a focus for developing adaptive practices, without a nuanced understanding of how that agency is contextually embedded – both institutionally and within the immediate organizational setting.

5.7.4 New institutional meanings?

Purdy et al. (2019, p.417) called for research that could, "...trace the emergence of new institutional meanings through widespread acceptance and subsequent cycles of institutional change." Adaptive responses were shown to emerge over time and across a combination of 4 conditions: strong senior leader support or permission; clarity of purpose; productive tension or catalyst for action; and the acceptance of compromise and uncertainty to provide a safe place for collaboration. The findings in relation to the acceptance of compromise and uncertainty align closely with previous findings that suggest addressing complex problems requires the dominant influences to be challenged and overcome in order for new learning or alternative methods to be enacted (see Grint, 2005; Head and Alford, 2015; Heifetz, 1994; Heifetz et al 2009). The findings in relation to a 'productive tension' aligned with Heifetz's (1994, p.116) claim that, "Urgency, well framed, promotes adaptive work". The temporal element is important here since strong evidence was also found to show how a perception of urgency can lead to rigid problem framing for crises. The temporal theme associated with a 'productive tension' supporting adaptive practices also appears to align with work that highlights the importance of productive emotional responses to work challenges (see Giorgi, 2017; Heaphy, 2017; Maitlis and Sonenshein, 2010; Sandberg and Tsoukas, 2015) in combination with the absence of dominant, hierarchically driven prescriptive actions.

This study shows that a new form of institutionalized leadership that values and legitimizes emergent, collaborative action above traditional leader-led paradigms in certain circumstances (for example in tackling complex organizational problems) is not yet embedded and normalised within the case study organization. However, in line with Currie et al.'s (2009a; 2009b) findings in relation to an emergent institution of distributed leadership, evidence was found to support pockets of adaptive practices that overcame the dominant institutionalized norm, as is neatly summarized by a senior officer, *"...you can see a bright light go on somewhere. And that bright light might flicker quite a few times. But then there could be an organisational change, there could be a personality change. And then you see the sort of more constrained approach re-emerge." (P-22).*

5.8 Limitations

The findings represent an indication of the perceptions of the individual respondents at a particular point in time. Time limitations within the doctoral research journey prevented an ethnographic approach that could have revealed a more complete temporal explanation. Whilst every effort was made to uncover the temporal framing journey from initial leader awareness of a complex problem, through to organizational response, the nature of the data set means that this journey is inevitably incomplete, with blind spots along the way.

The lead researcher was a serving member of the case study organization. Whilst every effort was made to minimize researcher impact and potential for researcher bias in the form of leading questions (detailed and structured interview protocol) and coding errors (through the detailed check coding process outlined in the research method section) it is acknowledged that the lead researcher impacts on the research in various ways (for example subconscious non-verbal cues) that cannot be completely eliminated.

The single organization case study approach used, limits claims about underlying causal mechanisms since there is no evidence that the results were replicated elsewhere. However, several other studies focused in public service settings (notably Currie et al.,

2009a; 2009b) provide evidence to support both the broad approach taken and a number of the key findings.

5.9 Conclusions

In considering how and under what contextual conditions leaders' framing of complex problems influences organizational responses over time, this empirical paper extends work on plural leadership theory by highlighting the importance of contextual and structural embeddedness and deepens understanding of the conditions under which adaptive organizational responses may emerge. Whilst this empirical study found evidence to support the emergence of adaptive practices through dynamic interactions (Lichtenstein et al., 2006; Uhl-Bien and Marion, 2009), adaptive practices were only seen to emerge under conditions that included senior leader support or permission and through alignment of a number of intra-organizational contextual conditions that combined in ways to overcome the traditional dominant leadership paradigms. The findings extend critical leadership literature since evidence was found to support the emergence of adaptive practices within a dominant institutionalized and hierarchically embedded organization. Nevertheless, strong evidence was found to support the presence of a dynamic of "coercive persuasion" (Tourish et al., 2009, p.361) that typically resulted in traditional leadership responses and this study therefore recognises the overarching influence of hierarchical power dynamics.

The paper also extends recent framing literature by providing empirical evidence to support Purdy et al.'s (2019) call for research that uses the framing perspective to “trace the emergence of new institutional meanings..." taking “a recursive perspective where institutions are produced and reproduced through the everyday activities of individuals.” (Purdy et al., 2019, p.410). This empirical study has found that leaders’ framing of complex problems influences organizational responses over time, in line with two principal categories. Firstly, and most commonly, individual leaders’ everyday institutional activity leads to actions that are familiar and perceived to be effective in relation to addressing problems. These micro-level actions across multiple individual leaders results in ‘blocking conditions’ that constrain adaptive responses to complex

problems. Secondly, and only in combination with a particular variety of senior leader support or permission, 'enabling conditions' were found that had the potential to produce adaptive responses that overcame traditional responses, through the amplification of a problem frame (Purdy et al., 2019) that called for new practices or thinking.

Future research would benefit from a multi-methods approach, including ethnographic study that enables a more complete picture of the temporal and contextual influences to be developed. Future research would also benefit from a multiple case study approach that would provide greater confidence about the underlying causal mechanisms enabling and constraining adaptive organizational responses over time.

REFERENCES:

Alvesson, M. (2017) 'Leadership: Convergence and Divergence in Leadership Relations', *Journal of Management Inquiry*, 28(3), pp. 319–334.

Alvesson, M. and Spicer, A. (2012) 'Critical leadership studies: The case for critical performativity', *Human Relations*, 65(3), pp. 367–390.

Andersson, C. and Törnberg, P. (2017) 'Wickedness and the anatomy of complexity', *Futures*, 95(September 2017) Elsevier Ltd, pp. 118–138.

Ansari, S. (Shaz), Wijen, F., & Gray, B. (2013). Constructing a Climate Change Logic: An Institutional Perspective on the "Tragedy of the Commons". *Organization Science*, *24*(4), 1014–1040.

Army Leadership Doctrine (2016).

Augier, M., Shariq, S.Z. and Thanning Vendelø, M. (2001) 'Understanding context: its emergence, transformation and role in tacit knowledge sharing', *Journal of Knowledge Management*, 5(2) Kempston: Emerald Group Publishing Limited, pp. 125–137.

Bass, B.M. (1990) 'From transactional to transformational leadership: Learning to share the vision', *Organizational Dynamics*

Baum, J.A.C. and McGahan, A.M. (2013) 'The reorganization of legitimate violence: The contested terrain of the private military and security industry during the post-cold war era', *Research in Organizational Behavior*, 33, pp. 3–37.

Bennis, W. (2007) 'The challenges of leadership in the modern world: Introduction to the special issue.', *American Psychologist*, 62(1), pp. 2–5.

Berente, N. and Yoo, Y. (2012) 'Institutional Contradictions and Loose Coupling: Postimplementation of NASA's Enterprise Information System', *Information Systems Research*, 23(2), pp. 376–396.

Bundy, J., Pfarrer, M.D., Short, C.E. and Coombs, W.T. (2017) *Crises and Crisis Management: Integration, Interpretation, and Research Development*.

Calabretta, G., Gemser, G. and Wijnberg, N.M. (2017) 'The Interplay between Intuition and Rationality in Strategic Decision Making: A Paradox Perspective', *Organization Studies*, 38(3–4), pp. 365–401.

Cardinale, I. (2018) 'Beyond Constraining and Enabling: Toward New Microfoundations for Institutional Theory', *Academy of Management Review*, 43(1), pp. 132–155.

Collinson, D. (2005) 'Dialectics of leadership', *Human Relations*, 58(11), pp. 1419–1442.

Collinson, D. (2014) 'Dichotomies, dialectics and dilemmas: New directions for critical leadership studies?', *Leadership*, 10(1), pp. 36–55.

Collinson, D., Bryman, A., Collinson, D. and Grint, K. (2011) *The Sage handbook of leadership*. London: Sage Publications.

Collinson, D., Smolović Jones, O. and Grint, K. (2017) '"No More Heroes": Critical Perspectives on Leadership Romanticism', *Organization Studies*, , p. 017084061772778.

Collinson, D. and Tourish, D. (2015) 'Teaching leadership critically: New directions for leadership pedagogy', *Academy of Management Learning and Education*, 14(4), pp. 576–594.

Cornelissen, J.P., Holt, R. and Zundel, M. (2011) 'The role of analogy and metaphor in the framing and legitimization of strategic change', *Organization Studies*, 32(12), pp. 1701–1716.

Cornelissen, J.P., Mantere, S. and Vaara, E. (2014) 'The contraction of meaning: The combined effect of communication, emotions, and materiality on sensemaking in the stockwell shooting', *Journal of Management Studies*, 51(5), pp. 699–736.

Cornelissen, J.P. and Werner, M.D. (2014) 'Putting framing in perspective: A review of framing and frame analysis across the sensemaking, social movements and institutional literatures', *Academy of Management Annals*, 8(1) Taylor & Francis, pp. 181–235.

Crevani, L., Lindgren, M., & Packendorff, J. (2010). Leadership, not leaders: On the study of leadership as practices and interaction. *Scandinavian Journal of Management*, *26*(1), 77–86.

Crowley, K. and Head, B.W. (2017) 'The enduring challenge of "wicked problems": revisiting Rittel and Webber', *Policy Sciences*, 50(4) Springer US, pp. 539–547.

Currie, G., Lockett, A. and Suhomlinova, O. (2009a) 'Leadership and institutional change in the public sector: The case of secondary schools in England', *The Leadership Quarterly*, 20(5), pp. 664–679.

Currie, G., Lockett, A. and Suhomlinova, O. (2009b) 'The institutionalization of distributed leadership: A "catch-22" in English public services', *Human Relations*, 62(11), pp. 1735–1761.

D'Andreta, D., Marabelli, M., Newell, S., Scarbrough, H. and Swan, J. (2016) 'Dominant Cognitive Frames and the Innovative Power of Social Networks', *Organization Studies*, 37(3), pp. 293–321.

Daviter, F. (2017) 'Coping, taming or solving: alternative approaches to the governance of wicked problems', *Policy Studies*, 38(6) Taylor & Francis, pp. 571–588.

Denis, J.L., Langley, A. and Sergi, V. (2012) 'Leadership in the Plural', *Academy of Management Annals*, 6(1), pp. 211–283.

Drath, W.H., McCauley, C.D., Palus, C.J., Van Velsor, E., O'Connor, P.M.G. and McGuire, J.B. (2008) 'Direction, alignment, commitment: Toward a more integrative ontology of leadership', *Leadership Quarterly*, 19(6), pp. 635–653.

Fincham, R., & Forbes, T. (2015). Three's a Crowd: The Role of Inter-logic Relationships in Highly Complex Institutional Fields. *British Journal of Management*, *26*(4), 657–670.

Fischer, T., Dietz, J. and Antonakis, J. (2017) 'Leadership Process Models: A Review and Synthesis', *Journal of Management*, 43(6), pp. 1726–1753.

Friedrich, T L., Vessey, W., Schuelke, M.J., Ruark, G.A., and Mumford, M.D. (2009) 'A framework for understanding collettive leadership: The selettive utilization of leader and team expertise with networks', *The Leadership Quarterly*, 20(6), pp. 933–958.

Giorgi, S. (2017) 'The Mind and Heart of Resonance: The Role of Cognition and Emotions in Frame Effectiveness', *Journal of Management Studies*, 54(5), pp. 711–738.

Gordon, R. (2011) 'Leadership and Power', in Collinson, D., Bryman, A., Grint, K., Brad, J. and Uhl-Bien, M. (eds.) *The SAGE Handbook of Leadership*. London: Sage Publications, pp. 195–202.

Gray, B., Purdy, J.M. and Ansari, S. (Shaz) (2015) 'From Interactions to Institutions: Microprocesses of Framing and Mechanisms for the Structuring of Institutional Fields', *Academy of Management Review*, 40(1), pp. 115–143.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E.R. and Lounsbury, M. (2011) 'Institutional Complexity and Organizational Responses', *The Academy of Management Annals*, 5(1), pp. 317–371.

Grint, K. (2005) 'Problems, problems, problems: The social construction of "leadership"', *Human Relations*, 58(11), pp. 1467–1494.

Grint, K. (2010a) *Leadership: A Very Short Introduction*. Oxford: Oxford University Press.

Grint, K. (2010b) 'The cuckoo clock syndrome: Addicted to command, allergic to leadership', *European Management Journal*, 28(4) Elsevier Ltd, pp. 306–313.

Hazy, J.K. and Uhl-Bien, M. (2015) 'Towards operationalizing complexity leadership: How generative, administrative and community-building leadership practices enact organizational outcomes', *Leadership*

Head, B.W. and Alford, J. (2015) 'Wicked Problems: Implications for Public Policy and Management', *Administration & Society*, 47(6) Beverly Hills: SAGE PUBLICATIONS, INC., p. 711.

Heaphy, E.D. (2017) '" Dancing on Hot Coals " : How Emotion Work Facilitates Collective Sensemaking', *Academy of Management Journal*, 60(2), pp. 642–670.

Heifetz, R.A. (1994) *Leadership without easy answers*. London: Harvard University Press.

Heifetz, R.A., Grashow, A. and Linsky, M. (2009) *The Theory Behind the Practice A Brief Introduction to the Adaptive Leadership Framework*.

Lagreid, P. and Rykkja, L.H. (2015) 'Organizing for "wicked problems" – analyzing coordination arrangements in two policy areas', *International Journal of Public Sector Management*, 28(6), pp. 475–493.

Land Warfare Development Centre. *Army Doctrine Publication: Land Operations*. Army Doctrine Publication AC 71940.

Lichtenstein, B.B. and Plowman, D.A. (2009) 'The leadership of emergence: A complex systems leadership theory of emergence at successive organizational levels', *Leadership Quarterly*, 20(4) Elsevier Inc., pp. 617–630. Available at: 10.1016/j.leaqua.2009.04.006

Lichtenstein, B.B., Uhl-bien, M., Marion, R., Seers, A., Douglas, J. and Schreiber, C. (2006) 'on Leading in Complex Adaptive Systems', *Emergence: Complexity and Organization*, 8(4), pp. 2–12.

Maitlis, S. and Sonenshein, S. (2010) 'Sensemaking in Crisis and Change: Inspiration and Insights From Weick (1988).', *Journal of Management Studies*, 47(3), pp. 551–580.

Marion, R. and Uhl-Bien, M. (2001) 'Leadership in complex organizations 105', *Leadership Quarterly*, 12(4), pp. 389–418.

McPherson, C. M., & Sauder, M. (2013). Logics in Action: Managing Institutional Complexity in a Drug Court. *Administrative Science Quarterly*, *58*(2), 165–196.

Miles, M.B. and Huberman, M.A. (1994) *Qualitative Data Analysis*.second. Thousand Oaks: Sage Publications.

Murphy, J., Rhodes, M.L., Meek, J.W. and Denyer, D. (2017) 'Managing the Entanglement: Complexity Leadership in Public Sector Systems', *Public Administration Review*, 77(5), pp. 692–704.

Northouse, P. (2016) *Leadership*. 7th edn. London: Sage Publications.

Ocasio, W., Loewenstein, J. and Nigam, A. (2015) 'How streams of communication reproduce and change institutional logics: The role of categories', *Academy of Management Review*, 40(1), pp. 28–48.

Ocasio, W. and Radoynovska, N. (2016) 'Strategy and commitments to institutional logics', *Strategic Organization*, 14(4), pp. 287–309.

Pache, A.-C., & Santos, F. (2010). When Worlds Collide: The Internal Dynamics Of Organizational Responses To Conflicting Institutional Demands. *Academy of Management Review*, *35*(3), 455–476.

Pazzaglia, F., Farrell, M., Sonpar, K., & Martin de Holan, P. (2018). Keeping up with the Joneses: Industry rivalry, commitment to frames and sensemaking failures. *Human Relations*, *71*(3), 427–455.

Plowman, D.A., Solansky, S., Beck, T.E., Baker, L., Kulkarni, M. and Travis, D.V. (2007) 'The role of leadership in emergent, self-organization', *The Leadership Quarterly*, 18(4), pp. 341–356.

Purdy, J., Ansari, S. and Gray, B. (2019) 'Are Logics Enough? Framing as an Alternative Tool for Understanding Institutional Meaning Making', *Journal of Management Inquiry*, 28(4), pp. 409–419.

Raelin, J. A. (ed.) (2016) *Leadership-As-Practice*. Abingdon: Routledge.

Raelin, J.A. (2011) 'From leadership-as-practice to leaderful practice', *Leadership*, 7(2), pp. 195–211.

Rhee, E.Y. and Fiss, P.C. (2014) 'Framing Controversial Actions: Regulatory Focus, Source Credibility, and Stock Market Reaction to Poison Pill Adoption', *Academy of Management Journal*, 57(6), pp. 1734–1758.

Rittel, H.W.J. and Webber, M.M. (1973) 'Dilemmas in a general theory of planning', *Policy Sciences*, 4(2), pp. 155–169.

Sandberg, J. and Tsoukas, H. (2015) 'Making sense of the sensemaking perspective: Its constituents, limitations, and opportunities for further development', *Journal of Organizational Behavior*, 36, pp. s6–s32.

Scott, W. R. (1995). *Institutions and Organizations.* London: Sage Publications

Scott, W.R. (2003) 'Institutional carriers: reviewing modes of transporting ideas over time and space and considering their consequences', *Industrial and Corporate Change*, 12(4), pp. 879–894.

Smets, M., Jarzabkowski, P., Burke, G.T. and Spee, P. (2015) 'Reinsurance Trading in Lloyd's of London: Balancing Conflicting-yet-Complementary Logics in Practice', *Academy of Management Journal*, 58(3), pp. 932–970.

Smith, W.K, Erez, M., Jarvenpaa, S., Lewis, M.W. and Tracey, P. (2017) 'Adding Complexity to Theories of Paradox, Tensions, and Dualities of Innovation and Change:

Introduction to Organization Studies Special Issue on Paradox, Tensions, and Dualities of Innovation and Change', *Organization Studies*, 38(3–4), pp. 303–317.

Smith, W.K. and Lewis, M.W. (2011) 'Toward a theory of paradox: A dynamic equilibrium model of organzining', *Academy of Management Review*, 36(2), pp. 381–403.

Tourish, D. (2019) 'Is Complexity Leadership Theory Complex Enough? A critical appraisal, some modifications and suggestions for further research', *Organization Studies*

Tourish, D. (2014) 'Leadership, more or less? A processual, communication perspective on the role of agency in leadership theory', *Leadership*, 10(1), pp. 79–98.

Tourish, D., Collinson, D. and Barker, J.R. (2009) 'Manufacturing Conformity : Leadership Through Coercive Persuasion in Business Organisations', *M(djn(djgement*, 12(5) Nantes: Association Internationale de Management Stratégique, pp. 360–383.

Turner, N., Swart, J. and Maylor, H. (2013) 'Mechanisms for managing ambidexterity: A review and research agenda', *International Journal of Management Reviews*, 15(3), pp. 317–332.

Uhl-Bien, M. (2006) 'Relational Leadership Theory: Exploring the social processes of leadership and organizing', *Leadership Quarterly*, 17(6), pp. 654–676.

Uhl-Bien, M. and Arena, M. (2018) 'Leadership for organizational adaptability: A theoretical synthesis and integrative framework', *Leadership Quarterly*, 29(1), pp. 89–104.

Uhl-Bien, M. and Marion, R. (2009) 'Complexity leadership in bureaucratic forms of organizing: A meso model', *Leadership Quarterly*, 20(4) Elsevier Inc., pp. 631–650.

Uhl-Bien, M., Marion, R. and McKelvey, B. (2007) 'Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era', *Leadership Quarterly*, 18(4), pp. 298–318.

Weber, E.P. and Khademian, A.M. (2008) 'Wicked Problems, Knowledge Challenges, and Collaborative Capacity Builders in Network Settings', *Public Administration Review*, 68(2) Washington: American Society for Public Administration, pp. 334–349.

Willmott, H. (1993) 'Strength Is Ignorance; Slavery Is Freedom: Managing Culture in Modern Organizations*', *Journal of Management Studies*, 30(4), pp. 515–552.

Yukl, G. (2013) *Leadership in Organizations*. 8th edn. Harlow: Pearson.

CHAPTER 6: OVERALL DISCUSSION

6.1 The Overall Flow of the 3 Thesis Papers

In the section that follows, the researcher will provide a summary of the overall flow and contribution of the three papers within this thesis, highlighting how the research progressed from systematic literature review through to the two empirical studies and identifying areas of supporting evidence in the studies that offer potential explanations for underlying mechanisms that act to enable or constrain adaptive responses to complex organizational problems.

6.1.1 Paper 1: A Systematic Literature Review (SLR) (Thesis Chapter 2)

The starting point for the SLR was the review question identified in a scoping study. The SLR's findings are portrayed in **Figure 6-1 below:**

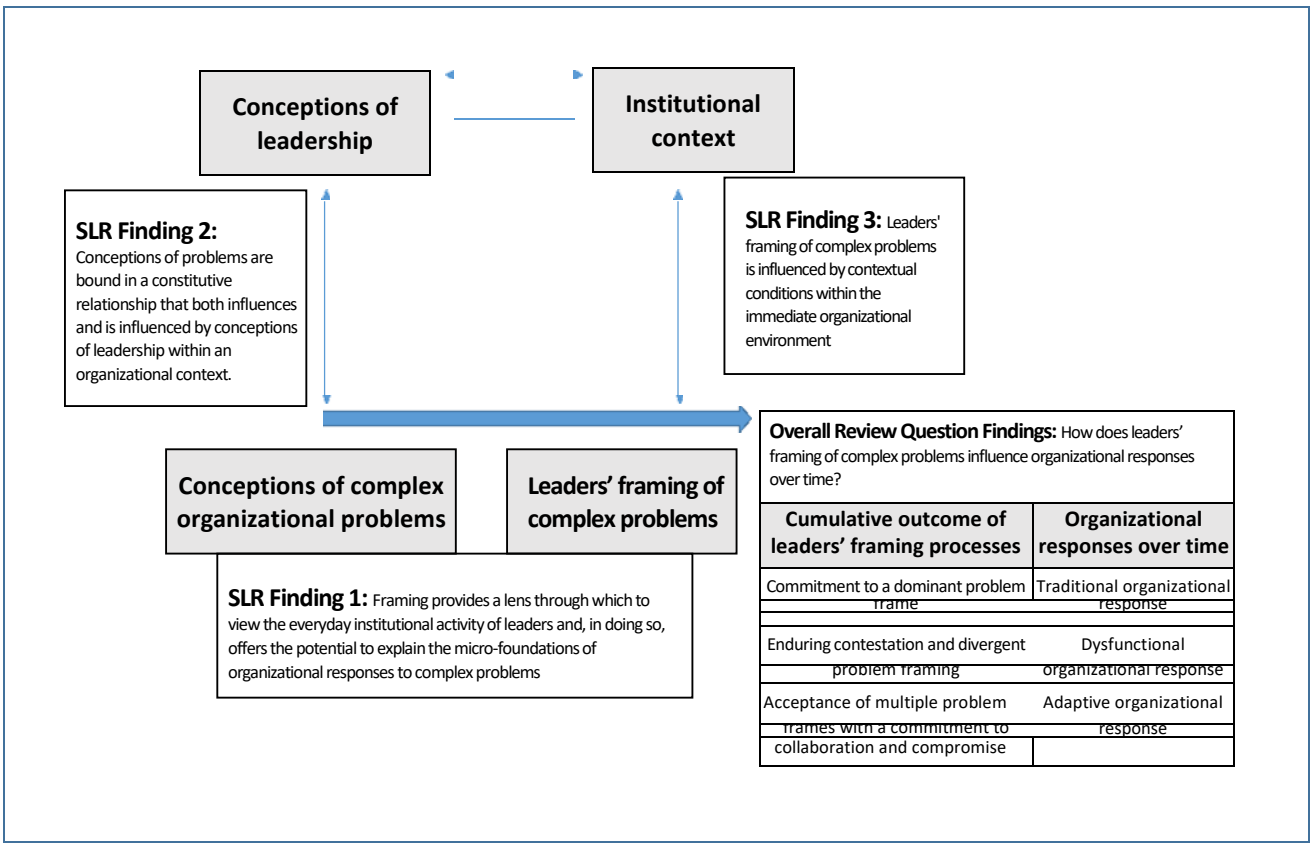


Figure 6-1: Systematic Literature Review Findings (originally presented at Figure 2-2)

The SLR identified three broad categories of potential organizational level responses to complex problems but could not explain under what specific contextual conditions and why a particular mechanism prevails in influencing leaders and how this affects the organizational response to a complex problem. The SLR identified that developing an understanding of contextual conditions within the immediate organizational environment is key to understanding the everyday institutional activity of individual leaders addressing complex organizational problems. Temporal influences were highlighted as being particularly important, but the SLR could not explain to what extent time influences variability of response to the institutionalized practices enacted by leaders. Literature also highlighted that careful attention needs to be paid to specific power related dynamics within an organizational context, as well as more generally the emergence of disproportionally influential individual behaviours whether they are specifically related to formal power structures or not.

The empirical research was designed to advance the conceptual model developed from the synthesis of ideas from the literature by seeking to identify and distinguish between the underlying mechanisms that lead to each of the organizational responses portrayed in Figure 6.1. Study 1 was designed to explore more fully the relationship between deeply embedded constructs leaders hold for addressing complex problems and the perceived effectiveness of organizational response. Study 2 was designed to facilitate the development of rich descriptions that explain contextual nuances – unpacking the particular conditions that enable or constrain adaptive responses at the organizational level. Such an approach was designed to enable power and hierarchical influences to be explored. The overall structure of the research is presented in **Figure 6-2** below.

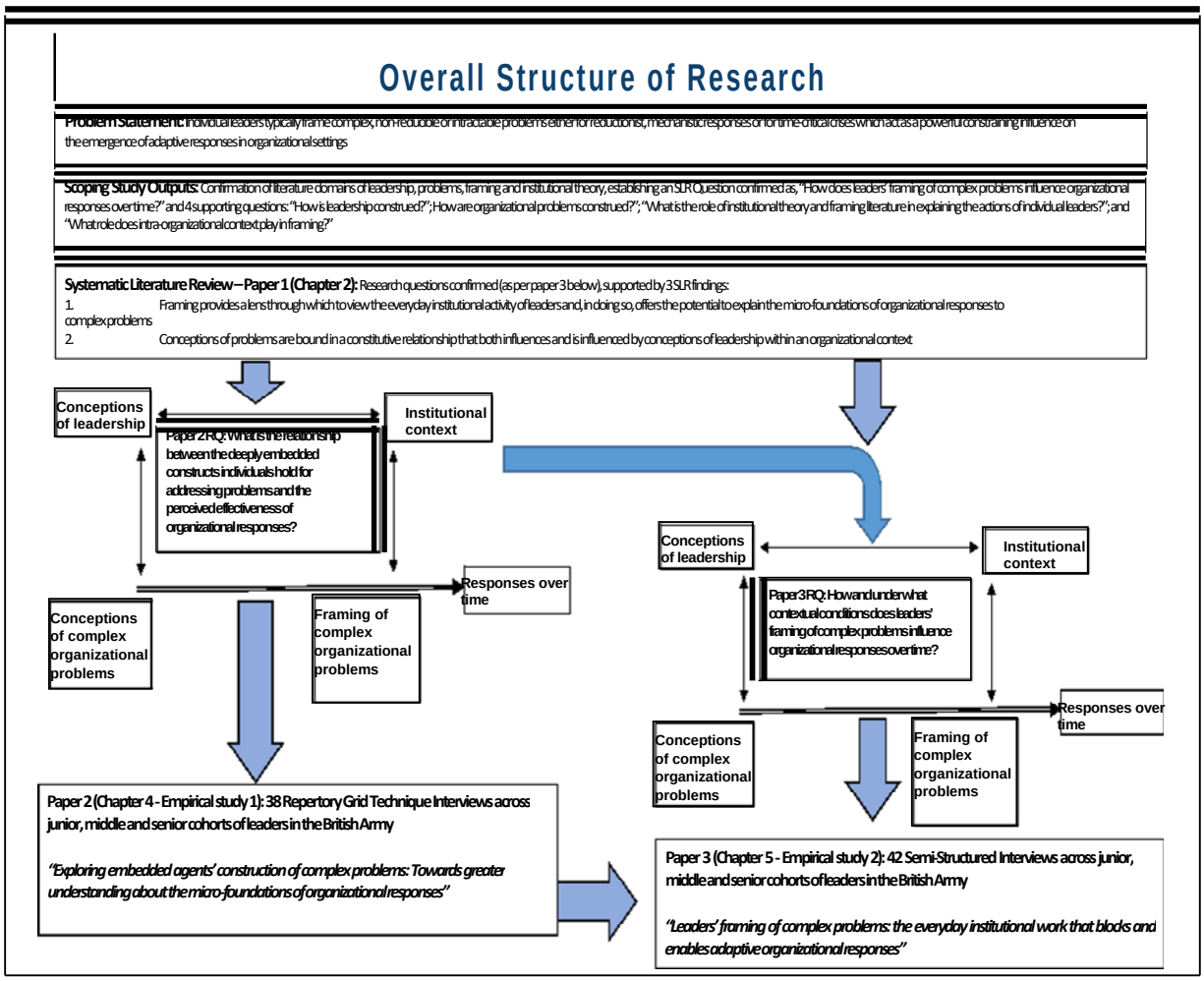


Figure 6-2: Overall structure of research study (originally presented at Figure 1-1)

6.1.2 Paper 2: Empirical Study 1 using RGT Interviews

The summary of findings from paper 2 are captured in **Figure 6-3** below. The findings suggest that respondents grouped complex and less complex, broadly successful and broadly unsuccessful problems within the same range, using similar constructs. This narrow range of convenience implies that in the minds of respondents, 'complex' problems are insufficiently distinguished from other types of problems (for example, crises and complicated problems), and effectiveness criteria are insufficiently distinct from ineffectiveness criteria to create a more distinct range of constructs and element scores within constructs.

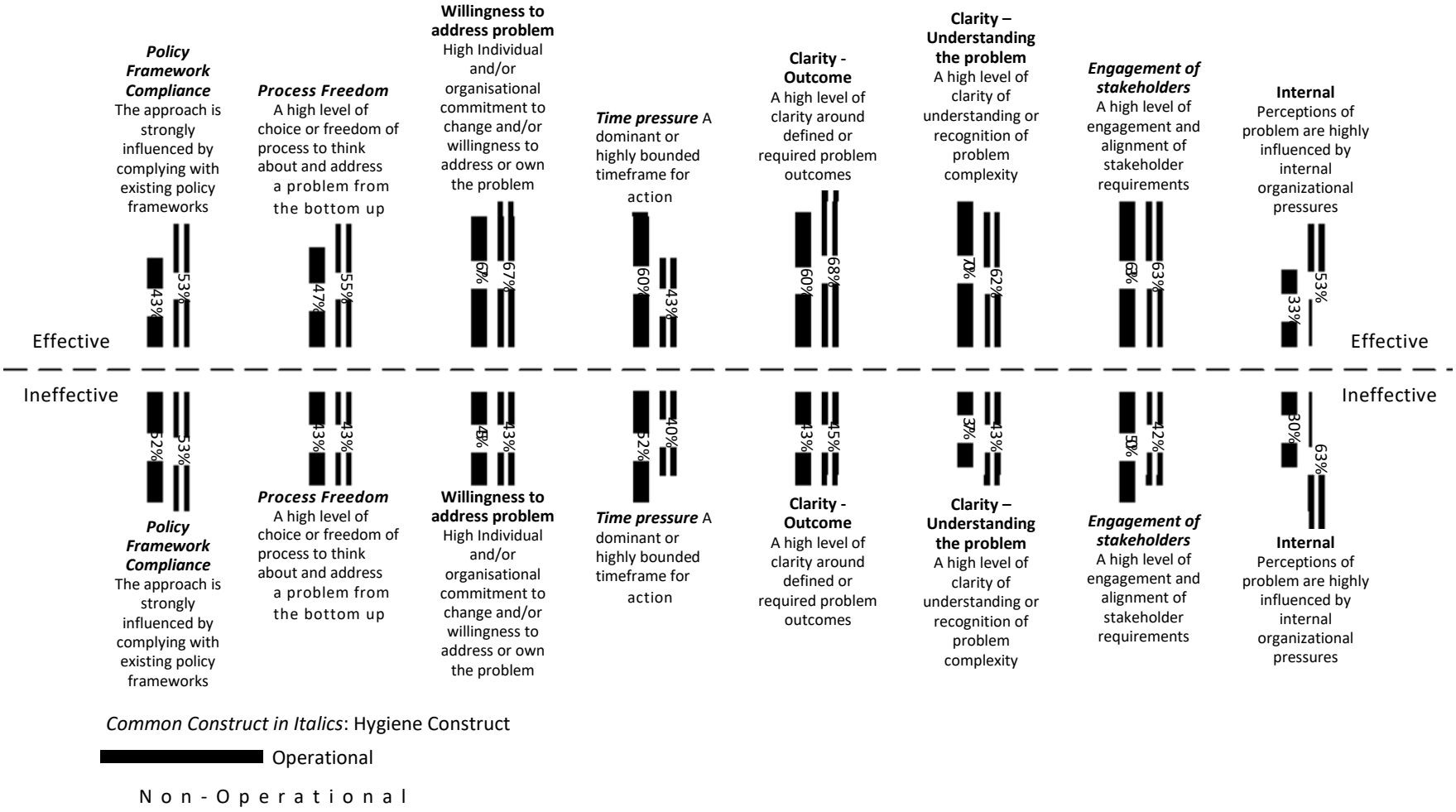


Figure 6-3: Empirical Study 1 Summary of Findings (originally presented at Figure 4-1)

Study 1 concluded that individual leaders' constructs relating to adaptive responses are bound in a constitutive relationship with structural and contextual influences (Purdy et al., 2019). Evidence was found to suggest some idiosyncratic elements (for example the conflict evident in the leaders' minds about the balance between compliance and freedom in relation to addressing complex problems), alongside dominant structural influences that lead to shared conceptions (Berente and Yoo, 2012) about complex problems (for example, the elegant alignment of common construct categories associated with effectiveness - actor willingness; clarity of understanding the problem; clarity of outcome; and engagement of stakeholders).

The findings revealed evidence to support the existence of a constitutive relationship and yet the data could not explain under what specific contextual conditions influences were dominated by individual, idiosyncratic factors; or structural, institutional forces. Study 2 was designed to address this deficiency, using semi-structured interviews to reveal richer descriptions about the contextual and structural influences on leaders' framing processes in relation to addressing complex problems. This micro-level focus revealed the enabling and blocking mechanisms that manifested in organizational responses, as is portrayed in Figure 6-4 below.

6.1.3 Paper 3: Empirical Study 2 using Semi-Structured Interviews

The findings from paper 3 are summarized in the model at **Figure 6-4** below:

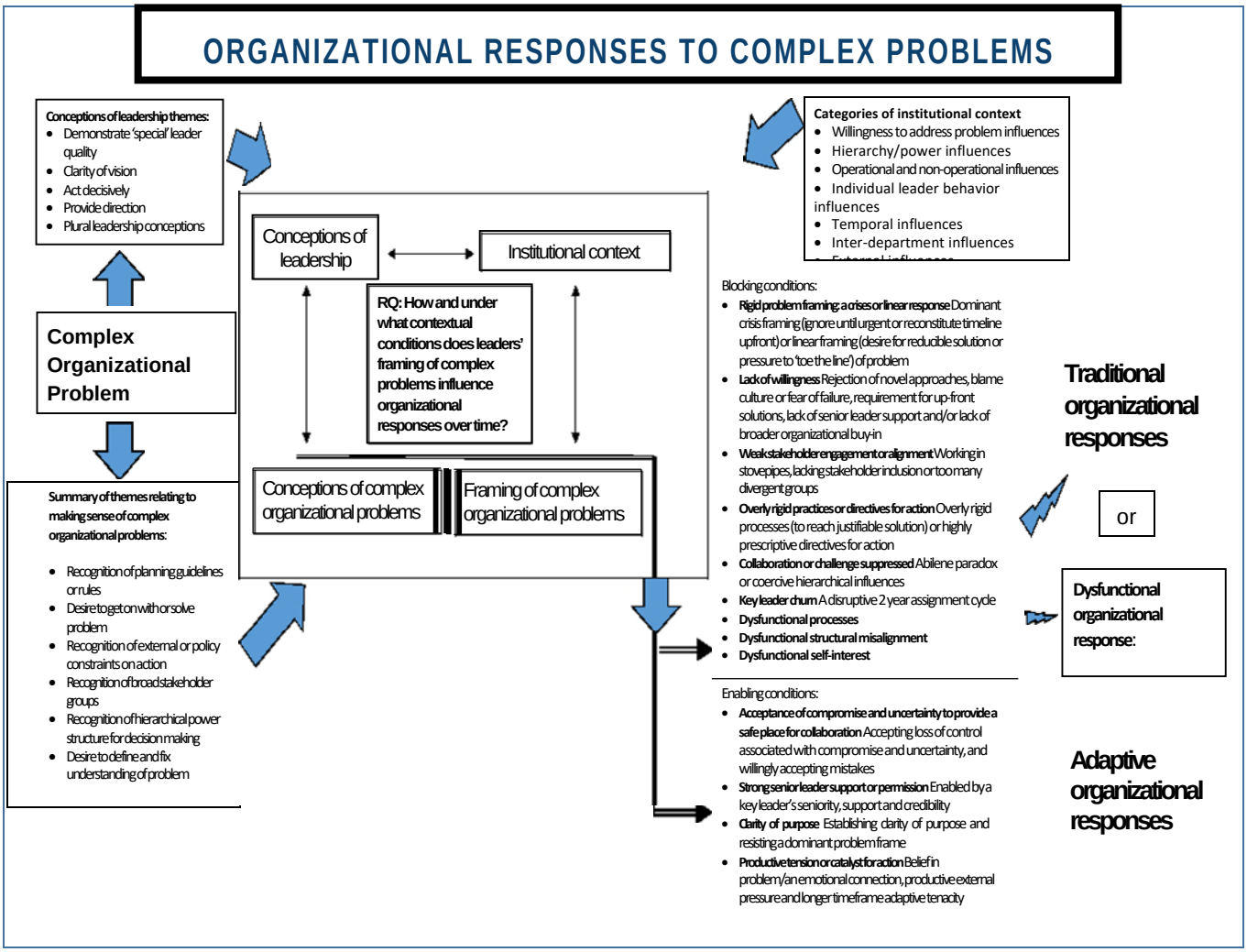


Figure 6-4: Empirical Study 2 Summary of Findings (originally presented at Figure 5-6)

The findings from paper 3 therefore revealed under what contextual conditions adaptive responses to complex problems emerged within an organizational setting. Adaptive responses were shown to emerge over time and across a combination of four conditions: strong senior leader support or permission; clarity of purpose; productive tension or catalyst for action; and the acceptance of compromise and uncertainty to provide a safe place for collaboration. However, evidence was presented to suggest that these adaptive responses are not yet embedded and normalised within the case study organization, only emerging when a combination of enabling conditions align to 'amplify' the new or innovative problem frame (Purdy et al., 2019) and overcome the dominant institutionalized norms. The next section will consider how the findings across the two empirical studies combined to address the principal research question.

6.2 The Overall Synthesis of Findings and Contribution of the 3 Thesis Papers

6.2.1 Problem Constructs - Structural influences

Decision-making frameworks typically try to explain the attributes of problems and focus on cognitive psychological perspectives in pursuit of improved individual leaders' decision making. For example, the Cynefin framework (see Snowdon and Boone, 2007) draws on complexity science and theorizes complex problems as a discrete problem category alongside simple, complicated and chaotic problem categories. The findings from study 1 suggest that individual leaders' constructions of complex problems are insufficiently differentiated from other organizational level problems (for example complicated problems or crises) in the minds of individual actors, to invoke new and innovative problem frames. The findings from study 2 highlighted the importance of paying attention to interactional processes associated with the construction of problems over time. The following section will consider findings drawn from the two empirical studies that supports the assertion that cognitive, individual leader focused decision making models would benefit from the inclusion of perspectives drawn from PCT (Kelly, 1955) and framing literature (Purdy et al., 2019) that recognise the constructed nature of problems and allow for a broader view of the collective and structural influences affecting individual decision making.

The findings from study 1 showed a high degree of commonality in construct categories across all three hierarchical groups of respondents (displayed in the notably high %UF scores across relatively few common construct groups). In addition, the narrow spread of ANV suggested a lack of discriminatory capacity in the minds of respondents for their constructs associated with addressing complex problems. Whilst the findings from study 1 lacked the rich descriptions capable of providing a more complete picture, a deeper look at Kelly's (1955) PCT provides some constructivist insights into possible explanations for this lack of discriminatory capacity that point to the influence of structural forces.

Kelly's (1955) PCT is based on a fundamental postulate (a person's processes are psychologically channelised by the ways in which he or she anticipates events) and 11 corollaries (summarized in Jankowicz, 2004, Appendix 6 and in detail in Kelly, 1955). Four of Kelly's corollaries appear to have particular relevance to the influence of broader structural influences. These corollaries, in particular, help to elicit meaning about how structural influences on individual leaders' personal constructs may constrain adaptive responses to complex problems:

- **Range Corollary:** A construct has a limited 'range of convenience' in terms of its perceived usefulness to the person using it. A lack of ANV spread suggests that, to some extent, respondents have grouped complex and less complex; broadly successful and broadly unsuccessful problems within the same range, using similar constructs. This narrow range therefore implies that the category of 'complex' problem is insufficiently distinguished from other types of problems (for example, crises and complicated problems) and effectiveness criteria for complex problems are insufficiently distinct from ineffectiveness criteria in the minds of respondents to create a more distinct range of constructs and construct scores.

- **Modulation Corollary:** "A person's construction system is composed of complementary superordinate and subordinate relationships." (Kelly, 1955, p.78). Some constructs are more permeable than others and, in general, people's construct systems become more set and less modifiable in dominant cultural environments, where a person's role is more influenced by their superordinating system. Consequently, one would expect this corollary to be influential in traditional organizational settings such as the British Army, suggesting that leaders' construct systems are relatively less modifiable and open to change than in other, less hierarchical environments.

- **Commonality Corollary:** People are similar in that they construe similar meaning in events rather than they encounter the same events. A dominant and recognisable organizational culture therefore has the potential to influence

individuals such that they construe events similarly. Despite choosing examples of complex problems most salient to their personal experiences, respondents appeared to construe meaning, and to present constructs in relation to complex problems in notably similar ways.

- **Sociality Corollary:** People play a role in others' construction processes through the role relationships they form and through their ability to understand other people's constructs. A focus on this social process within PCT indicates a recognition of the normative influences that impact on people's individual cognitive processes of meaning-making.

Taken together in relation to study 1 findings, these corollaries suggest the influence of dominant norms within the minds of individual leaders, since the findings revealed a combination of common, shared constructs for complex problems and a general lack of discriminatory power in relation to perceived effectiveness of response.

Framing literature provides several powerful insights into why dominant, structurally influenced constructs may constrain adaptive organizational responses. Cornelissen and Werner (2014) provide one such insight, stating "...the overreliance on a pre-existing cognitive frame has been suggested as an important source of failure in the context of novel, unprecedented, or changing circumstances that require inferential flexibility and alternative conceptualizations" (p.190). Henisz and Zelner (2005) offer some explanatory detail in support of this view, arguing that individuals judge emerging institutions in the context of reference points with established legitimacy. When individuals are forced to make choices or judgements involving both established and emerging institutions it is generally harder for individuals to match the emerging institutional influence with existing benchmarks and, without the same level of "cognitive legitimacy" (p.362), actors tend to rely on existing benchmarks.

Further evidence of a dominant structural influence on leaders' personal constructs was revealed when the data from study 1 **(see Chapter 5 and Appendix G-4)** were broken down by hierarchical cohort (junior, middle and senior groups). The data showed

remarkably little difference in perceptions of effectiveness and differentiation by normal or abnormal environmental context across the hierarchical levels. Whilst the small sample size within each hierarchical group (15 junior, 11 middle and 12 senior) tempers any strong conclusions being drawn, it is nevertheless interesting that there was so little differentiation across the hierarchical groups.

The findings from study 1 in relation to normal and abnormal contexts revealed further evidence of structural influences on leaders' personal constructs. Complex problems in abnormal contexts (operationally deployed military environments) were noticeably more associated with problems that had shorter timeframes for action than normal contexts. Consideration of this finding within the context of relevant PCT corollaries (Kelly, 1955) discussed above and with the findings from study 2 suggests that this connection between time constraint and problem within an abnormal context has stronger cognitive legitimacy than other distinctions, including distinctions between complex problems and the perceived effectiveness of response, that the study explicitly sought to enquire about. For abnormal environment problem examples, respondents therefore typically identified time related constructs associated with crises, suggesting that leaders' 'range of convenience' (Kelly, 1955) is insufficiently broad to distinguish effectively between crisis type and enduring complex type problems.

The evidence from the two empirical studies outlined above, provides support to the central argument advanced by Grint's 'Irony of Leadership' narrative (2005, p.1478) and his 'Problems, power and authority' typology (p.1477). Grint's (2005) key assertion is that the greater the need for a collective resolve to accept a level of enduring uncertainty posed by complex problems, the greater the forces are to reconstitute the problems as crises and therefore legitimise (in the minds of key stakeholders) purposeful command action using coercive power to address the problem. Described using the language of PCT and framing, leaders' limited 'range of convenience' (Kelly, 1955), leads to problem frames that lack discriminatory power to distinguish between crises and complex problems; the higher the perceived pressure to get on and fix the problem (Bundy et al., 2017), the more likely leaders are to rely on familiar activity, with cognitive legitimacy (Henisz and Zelner, 2005). As such, as the perceived pressure or level of uncertainty

increases, so too does the likelihood of a cognitively legitimate crisis style response from leaders.

However, in line with Grint's (2005) assertion that the typology should be viewed as a heuristic, rather than a contingency leadership model, the study found evidence to suggest that the alignment of crises with coercive power; and complex (wicked in Grint's text) problems with normative power was more nuanced, with crises sometimes associated with greater normative power and complex problems sometimes associated with more coercive influences over time, depending on the prevalent conditions within the immediate intra-organizational context. The next section will consider the potential for responses that overcome the dominant, institutionalized norms and consider the role of leadership in promoting the potential for adaptive organizational responses to complex problems.

6.2.2 Leadership - The elusive search for adaptive responses

The findings from studies 1 and 2 suggest that adaptive organizational responses to complex problems are generally elusive. Responses to problems only revealed their 'adaptive' nature when they could be understood in context and connected with the processual flow of micro-level interactions, manifesting as opposing enabling and blocking conditions. Whilst some have specifically assigned the word 'adaptive' as an adjective aligned to 'leadership' (Heifetz, 1994; Heifetz et al., 2009), the findings suggest that this approach may be unhelpful. In line with recent work by Uhl-Bien and Arena (2018), the study found support for the re-labelling of the term 'adaptive leadership' within CLT literature. While the term has been used in relation to an outcome of collaborative endeavour (Lichtenstein et al., 2006; Uhl-Bien and Marion, 2009), it is also used explicitly in relation to entitative leader activity (Heifetz, 1994; Heifetz et al., 2009). The study supports the assertion of Tourish (2019, p.223), that terms such as 'adaptive leadership' within CLT promote conceptions of leadership that find their way back to heroic, individual agency. These conceptions are associated with the coordination and control of linear activity between entities, rather than conceptions of complexity as engrained within leaders embedded in structural influences. The following section will

consider evidence across the two empirical studies that deepens understanding about the role of leaders in the emergence of adaptive organizational responses to complex problems.

The slight preference for freedom from existing policy frameworks (in abnormal contexts) and process freedoms (in normal contexts) in study 1 aligns with the notion of there being some agentic potential to overcome macro-level structural influences in pursuit of adaptive responses to complex problems. This finding provides tentative support for the existence of leader constructs that associate effectiveness of response with the novel approaches (Grint 2010b; Head and Alford, 2015; Heifetz et al., 2009) seen to be so important in relation to addressing complex problems. However, the findings from study 1 suggest a strong institutionalized influence on individuals' personal construct categories in relation to complex problems, with leaders typically lacking in discriminatory power to sufficiently differentiate complex problems from other types of problems (categorized in this study as linear, complicated problems and crises). This finding is important since it foregrounds the cognitive institutional influences and complements the (predominantly) normative and regulative influences identified in study 2. As such, applying a combination of constructivist and socially constructed epistemological perspectives in the empirical studies offered complementary insights that assisted in deepening understanding of the underlying enabling and blocking conditions influencing adaptive organizational responses to complex problems.

Findings from study 1 offered an interesting insight about where agency appears to be most constrained - where the problem is in a normal environment and highly internally (within the organization) bounded. Without an external catalyst for action, enduring and intractable complex problems generated highly constraining influences on agency which blocked the development of new or novel approaches. Study 2 revealed that the blocking conditions typically manifested as a combination of coercive hierarchical influences, rigid problem framing and suppression of challenge. Study 2 findings also identified the importance of external pressure to provide a productive tension or catalyst for action as a key enabling condition, but did not find such a clear distinction between internally and externally bounded problems. Taken together, the study findings foreground an aspect

of intra-organizational context that highlights particularly constraining structural influences on agency.

Evidence from study 2 provided strong support for the assertion that adaptive organizational responses cannot be prescribed successfully by leader-led declarations, however ‘heroic’ or decisive they are. Notwithstanding the constraints on leader agency, study 2 found evidence to support the enduring relevance and importance of purposeful agentic action by leaders in influencing organizational responses. Leader support was found to be an essential element of the enabling conditions that had the potential to challenge and overcome the dominant patterns of traditional institutionalized responses. These findings are consistent with descriptions of leaders being essential to the process of 'frame amplification' where a new frame wins over a number of key proponents, takes root over time, and amplifies with sufficient resonance and support to enable new institutional meanings to emerge (Purdy et al., 2019, p.411). In this way, a framing perspective focused on micro-level leader perceptions revealed enabling conditions capable of amplifying new, emergent problem frames to overcome dominant institutionalized norms.

The type of leader support required to enable the conditions for adaptive organizational responses were linked to a combination of a leader’s ‘seniority', active ‘support’, and also with the leader’s ‘credibility’ to break from the expected routine in the minds of other actors. It was only within this particular senior leader enabled context that adaptive responses were seen to emerge. While leaders cannot prescribe adaptive responses, the findings suggest that purposeful and credible agentic leader activity (particularly by senior leaders) matters in enabling the conditions for new problem frames to be amplified over time (Purdy et al., 2019).

Traditional normative or rational (see Grint, 2010a) paradigms focused on aspects of identifying or developing leader skill sets therefore remain highly relevant to developing individual knowledge and the potential for adaptive organizational capability. However, traditional individual agency dominated paradigms are insufficient as a sole focus for developing leaders to enable adaptive responses. Adaptive organizational responses

require the development of a nuanced understanding of how leaders' agency is contextually embedded – both institutionally and within the immediate organizational setting. Leadership development interventions therefore need to focus on the underpinning schemata embedded within organizational norms (Probert and Turnbull-James, 2011) in order to develop possibilities for new institutional meanings (Purdy et al., 2019).

To summarise, in line with the assertions of CLT (Uhl-Bien and Marion, 2009; Uhl-Bien et al., 2007) purposeful and effortful leader agency was seen to act as an essential enabler to set the conditions for the potential for adaptive organizational responses to complex problems, rather than as a causal guarantee of adaptive response. In addition, where adaptive responses were identified, leaders typically overestimated the contribution of individuals' (typically senior leaders') perceived special qualities, consistent with notions of traditional, heroic agency. The next part of the discussion will focus specifically on the influence of power and hierarchy on leaders' framing processes, considering the findings across the two studies.

6.2.3 Leadership - Power and hierarchy reinforcing the institutionalized norm

Surprisingly in a notably hierarchical organization, neither power nor hierarchy appeared as either discrete construct categories, or as identifiable aspects within the common construct categories in study 1. This finding suggests that power dynamics were typically not within leaders' 'range of convenience' (Kelly, 1955) since they rarely surfaced in respondents' descriptions of constructs. This does not necessarily mean that leaders were unaware of the influence of power, but it does suggest that leaders' perceptions of power were relatively unimportant in relation to the way they thought about complex problems.

Contrastingly, hierarchical power and authority ran through the rich descriptions in study 2. Interestingly, alongside critical insights into the effects of power and hierarchy within the case study organization, study 2 also provided many descriptions related to either an unproblematic acceptance of the need for hierarchy, or active support for the

appropriateness of the army's structures in addressing challenging problems, as the following illustrative quotes highlight:

“...I would rather personally would rather have firm direction of where we're going then try and have some wishy-washy way of how we're going to do things.” (junior cohort).

“...and particularly when problems are ambiguous, particularly when problems are complex, because people are looking for leadership, they're looking for somebody to point them in the right direction.” (middle cohort)

“...sometimes you, you're the, if you're the leader, you are the leader, because of your wisdom and your experience, and therefore where you're best placed to be is probably providing that intuition to help them navigate through the complexity.” (senior cohort)

Typically, the more senior the position of the leader in the hierarchy, the more the leader was perceived to be legitimately empowered to decide upon action; if the actions were perceived to 'solve' the problem, the most senior leader gained the majority of the credit; whereas if the actions were perceived to be ineffective, the senior leader attracted most of the blame, as the illustrative quotes below imply:

"it's about people's perceptions of the individual who's made the choice or the idea. And it's ego, and pride still comes into play quite a lot." (junior cohort)

"we have a bit of cult of personality with our general officers." (junior cohort)

The combination of findings above, suggests that the impact of a hierarchical power dynamic manifested in ways that are consistent with descriptions of "coercive persuasion" (Tourish et al., 2009), where actors internalize, often subconsciously, an attachment to dominant cultural norms; and are also consistent with a highly institutionalized form of traditional, heroic, individual decision-making leadership (Currie et al., 2009a; 2009b). Rather than as conscious acts of agentic domination to stifle change, the findings from study 2 suggest that the use of hierarchical privilege by leaders to ‘block’ adaptive responses was more often as a result of myriad micro-level instances of perceived purposeful endeavour to achieve legitimate task-orientated outcomes aligned with “fixing the problem” and delivering outcomes to agreed measures or targets; or demonstrating perceived effectiveness by reframing the problem as time critical (Bundy et al., 2017).

The empirical studies suggest that the impact of power on organizational response is substantial, albeit with strong cultural-cognitive and normative institutional forces pointing to a less agentic and more structurally influenced form of coercion than is sometimes emphasized in critical leadership literature. Nevertheless, the dominant, institutionalized conceptions of leaders as unhindered, rather than embedded agents leads to a position where perceptions of agentic potential to influence adaptive organizational responses are overestimated in the majority of instances. Respondents' perceptions related to power and hierarchy were typically associated with the effectiveness of decision making by individual leaders, expressed in a particularly agentic way that backgrounded the possibility of constraining structural influences. Whilst evidence was found to support the notion that leader agency is an essential enabling component of adaptive responses to complex problems, the findings were equally clear that adaptive responses could not be successfully prescribed and controlled by individual leaders - however hierarchically powerful and charismatic they were. Further implications of power dynamics are discussed in relation to context in the section that follows.

6.2.4 Leadership and Institutions - Deepening contextual understanding

In their empirical study of the institutionalization of leadership in an English public service setting Currie et al. (2009b, p. 1735) concluded that, "...leadership more generally, cannot be divorced from its institutional context and that the relative influence of divergent institutional forces depends upon the immediate organizational environment." Study 2 provided rich descriptions that offered strong support to Currie et al.'s (2009a; 2009b) assertions. Whilst the research methodology lacked the capacity to develop a complete temporal picture of how the underlying mechanisms affected organizational responses over time, the data indicated that the contextually specific flow of micro-level interactional communication between actors over time played a key role. For example, consistent with the findings from paper 1 (Chapter 2) early engagement by organizational actors in problems perceived to be complex were commonly associated with the encouragement of divergent problem framing. The rich descriptions developed from the data in study 2 showed that these early calls for divergent problem frames typically eroded over time across myriad micro-processes as a dominant problem frame

emerged (Purdy et al., 2019), leading to familiar organizational responses related to time-critical crises or reducible and measurable linear problems. Only in rare cases did initially divergent problem framing, lead to either enduring contestation (and dysfunctional responses) or, alternatively, to adaptive organizational responses.

A detailed analysis of the intra-organizational contextual categories developed during the coding process identified themes of micro-level interactions that revealed underlying enabling and blocking conditions. The conditions identified are not offered as definitive evidence of a causal behaviour-outcome link, rather they are intended to deepen understanding of the nuanced and highly context specific framing processes of individual leaders that nevertheless lead to recognisable patterns of organizational response.

The process model portrayed in **Figure 6-5** below provides a visual representation of these enabling and blocking conditions. The size of the arrows provides an indication of the strength of the oppositional forces based on the coded data from study 2. The conditions identified are neither mutually exclusive, nor do they guarantee alignment with a specific organizational response. The data showed that a combination of blocking conditions, operating in a processual flow and in tension with competing enabling conditions, typically led to a recognisable organizational response, termed in the study traditional response. From a numerical perspective, the enabling conditions associated with purposeful leader support and an acceptance of compromise generated stronger forces than the opposing blocking conditions, suggesting an agentic commitment to enabling the emergence of adaptive responses. However, the subsequent enabling conditions appear to be far weaker than the forces generated by the opposing blocking conditions, supporting the notion that, over time, traditional responses to complex organizational problems are generated. The blocking conditions associated with rigid problem framing and practices appear to be particularly strong, as highlighted in the illustrative quote below:

> *"I think, I think forming divergent opinions in the planning process is absolutely fine...But I think then when it comes to the execution of the approach to the problem, then I think at that point, people need to toe the line."* (junior cohort)

It was only through paying careful attention to the specific intra-organizational contextual influences that an understanding of the underlying and competing enabling and constraining conditions could be developed.

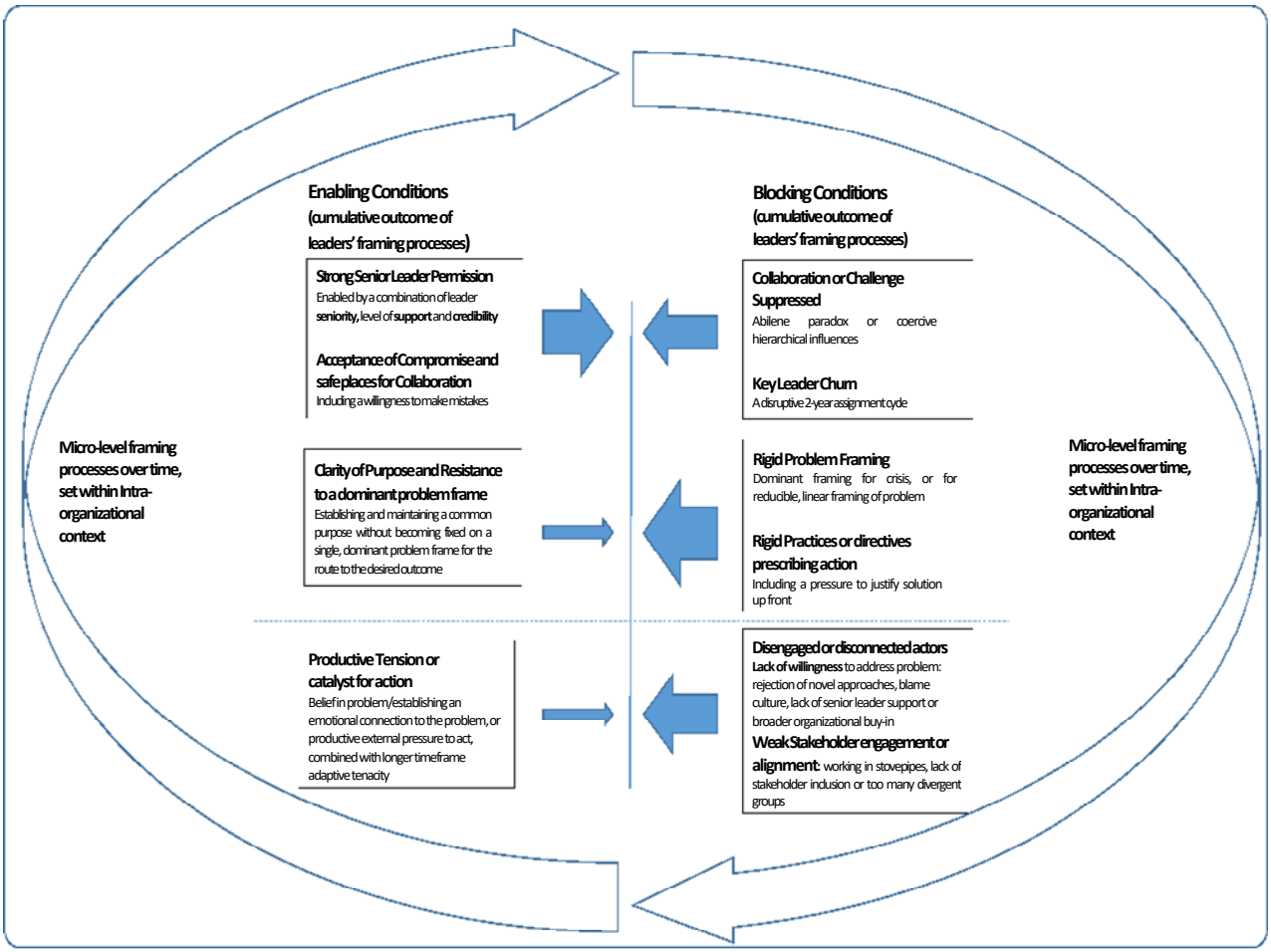


Figure 6-5: A Process Model for the forces influencing adaptive organizational responses to complex problems

The findings from study 1 also revealed an elegant alignment of common construct categories associated with effectiveness – actor willingness; clarity of understanding problem; clarity of outcome; and engagement of stakeholders. While these construct categories align with the purposeful outcomes in the DAC ontology (Drath et al., 2008), it would appear likely that this alignment has more to do with leaders' existing constructs in relation to addressing problems in general rather than new constructs related to adaptive responses to complex problems (see Denis et al, 2012; Hazy and Uhl-Bien, 2015). The findings from study 2 provided further supporting evidence, showing that

organizational responses aligned with purposeful DAC outcomes were strongly influenced by the organizational power dynamic and that micro-level leader framing activities typically led to blocking rather than enabling conditions. While these blocking conditions usually aligned with purposeful DAC (Drath et al., 2008) outcomes, they resulted in traditional organizational responses that had cognitive legitimacy and familiarity (Henisz and Zelner, 2005) rather than in new, adaptive responses. Consideration of evidence from study 2 therefore suggests that the strong alignment with DAC identified in study 1 is the result of dominant cognitive frames for traditional reducible responses or for time critical crises.

Taken together, and in relation to **Figure 6-5,** the findings provide further evidence to suggest that individual leaders perceive that their actions to address complex problems are aligned with purposeful activity to enable adaptive practices, with only a limited recognition of the structurally embedded influences that constrain and block the emergence of adaptive responses over time. Where leaders did recognise limitations on agency, it was typically in relation to regulative influences - rules or policy constraints perceived to be outside leaders' control, as is illuminated in the quotes below:

"It's all procedurally very policy constrained" (senior cohort)

*"**...**and there's so much bureaucracy around it that that that willingness to change, it just translates, just effectively turns into frustration..."*. (middle cohort)

The final section that follows will draw the discussion together, considering empirical evidence to support the claim that framing literature provides an ideal lens to study the everyday institutional activity of leaders and, in doing so, explain the how and under what contextual conditions leaders' influence organizational responses to complex problems.

6.2.5 Framing - An ideal lens to study the everyday institutional activity of leaders

Until recently, the dominant empirical focus within framing literature at the micro-level has been on individuals' cognitive frames rather than on socially constructed meaning. As Cornelissen and Werner (2014) remark "The focus on the activation and effects of a given

cognitive frame marks the difference between micro-level cognition research and meso-and macro-level sociological analyses that conceptualize framing as the active social construction and negotiation of frame-based meanings." (p.196). Thornton et al. (2012, p.102) assert explicitly that the logics perspective accounts for both constructivist processes of individual cognition and the sociological analyses of social constructionist processes. The recent interactional turn in framing literature at the individual level accounts for both types of construction in a very similar way since it pays attention to the internalized cognitive processes of individuals - the priming and activation of knowledge schemas (Cornelissen and Werner, 2014, p.183) - whilst also focusing on how individuals' constructions emerge and manifest in communicative interaction (Purdy et al., 2019).

While framing is most commonly aligned with the cultural-cognitive aspect of institutions (Scott, 2003, p.880), the recent developments in framing literature enables attention to be focused on all three aspects of institutional influence (cultural-cognitive, normative and regulative). This research project considered leaders' framing from both constructivist and social constructionist perspectives: study 1 used a constructivist epistemology to study individuals' existing cognitive frames, or constructs; and study 2 employed a social constructionist epistemology to study the micro-level construction of meaning and identify under what contextual conditions specific mechanisms influence organizational responses to complex problems over time. In line with the conceptual approach encouraged by Purdy et al. (2019, p.409), the study used framing to understand the constitutive relationship between processes of institutionalization and the agency through which leaders can influence institutions.

Study 2 foregrounded macro-level sociological analyses in order to elucidate how meso-level organizational responses to complex problems manifested over time. The study provided rich descriptions that helped to highlight the various structural influences on individual leaders' framing processes in relation to decision-making and prescribed actions. These micro-level processes across multiple interactional instances and hierarchical levels typically led to blocking conditions that constrained adaptive responses. As Cornelissen and Werner (2014) noted, "The real strength of the framing construct for institutional theory is its dual character in capturing the institutionalization

of enduring meaning structures, and in providing a macro-structural underpinning for actors' motivations, cognitions, and discourse at a micro level." (p.206).

The framing processes identified in study 2 that emerged over time to act as blocking conditions are consistent with descriptions of "framing contests" (Purdy et al., 2019, 412), where dominant frames typically prevail. This finding also supports the findings reported by Grint (2005, 2010b) and Heifetz et al. (2009, p.19) in relation to framing for linear, technical problems (Heifetz, 1994; Heifetz et al., 2009) or time-critical crises (Grint, 2005; 2010b) regardless of problem complexity. The study findings are also consistent with the empirical studies conducted by Currie et al. (2009a; 2009b) who found that new and emerging forms of plural leadership were not yet institutionalized and that these alternative conceptions of leading were typically overshadowed by the dominant institutionalized norm of individual leadership.

Where adaptive responses were identified, the processual flow was consistent with descriptions of 'frame amplification' (Purdy et al., 2019, p.411), with new or innovative problem frames winning key proponents such that they take root and gain sufficient resonance over time to enable the emergence of new institutional meanings. Further, it was found that this amplification process could only prevail over dominant traditional norms under conditions where key proponents had sufficient seniority, provided active support and had the credibility to break from the dominant norms in the minds of other actors. Using a framing lens revealed contextual nuances that gave meaning to the opposing enabling and blocking conditions operating in a constant processual flow. Evidence of 'frame amplification' (Purdy et al., 2019, p.411) supports the notion that purposeful leader agency is both important and insufficient in itself, in relation to achieving adaptive organizational responses to complex problems.

In summary, this section has considered the combination of findings from studies 1 and 2 in order to question and strengthen evidence in relation to an overall contribution to knowledge. A forcefield model was introduced **(Figure 6-5)** that highlights how enabling and blocking conditions are bound in a processual relationship, dependent on the specific intra-organizational context over time. The overall discussion provided further insights

into the meanings associated with the two empirical studies, suggesting that the power dynamic amongst organizational leaders, combined with a dominant institutionalized norm for traditional, heroic conceptions of leadership is inextricably linked with organizational responses that block adaptive practices over time. The strongly hierarchically influenced dominant problem frame tends towards the familiar (Cornelissen et al., 2014) and, over time, influences collective perceptions of effective actions (Murphy et al., 2020) that suggest a strong cultural-cognitive and normative legitimacy (Scott, 1995) for either a mechanistic and procedural, or crises style response to problems, regardless of problem context. **Table 6-1** below summarises the theoretical contributions to knowledge made by this doctoral study.

6.3 Theoretical contributions

Observations/Findings	Interpretations	Contributions
Chapt 6 (overall discussion) section 6.2.1 The %UF and ANV spread in study 1 suggests a high degree of institutionalised thinking about organizational problems. **Chapt 4 (study 1) section 4.3.4.1 (p.111)** The findings from study 2 identified dominant prescriptions for problem solving and leading are bound in a constitutive relationship that aligns with traditional leadership and problem- solving paradigms regardless of problem context. **Chapt 5 (study 2) section 5.5.1 (p.153)**	**Problems literature** Complex problems are often theorized as a discrete problem category, but are typically insufficiently differentiated from other organizational level problems (for example complicated problems or crises) in the minds of individual actors and through social interactions over time, to invoke new and innovative problem frames	**Proposed amendment to theory** Decision-making frameworks focusing on cognitive psychological perspectives and aimed at improving individual leaders' decision making would benefit from the inclusion of perspectives such as PCT (Kelly, 1955) and framing that recognise the constructed nature of problems and allow for a broader view of the collective and structural influences affecting individual decision making.
Chapt 6 (overall discussion) section 6.2.1	**Leadership - 'The Irony of Leadership'** The empirical study findings support the central premise underpinning Grint's (2005, p.1478) 'irony of leadership' narrative	**Proposed theory support** Grint's 'Irony of Leadership' narrative (2005, p.1478) and his 'Problems, power and authority' typology (p.1477) is supported.
Chapt 6 (overall discussion) section 6.2.2 Adaptive responses to complex problems cannot be prescribed by leaders, however 'heroic' or decisive they are. **Chapt 5 (study 2) section 5.7.3 (p.175)**	**Plural Leadership Theory - The problem with 'Adaptive Leadership'** Adaptive organizational responses to complex problems require the purposeful engagement of leaders, but purposeful engagement of leaders is insufficient in itself. The term 'adaptive leadership' is an unhelpful label that promotes thinking aligned with traditional, heroic paradigms of leadership	**Support to amended theory:** In line with recent work by Uhl-Bien and Arena (2018), the study found support for the re-labelling of the term 'adaptive leadership' within CLT literature. The study also supports the claims of Tourish (2019, p.223), finding that terms such as 'adaptive leadership' promote conceptions of leadership that find their way back to heroic, individual, entitative paradigms

Chapt 6 (overall discussion) section 6.2.3 Leaders' perceptions of power dynamics were not within their 'range of convenience' in relation to complex problems, suggesting a dynamic of coercive persuasion. **Chapt 4 (study 1)** section 4.4 (Discussion, p. 123) The power dynamic influencing leadership is woefully underrepresented in traditional leadership literature. **Chapt 5 (study 2)** section 5.7.2, p. 173	**Leadership - Power and hierarchy** Power relations are deeply embedded in organizational responses to complex problems and yet the influence of power within organizational settings is rarely paid attention to in traditional leadership literature	**Support to theory** Strong support was found for the principal claims made by CLS (Collinson et al., 2011; Collinson and Tourish, 2015; Tourish, 2014; 2019; Tourish et al, 2009; Willmott, 1993; Collinson et al, 2017). In particular, evidence was found to support descriptions of 'coercive persuasion' (Tourish et al., 2009) within an organizational context
Chapt 6 (overall discussion) section 6.2.4 **Figure 6-5,** p.204 The influence of institutional forces on leaders' framing can only be understood when considered in relation to the immediate organizational context in which they occurred. **Chapt 5 (study 2)** section 5.7.1, p. 173	**Leadership and Institutions - Deepening Contextual Understanding** Paying attention to intra-organizational context helps to elucidate the cultural-cognitive, normative and regulative institutional forces influencing individual leaders' activity to address complex problems	**Theory supported and extended** Support was found for Currie et al.'s (2009a; 2009b) findings. Complementary empirical evidence was provided to support the importance of context and to support further integration of leadership and institutional literature
Chapt 6 (overall discussion) section 6.2.5 Framing literature offers powerful insights into why dominant structurally influenced individual constructs may constrain adaptive organizational responses. **Chapt 4 (study 1)** section 4.4 (Discussion, p.121) Study 2 provides empirical support to Purdy et al.'s (2019) assertion that framing offers a perspective suited to understanding how institutions are produced and reproduced through the everyday activities of individuals. **Chapt 5 (study 2)** section 5.7.2, p. 173	**Framing literature and Institutional theory** Framing literature - particularly the concepts of 'framing contests' and 'frame amplification' provided an ideal lens to study the everyday institutional activity of individual leaders	**Theory integration supported** Empirical findings support the recent advances in framing literature described by Cornelissen and Werner (2014) and extended by Purdy et al. (2019). Specifically, findings consistent with descriptions of 'framing contests' and 'frame amplification' was identified

Table 6-1: Summary of contributions

REFERENCES

Berente, N. and Yoo, Y. (2012) 'Institutional Contradictions and Loose Coupling: Postimplementation of NASA's Enterprise Information System', *Information Systems Research*, 23(2), pp. 376–396.

Bundy, J., Pfarrer, M.D., Short, C.E. and Coombs, W.T. (2017) *Crises and Crisis Management: Integration, Interpretation, and Research Development*.Vol 43(6), pp. 1661-1692.

Collinson, D., Bryman, A., Collinson, D. and Grint, K. (2011) *The Sage handbook of leadership*. London: Sage Publications.

Collinson, D. and Tourish, D. (2015) 'Teaching leadership critically: New directions for leadership pedagogy', *Academy of Management Learning and Education*, 14(4), pp. 576–594.

Collinson, D., Smolović Jones, O. and Grint, K. (2017) '"No More Heroes": Critical Perspectives on Leadership Romanticism', *Organization Studies*, p. 1-23.

Cornelissen, J.P. and Werner, M.D. (2014) 'Putting framing in perspective: A review of framing and frame analysis across the sensemaking, social movements and institutional literatures', *Academy of Management Annals*, 8(1), pp. 181–235.

Cornelissen, J.P., Mantere, S. and Vaara, E. (2014) 'The contraction of meaning: The combined effect of communication, emotions, and materiality on sensemaking in the stockwell shooting', *Journal of Management Studies*, 51(5), pp. 699–736.

Currie, G., Lockett, A. and Suhomlinova, O. (2009a) 'The institutionalization of distributed leadership: A'Catch-22'in English public services', *Human Relations*, 62(11), p. 1735.

Currie, G., Lockett, A. and Suhomlinova, O. (2009b) 'Leadership and institutional change in the public sector: The case of secondary schools in England', *The Leadership Quarterly*, 20(5), pp. 664–679.

Denis, J.-L., Langley, A. and Sergi, V. (2012) 'Leadership in the Plural.', *Academy of Management Annals*, 6(1), pp. 211–283.

Drath, W.H., McCauley, C.D., Palus, C.J., Van Velsor, E., O'Connor, P.M.G. and McGuire, J.B. (2008) 'Direction, alignment, commitment: Toward a more integrative ontology of leadership', *Leadership Quarterly*, 19(6) Elsevier Inc., pp. 635–653.

Grint, K. (2005) 'Problems, problems, problems: The social construction of "leadership"', *Human Relations*, 58(11), pp. 1467–1494.

Grint, K. (2010a) *Leadership: A Very Short Introduction*.Oxford: Oxford University

press.

Grint, K. (2010b) ‘The cuckoo clock syndrome: Addicted to command, allergic to leadership’, *European Management Journal*, 28(4) Oxford: Elsevier Science Ltd., pp. 306–313.

Hazy, J.K. and Uhl-Bien, M. (2015) ‘Towards operationalizing complexity leadership: How generative, administrative and community-building leadership practices enact organizational outcomes’, *Leadership*, 11(1), pp. 79–104.

Head, B.W. and Alford, J. (2015) ‘Wicked Problems’, *Administration & Society*, 47(6), pp. 711–739.

Heifetz, R. A. (1994). *Leadership without easy answers*. London: Harvard University Press.

Heifetz, R.A., Grashow, A. and Linsky, M. (2009) *The Theory Behind the Practice A Brief Introduction to the Adaptive Leadership Framework*. Boston: Harvard Business Press.

Henisz, W.J. and Zelner, B.A. (2005) ‘Legitimacy, Interest Group Pressures, and Change in Emergent Institutions: The Case of Foreign Investers and Host Country Governments’, *Academy Of Management Review*, 30(2), pp. 361–382.

Jankowicz, D. (2004) *The Easy Guide to Repertory Grids*. Chichester: John Wiley and Sons, Limited.

Kelly, G.A. (1955) *The Psychology of Personal Constructs*. New York: Norton.

Lichtenstein, B. B., Uhl-bien, M., Marion, R., Seers, A., Douglas, J., & Schreiber, C. (2006). on Leading in Complex Adaptive Systems. *Emergence: Complexity and Organization*, *8*(4), 2–12.

Murphy, J., Denyer, D. and Pettigrew, A. (2020) ‘The Role of Framing Mechanisms in Explaining System-Wide Change: The Case of the Northern Ireland Conflict and Peace Process’, *British Journal of Management*

Probert, J. and Turnbull James, K. (2011) ‘Leadership development: Crisis, opportunities and the leadership concept’, *Leadership*, 7(2), pp. 137–150.

Purdy, J., Ansari, S. and Gray, B. (2019) ‘Are Logics Enough? Framing as an Alternative Tool for Understanding Institutional Meaning Making’, *Journal of Management Inquiry*, 28(4), pp. 409–419.

Scott, R.W (1995) *Institutions and Organizations.* London:Sage Publications.

Scott, R.W (2003) ‘Institutional carriers: reviewing modes of transporting ideas over time and space and considering their consequences’, *Industrial and Corporate Change*,

12(4), pp. 879–894.

Snowden, D.J. and Boone, M.E. (2007) ‘A Leader ’ s Framework’, *Harvard Business Review*, 85(11), pp. 68–76.

Thornton, P.H., Ocasio, W. and Lounsbury, M. (2012) ‘Introduction to the institutional logics perspective’, in *The institutional logics perspective: a new approach to culture, structure, and process*. Oxford: Oxford University Press.

Tourish, D., Collinson, D. and Barker, J.R. (2009) ‘Manufacturing Conformity : Leadership Through Coercive Persuasion in Business Organisations’, *M@n@gement*, 12(5) Nantes: Association Internationale de Management Stratégique, pp. 360–383.

Tourish, D. (2014). Leadership, more or less? A processual, communication perspective on the role of agency in leadership theory. *Leadership*, *10*(1), 79–98.

Tourish, D. (2019) ‘Is Complexity Leadership Theory Complex Enough? A critical appraisal, some modifications and suggestions for further research’, *Organization Studies*, Vol 40(2), 219-238.

Uhl-Bien, M. and Marion, R. (2009) ‘Complexity leadership in bureaucratic forms of organizing: A meso model’, *Leadership Quarterly*, 20(4) Elsevier Inc., pp. 631–650.

Uhl-Bien, M., Marion, R. and McKelvey, B. (2007) ‘Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era’, *Leadership Quarterly*, 18(4), pp. 298–318.

Uhl-Bien, M. and Arena, M. (2018) ‘Leadership for organizational adaptability: A theoretical synthesis and integrative framework’, *Leadership Quarterly*, 29(1), pp. 89–104.

Willmott, H. (1993). Strength Is Ignorance; Slavery Is Freedom: Managing Culture in Modern Organizations*. *Journal of Management Studies*, *30*(4), 515–552.

CHAPTER 7: OVERALL CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

7.1 Overall Conclusions

An SLR was conducted to address a central problem statement, suggesting leaders typically frame complex problems either for reductionist, mechanistic activity, or for time-critical crises and this acts as a powerful constraining influence on the emergence of adaptive responses within an organizational setting.

The SLR found strong evidence to support the problem statement, concluding that in most situations, regardless of the problem context, institutional forces combined with agentic preferences for demonstrating individual leader strength and decisiveness, lead either to framing for clarity, with linear paths to solutions, or for crises, with a perceived time-critical requirement for immediate action. This framing activity acts as a powerful constraining influence on adaptive responses to address the most challenging and complex organizational problems (Aagaard, 2016; Grint, 2005; 2010b; Pazzaglia et al., 2018; Tourish et al., 2009). The SLR did find evidence in literature to suggest that there are circumstances where the dominant institutional forces that typically drive out adaptive collaboration and the acceptance of multiple problem frames, can be resisted at the individual and collective level. However, the SLR could not identify existing research to explain under what specific contextual conditions and why a particular mechanism prevails in influencing leaders and how this affects the organizational response to a complex problem over time. The empirical studies that followed the SLR were designed to answer and explain as fully as possible the 'how' and 'why' around this issue.

Study 1 adopted a constructivist lens to focus on the embedded constructs individual leaders hold for addressing complex problems and the perceived effectiveness of organizational response. The findings suggested that to a large extent individual leaders' constructs were shared and influenced by institutional forces, rather than by individual and idiosyncratic influences. The study contributed to a deeper understanding of adaptive leadership responses by revealing the extent to which individual leaders' constructs, in

relation to addressing complex problems, are embedded in institutionalized norms of problem solving that are insufficiently differentiated from other problem categories (for example complicated, linear problems and crises). This lack of differentiation in the minds of leaders is likely to inhibit new and innovative problem frames. However, study 1 could not explain under what specific contextual conditions these institutionalized norms could be overcome.

Study 2 adopted a social constructionist lens to identify the rich descriptions that revealed a deeper understanding of the contextual conditions in which the dominant institutional influences either manifested or, alternatively, were resisted and overcome. The evidence supported and extended Currie at al.'s (2009a; 2009b) earlier empirical work, finding that conceptions of leadership remain strongly and institutionally aligned with traditional notions of heroic, decisive, individual leadership, and identifying mechanisms that had the potential to lead to adaptive organizational responses.

Study 2 extends existing plural theories of leadership, highlighting the importance of contextual and structural embeddedness in improving understanding of the conditions under which adaptive organizational leadership responses may emerge. Whilst the empirical study found evidence to support the emergence of adaptive responses through dynamic interactions (Lichtenstein et al., 2006; Uhl-Bien and Marion, 2009), such responses were only seen to emerge under conditions that included senior leader support or permission and through the alignment of a number of intra-organizational contextual conditions that combined in ways to overcome the traditional dominant leadership paradigms. Specifically, in conditions that contained *strong senior leader permission and support* combined with an *acceptance of compromise and safe places for collaboration; a clarity of purpose that resists a dominant problem frame;* and a *productive tension or catalyst for action.* The forcefield model portrayed at Figure 6-5 suggests that the forces that act to resist dominant problem frames, combined with the forces associated with establishing and maintaining a productive tension to act to address complex, intractable problems are faced with particularly strong opposing forces that typically lead to the blocking of adaptive organizational responses.

The findings extend critical leadership literature, finding strong evidence to support the presence of a dynamic consistent with descriptions of "coercive persuasion" (Tourish et al., 2009, p.361) where leader activity typically results in traditional responses due to the influence of dominant, largely subconscious, norms. Nevertheless, some evidence was found to support the potential for the emergence of adaptive leadership practices within a dominant institutionalized and hierarchically embedded organization.

Study 2 also extends framing literature by providing empirical evidence to answer Purdy et al.'s (2019) call for research that uses the framing perspective to "...trace the emergence of new institutional meanings...taking...a recursive perspective where institutions are produced and reproduced through the everyday activities of individuals." (Purdy et al., 2019, p.410). The empirical study found that leaders' framing of complex problems influences organizational responses over time, in line with two principal categories. Firstly, and most commonly, individual leaders' everyday institutional activity leads to actions that are 'cognitively legitimate' (Henisz and Zelner, 2005) and perceived to be effective, consistent with descriptions of 'framing contests' (Purdy et al., 2019) between dominant and new, alternative problem frames. These micro-level actions across multiple individual leaders generate mechanisms of 'blocking conditions' that constrain adaptive responses to complex problems. Secondly, and only in combination with a particular variety of senior leader support or permission, 'enabling conditions' were found that had the potential to produce adaptive responses that overcame the dominant norms, through the successful amplification of a new, innovative problem frame (Purdy et al., 2019).

Overall, this research project found that individual leaders recognise complex problems conceptually (demonstrated by leaders identifying examples of the most challenging complex problems that they had observed or addressed, differentiated from complicated problems and crises), and are familiar and supportive of the notion that problem complexity requires new and adaptive practices. Indeed, the forcefield model portrayed at **Figure 6-5** indicates that leaders were perceived to provide strong support for activity associated with some of the enabling conditions for addressing problem complexity (for example senior leader support, and acceptance of compromise). However, **Figure 6-5** also revealed activities that were strongly associated with blocking conditions (for

example, rigid problem framing and directives for action). In articulating their views about leadership in relation to addressing complex organizational problems, leaders typically aligned perceived effectiveness of response with the effectiveness of individual leaders' decision making; where leaders had made the 'right' decisions, complex problems had been solved; where leaders had got it 'wrong', problems had lingered or magnified.

In summary, viewing individual leaders' perceptions of complex organizational problems through a framing lens has revealed findings consistent with a dynamic of 'coercive persuasion' (Tourish et al., 2009) combined with a dominant, institutionalized form of individual leadership (Currie et al., 2009a; 2009b), that provides an explanation of the generative demi-regularities that constrain the emergence of adaptive responses within an organizational setting. While conditions were identified for adaptive responses to overcome the dominant norms, examples were rare and ephemeral, as the illustrative quote from a senior officer describes below:

> *"...you can see a bright light go on somewhere. And that bright light might flicker quite a few times. But then there could be an organisational change, there could be a personality change. And then you see the sort of more constrained approach re-emerge."*

The following section will outline key theoretical, methodological and practical implications for future research.

7.2 Limitations

A number of limitations emerged during the progression of the study which are outlined below.

A single case study approach is unavoidably idiosyncratic - while qualitative research in general falls short of offering replicability, a single case study requires a particularly cautious approach to claims of theory development. Consequently, the author's claims are tentative and, without the benefit of cross case comparison, any claims that have been

made are aligned to comments that place the study's empirical findings within the context of and in relation to existing knowledge of the phenomena of interest.

Whilst every effort was made to access a representative group of officers within the British Army (for example in relation to gender; career specialism; job roles etc) the study cannot claim to have achieved an objectively representative group across all categories.

As a serving officer in the British Army, there is a chance that unintended non-verbal cues, awareness of the interviewer's rank by the interviewee or subconscious bias in the mind of the researcher influenced the conduct of the interviews and the analysis of the results. Whilst the risk to misinterpreting the results was mitigated as far as possible with recognised qualitative research techniques such as independent check coding of data, the risk of some unintended interviewer bias during the semi-structured interviews remains unmitigated.

Cornelissen and Werner (2014, p.220) recommended research that analyses communication in real time to deepen understanding of the microfoundations of organizational outcomes (for example interaction analysis or discourse analysis). The present study did not achieve this real time granularity. It was felt that this type of real time analysis would be challenging for a researcher who himself was deeply immersed in the cultural norms and cognitive constructs of the case study organization. It is for this reason that RGT interviews were chosen alongside semi structured interviews - because RGT is recognised as a method that protects the researcher (as far as is possible in qualitative research) from their own biases. As a result of these choices, the picture of the temporal flow is incomplete and therefore any claims made in relation to the nature of processes over time are only tentatively offered.

It is acknowledged that the research gained only very limited insights into the relative importance of affective/emotional aspects of contextual influence. Future research would benefit from a more explicit focus on the influence of emotions in the construction of new institutional meanings.

Limitations of the RGT interviews. It is acknowledged that the RGT data set contained some weak areas and blind spots since the method required participants to draw on examples from their own experiences that were challenging to categorize. As such, some of the participants were able to establish relevant constructs and construct poles more successfully than others.

Limitations of the semi-structured interviews. The iterative development of the coding template was inevitably influenced to some extent by the subjective judgements of the researcher. Whilst the potential impact of researcher bias in these judgements was mitigated to a large extent by the rigorous check coding process, it is nonetheless possible that some subjective bias remained in the final coding template.

7.3 Implications for future research

Theoretical Implications

Future research would benefit from an approach that moves beyond perceptions binding leader and leadership development to psychological perspectives. As study 1 showed, individual leaders' problem frames are subject to normative influences beyond the conscious control of the individual. A more holistic perspective that includes and recognises the significance of sociological perspectives (including, but not limited to embedded agency) would provide the potential to move beyond the traditional leadership paradigm into new territory that improves individual and collective level understanding of macro-level structural influences on leaders' purposeful endeavours. Specifically, this doctoral study has identified that future research could lead to advances in theory in the following areas:

The present study has provided empirical support for the central assertion of critical leadership scholars, that the power dynamic within hierarchical leadership structures is of central importance to understanding leadership practices in organizational settings. Nevertheless, empirical evidence relating to the impact of power and hierarchical structures on organizational leadership practices remains thin. Further empirical research

that foregrounds power and hierarchical context within organizational settings, would strengthen the evidence base that challenges traditional, heroic leader paradigms.

The overarching contextual platform of complex problems within organizational settings was shown to be a productive foundation for research seeking to make connections between individual leaders' agency and the embedded structural forces influencing decision making and action. Productive lines of enquiry in future research projects could focus more explicitly on the temporal flow of activities and also more specifically on the balance between affective and cognitive agentic influences.

Framing literature offers much promise for future work aiming to develop further integration between leadership and institutional theory. In line with Purdy et al.'s (2019) recommendations, framing offers the potential to trace the emergence of new institutional meanings, offering theoretical tools such as 'framing contests' and 'frame amplification'. Used in this way, framing offers an ideal lens to access and interpret the everyday activities that reveal the contextually specific embedded nature of leaders' agency.

Methodological Implications

Several methodological contributions have implications for future research. In particular, the application of a critical realist perspective to epistemologically diverse literatures, which offers the potential to deepen understanding of the structural forces influencing actors' framing across multiple organizational phenomena.

As advocated by Jankowicz (2004), the use of the Repertory Grid technique (Kelly, 1955), in particular, offers an epistemologically expansive research method. Combining Repertory Grid technique with semi-structured interviews enables complementary constructivist and social constructionist perspectives to be accommodated within a depth realist ontological structure. Such an approach enables insights to be developed about both actors' existing cognitive frames, and how and under what contextual conditions these frames are subject to change through social interaction.

Research taking a multi-case study approach and adopting ethnographic or longitudinal methods would help in providing a more complete picture of both the generalizability of the causal mechanisms (described as demi-regularities) found and also provide a more granular temporal picture of the processual flow of the institutional meaning-making processes.

Practical Implications

This research project has the potential to make a number of contributions to organizational practices within the British Army. The research has been sponsored by the army's Director of Personnel, the Human Resources policy lead within the British Army and, as such, has a solid foundation of organizational support on which to develop or improve programmes and practices.

The army currently uses the Cynefin framework within its doctrinal publications, with the expectation that awareness of this model within the army's key leadership cohorts will promote the development of practices that are appropriate for addressing complex problems. In line with this study's findings and with Probert and Turnbull-James' (2011) assertion, leadership development interventions need to focus on the underpinning schemata embedded within organizational norms (Probert and Turnbull-James (2011) in order to develop possibilities for new institutional meanings (Purdy et al., 2019). As a career learning and development practitioner within the organization, the researcher is expected to work with policy leads to develop and embed new leadership learning interventions. The forcefield model, developed from the combined empirical research studies (at **Figure 6-5** above) will provide the foundation for the development of new learning interventions, since it provides the basis for amplifying problem frames that offer the potential to challenge and reimagine existing schemata.

Whilst claims of broad generalizability cannot be made, the findings are nevertheless likely to be of interest across the public sector environment (including, but not limited to other uniformed services). As such, the researcher will be sharing key insights across government through existing programmes and conferences (for example the army's

annual leadership conference, and through interactions with cross-government programmes such as the Project Leadership Programme and the Major Projects Leadership Academy).

An example of a practitioner focused article written by the researcher is at **Appendix H.** The article was published by the Centre for Army Leadership and is read by a wide audience of leaders within the British Army.

REFERENCES

Aagaard, P. (2016). How to Make the Mix Matter: A Case Study of Post-Transformational Leadership in Hybrid Public Management. *International Journal of Public Administration*, *39*(14), 1171–1179.

Currie, G., Lockett, A., & Suhomlinova, O. (2009a). Leadership and institutional change in the public sector: The case of secondary schools in England. *The Leadership Quarterly*, *20*(5), 664–679.

Currie, G., Lockett, A., & Suhomlinova, O. (2009b). The institutionalization of distributed leadership: A "catch-22" in English public services. *Human Relations*, *62*(11), 1735–1761.

Grint, K. (2005). Problems, problems, problems: The social construction of 'leadership.' *Human Relations*, *58*(11), 1467–1494.

Grint, K. (2010b). The cuckoo clock syndrome: Addicted to command, allergic to leadership. *European Management Journal*, *28*(4), 306–313.

Henisz, W.J. and Zelner, B.A. (2005) 'Legitimacy, Interest Group Pressures, and Change in Emergent Institutions: The Case of Foreign Investers and Host Country Governments', *Academy Of Management Review*, 30(2), pp. 361–382.

Jankowicz, D. (2004) *The Easy Guide to Repertory Grids*. Chichester: John Wiley and Sons, Limited.

Kelly, G.A. (1955) *The Psychology of Personal Constructs*. New York: Norton.

Lichtenstein, B. B., Uhl-bien, M., Marion, R., Seers, A., Douglas, J., & Schreiber, C. (2006). on Leading in Complex Adaptive Systems. *Emergence: Complexity and Organization*, *8*(4), 2–12.

Pazzaglia, F., Farrell, M., Sonpar, K., & Martin de Holan, P. (2018). Keeping up with the Joneses: Industry rivalry, commitment to frames and sensemaking failures. *Human Relations*, *71*(3), 427–455.

Probert, J. and Turnbull James, K. (2011) 'Leadership development: Crisis, opportunities and the leadership concept', *Leadership*, 7(2), pp. 137–150.

Purdy, J., Ansari, S. and Gray, B. (2019) 'Are Logics Enough? Framing as an Alternative Tool for Understanding Institutional Meaning Making', *Journal of Management Inquiry*, 28(4), pp. 409–419.

Tourish, D., Collinson, D., & Barker (2009). Manufacturing Conformity : Leadership Through Coercive Persuasion In Business Organisations Manufacturing Conformity : Leadership Through Coercive Persuasion in Business Organisations, *12*(4), 360–383.

Uhl-Bien, M., & Marion, R. (2009). Complexity leadership in bureaucratic forms of organizing: A meso model. *Leadership Quarterly*, *20*(4), 631–650.

APPENDICES

Appendix A: SLR SEARCH AND INCLUSION PROCESSES

Appendix A-1 SLR Search Strings and Search Strategy

The tables below detail work conducted to build search strings and develop searches:

Key Terms	Search String
Leadership term Leadership	**String 1 (58016 results)** “leadership”
Practice term Practice Time Temporal Process	**String 2 (943232 results)** "practice" OR "time" OR "temporal" OR "process*"
Collaborative term Shared Distributed Relational Integrative Post-heroic Collaborative Plural Spread Complexity Leadership-as-practice Critical	**String 3 (230960 results)** “shared” OR “distributed” OR “relational” OR “integrative” OR “post-heroic” OR “collaborative” OR “plural” OR “spread” OR “complexity” OR “leadership-as-practice” OR “LAP” OR “critical*”
Framing term: Looking for sources that refer to meaning-making processes Framing/priming Sensemaking/giving Cognition Emotion Affective	**String 4 (49130 results)** “frames” OR “framing” OR “priming” OR “sensegiving” OR “sensemaking” OR “sense-making” OR “cognition” OR “emotion” OR “affective”

Problem type term: Looking for sources that refer to wicked/complex/adaptive problems	**String 5 (1806 results)** "wicked problem*" OR "complex problem*" OR "adaptive challenge*"
Structure and Agency terms Institutional Logics Organizations Institutions Institutional Entrepreneur Organi?ation* culture/norms/practice/field Strategic Action Fields SAF Structure Agency Actor Power Politics Authority Enactment Commitment Struggle Tension	**String 6 (515 results)** “Institution* logics” AND ("organi?ation*" OR "institution*" OR "structur*" OR "agency" OR “actor*” OR “organi?ation* norm*” OR OR “organi?ation* field*” OR “institutional entrepreneur*” OR “organi?ation* culture” OR “organi?ation* practice*” OR “power” OR “politic*” OR “authority” OR “enact*” OR “commitment” OR “struggle” or “tension”) OR "field*” N5 ("strategic action" OR SAF")
Situational conditions term Looking for sources that refer to extreme contexts	**String 7 (314848 results)** “extreme context*” OR “crisis” OR “crises” OR “turbulen*” OR “change” OR “emerge*”

Combined Strings (numbers returned based on EBSCO only (Scholarly, English Lang

Searches	Search Terms	Results returned	Key scoping study references (plus addtl author references) returned in EBSCO Search
Search 1 (strings 1 N5 2 & 3)	**EBSCO:** Scholarly, English Lang (line 1) "leadership" N5 ("practice" OR "time" OR "temporal" OR "process*") (line 2 AND) (“shared” OR “distributed” OR “relational” OR “integrative” OR “post-heroic” OR “collaborative” OR “plural” OR “complexity” OR “leadership-as-practice” OR “LAP” OR “critical*”) **ABI:** Peer Reviewed**,** N/5 **Web of Science**: (("leadership" NEAR/5 ("practice" OR "time" OR "temporal" OR "process*"))) *AND* **TOPIC:** ((shared OR distributed OR relational OR integrative OR post-heroic OR collaborative OR plural OR complexity OR leadership-as-practice OR LAP OR critical*)) Lang: English Doc Type: Article WOS Index: Social Sciences WOS Categories: Management; Psychology Applied; Business **Combined (EBSCO, ABI and WOS) less duplicates**	656 642 297 **1133**	**Alvesson (+1)** **Alvesson and Spicer 1** **Avolio 1 (+6)** **Clarke 1** **Collinson (+1)** **Crevani 1** **Denis 1 (+1)** **Denyer (+1)** **Drath 1** **Fairhurst (+1)** **Gronn 1 (+2)** **Hannah 1 (+2)** **Langley (+2)** **Mabey 1 (+2)** **Marion 1 (+2)** **Raelin (+6)** **Tourish (+1)** **Turnbull-James (+1)** **Uhl-Bien 2 (+3)**
Search 2 (strings 3 4 & 7)	**EBSCO**: Scholarly, English Lang (“frames” OR “training” OR “[illegible]” OR “sensegiving” OR “sensemaking” OR “sense-making” OR “cognition” OR “emotion” OR “affective”) (line 2 AND) (“shared” OR “distributed” OR “relational” OR “integrative” OR “post-heroic” OR “collaborative” OR “plural” OR “complexity” OR “leadership-as-practice” OR “LAP” OR “critical*”)	1276	**Helpap 1** **Klein (+1)** **Maitlis and Sonenshein 1** **Pye (+2)** **Sutcliffe (+1)** **Weick (+2)** Addtl known impt articles: **Carroll and Smolovic 1** **Ocasio 1**

	(line 3 AND) (“extreme context*” OR “crisis” OR “crises” OR “turbulen*” OR “change” OR “emerge*”) **ABI:** Peer Reviewed**,** N/5 noft((“frames” OR “framing” OR “priming” OR “sensegiving” OR “sensemaking” OR “sense-making” OR “cognition” OR “emotion” OR “affective”)) AND noft((“shared” OR “distributed” OR “relational” OR “integrative” OR “post-heroic” OR “collaborative” OR “plural” OR “complexity” OR “leadership-as-practice” OR “LAP” OR “critical*”)) AND noft((“extreme context*” OR “crisis” OR “crises” OR “turbulen*” OR “change” OR “emerge*”)) Peer Reviewed **WOS:** Lang: English Doc Type: Article WOS Index: Social Sciences WOS Categories: Management; Psychology Applied; Business **Combined (EBSCO, ABI and WOS) less duplicates**	1036 679 **2188**	**Wellman 1**
Search 3 (strings 1 OR 7 & 5)	**EBSCO:** Scholarly, English Lang (line 1) (“leadership” OR (“extreme context*” OR “crisis” OR “crises” OR “turbulen*” OR “change” OR “emerge*”)) (line 2 AND) (("wicked problem*" OR "complex problem*" OR "adaptive challenge*"))	416	**Daviter 1** **Grint 2** **Head and Alford 1** **Heifetz 1** **Lagreid 1**

	ABI: Peer Reviewed and English Language **WOS:** Lang: English Doc Type: Article WOS Index: Social Sciences WOS Categories: Management; Psychology Applied; Business **Combined (EBSCO, ABI and WOS) less duplicates**	418 83 **697**	
Search 4 (string 6) (only 16 articles if combined with string 1)	**EBSCO:** Scholarly, English Lang "institution* logics" AND ("organi?ation*" OR "institution*" OR "structur*" OR "agency" OR "actor*" OR "organi?ation* norm*" OR "organi?ation* field*" OR "institutional entrepreneur*" OR "organi?ation* culture" OR "organi?ation* practice*" OR "power" OR "politic*" OR "authority" OR "enact*" OR "commitment" OR "struggle" OR "tension") OR ("field*" N5 ("strategic action" OR "SAF") **ABI:** Peer Reviewed and English Lang First line: ("Institution* logics") Second line: AND ("organi?ation*" OR "institution*" OR "structur*" OR "agency" OR "actor*" OR "organi?ation* norm*" OR "organi?ation* field*" OR "institutional entrepreneur*" OR "organi?ation* culture" OR "organi?ation* practice*" OR "power" OR "politic*" OR "authority" OR "enact*" OR "commitment" OR "struggle" OR "tension" OR ("field*" NEAR/5 ("strategic action" OR "SAF")))	520 428 978	**Besharov 1** **Currie 1 (+2)** **Fligstein 1** **Lounsbury (+9)** **McPherson and Sauder 1** **Ocasio (+6)** **Thornton (+3)** Addtl known impt articles: **Clark et al 1** **Decker 1** **Greenwood 7** **Hoffman 1** **Fellows 1** **Friedland 2** **Hatch 1** **Kauppinen, Cantwell and Slaughter 1** **Khan 1** **Langley 1** **Mutch 1** **Suddaby 2** **Svensson 1** **Uttley 1** **Willmott 1**

	WOS: Lang: English Doc Type: Article WOS Index: Social Sciences WOS Categories: Management; Psychology Applied; Sociology; Business ((“Institution* logics” AND ("organi?ation*" OR "institution*" OR "structur*" OR "agency" OR “actor*” OR “organi?ation* norm*” OR “organi?ation* field*” OR “institutional entrepreneur*” OR “organi?ation* culture” OR “organi?ation* practice*” OR “power” OR “politic*” OR “authority” OR “enact*” OR “commitment” OR “struggle” or “tension”) OR "field*” NEAR/5 ("strategic action" OR “SAF")) **Combined (EBSCO, ABI and WOS) less duplicates**	**1336**	
Search 5 (strings 1,2,3&7)	**EBSCO:** Scholarly, English Lang "leadership" N5 ("practice" OR "time" OR "temporal" OR "process*") (line 2 AND) (“shared” OR “distributed” OR “relational” OR “integrative” OR “post-heroic” OR “collaborative” OR “plural” OR “complexity” OR “leadership-as-practice” OR “LAP” OR “critical*”) (line 3 AND) (“extreme context*” OR “crisis” OR “crises” OR “turbulen*” OR “change” OR “emerge*”) **ABI:** Peer Reviewed and English Lang noft((("leadership" N/5 ("practice" OR "time" OR "temporal" OR "process*")))) AND noft((“shared” OR “distributed” OR “relational” OR “integrative” OR “post-heroic” OR “collaborative” OR “plural” OR “complexity” OR “leadership-as-practice” OR “LAP” OR	224 212	**Avolio (+3)** **Crevani 1** **Currie 1 (+1)** **Denis 1 (+1)** **Hannah et al 1** **Mabey 1** **Marion 2 (+1)** **Raelin (+3)** **Uhl-Bien 3 (+1)**

	“critical*”)) AND noft(“extreme context*” OR “crisis” OR “crises” OR “turbulen*” OR “change” OR “emerge*”)		
	WOS: Lang: English Doc Type: Article WOS Index: Social Sciences WOS Categories: Management; Psychology Applied; Business (("leadership" NEAR/5 ("practice" OR "time" OR "temporal" OR "process*"))) (line 2 AND) (“shared” OR “distributed” OR “relational” OR “integrative” OR “post-heroic” OR “collaborative” OR “plural” OR “complexity” OR “leadership-as-practice” OR “LAP” OR “critical*”) (line 3 AND) “extreme context*” OR “crisis” OR “crises” OR “turbulen*” OR “change” OR “emerge*”	122	
	Combined (EBSCO, ABI and WOS) less duplicates	**370**	

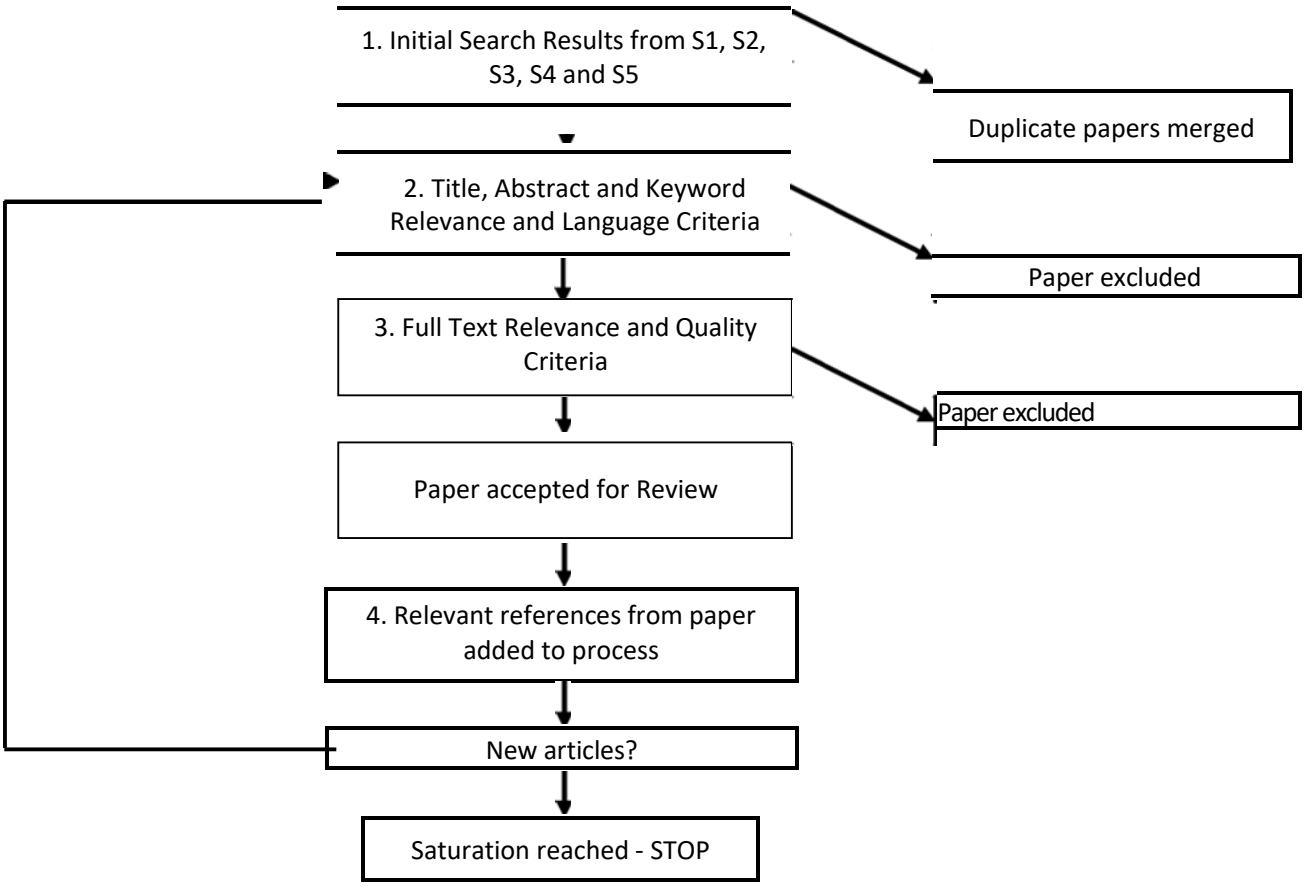
The following illustrative (unused) searches provided additional assurance that the five searches used did not miss realistically obtainable military specific literature and therefore combined searches effectively to strike an acceptable balance between quantity of articles returned and relevance. The first search failed to deliver any scholarly articles of interest and the second search was too broad to add usefully to the existing five searches in the search strategy:

"military" OR "army" OR "navy" OR "airforce" OR "armed forces" OR "combat" OR "soldier" OR "service person*el" AND String 5 produced 53 articles (33 Academic in Eng Lang), none of which warranted a full text review after scanning
"military" OR "army" OR "navy" OR "airforce" OR "armed forces" OR "combat" OR "soldier" OR "service person*el" AND String 7 produced 16158 articles (4961 peer reviewed and Eng Lang)

Appendix A-2 Paper Acceptance and Exclusion Processes

The holistic process for excluding or including papers for the SLR is shown below. Recognising the comprehensive coverage of the relevant literature domains, the following databases were used for each of the searches:

- ABI/Inform
- EBSCO
- Web of Science



Appendix A-1 identifies the results returned from each of the five searches. Title, Abstract, Keyword Relevance and Language inclusion criteria are shown below**.** The process at Step 2 above was applied and then reapplied at the step 3 (full text stage), where the title and abstract provided insufficient detail to exclude the article. In this way, the process provided a robust mechanism to ensure that literature was not excluded erroneously.

The next stage **(step 3 of the flow diagram above**) consisted of careful full text review of each of the remaining papers, analysed against the inclusion criteria and the quality criteria outlined below.

Criteria	Inclusion	Exclusion	Rationale
SLR Question Relevance	Title, abstract or keywords (or full text in step 3) indicated that the paper will provide insights about the structural and agentic factors that influence the framing/reframing of adaptive problems and how this affects leadership responses.	Studies which fail to provide insight about the structural and agentic factors that influence the framing/reframing of adaptive/wicked problems and how this affects leadership responses. Broader Leadership literature that is focused wholly on Leadership within a "tripod" ontology Broader Organization and Institutional Theory and Organizational Culture literature, except where it is substantially linked or integrated with the Institutional Logics Perspective, Strategic Action Fields or Institutional Complexity.	There is an enormous quantity of literature within the Leadership domain, as well as within the Institutional and Organizational Theory domains and it is not possible to consider the full breadth of this work.
Language	English	Non-English	Availability of literature, acknowledgement that English is the recognised unifying language of the international academic community. Researcher's first language.

Type of Publication	Academic journal articles	Non-academic journals	The SLR attempts to bring together disparate academic literature domains and clarity is therefore required in relation to source literature domains, ontology and empirical methodology - this clarity is available most conclusively in academic papers and this paper will consequently focus exclusively on these sources

The quality criteria below were applied to the articles at the full text review stage of the review. Each article was required to pass a minimum of six of the eight criteria in order to be included:

Quality Criteria	**Inclusion criteria**	**Exclusion criteria**
Is the article peer-reviewed?	Yes	No
Is the article written and structured in a clear and accessible manner?	Yes	No
Is the theoretical or empirical contribution to the field clear and significant?	Yes	No
Does the article offer an appropriate literature review?	Yes	No
Are the aims and objectives of the article sufficiently clear and understandable?	Yes	No
Are the article's research design and processes (including method, sampling, data collection, results and analysis) appropriate, sufficient and transparently explained?	Yes	No
Is there an attempt to link 2 or more of the following literature domains - Leadership; Framing (or other meaning-making literature); Wicked or Complex Problems; and Institutional Theory (including Institutional Logics, Strategic Action Fields, or Institutional Complexity)?	Yes	No
Are the conclusions drawn by the study appropriate, convincing and relevant given the results and analysis?	Yes	No

The result of this acceptance and exclusion processes led to the article numbers shown below:

	Articles remaining (after duplications removed)	Articles remaining (after title and abstract review for relevance)	Articles Remaining (after full text review for relevance and quality)	Articles generated and included after cross-referencing complete	Total number of articles considered in review
(S1)	1133	107	24	**10**	**34**
(S2)	2188	88	16	**5**	**21**
(S3)	697	58	14	**6**	**20**
(S4)	1336	87	25	**8**	**33**
(S5)	370	28	2	**2**	**4**
Total	**5724**	**368**	**81**	**31**	**112**

I conducted the full text reviews across 5 separate searches rather than from the merged folder, hence a few duplicates weren't picked up by Mendeley despite using the "check for duplicates" function. The 5724 spread across S1-S5 reduced to 5334 when the 5 x searches were merged (therefore removing further duplicates). The final figure in row S5 is low since of the 17 articles flagged for inclusion after full text review, 15 were duplicates from rows S1-S4. The full text review figure has therefore been amended from 43 to 28 in row S5 to take account of the 15 duplicates that should have been removed at an earlier stage.

As can be seen above, the final number of articles included in this review from the initial searches is 112.

Appendix B: Interview Primer

*"Leaders who try to impose order on complexity are likely to fail" (*JCN 2/17, p.48)

Both military publications and academic literature support the notion that organizational problems of a complex and ambiguous nature are becoming increasingly common. What are complex problems? Complex, ambiguous problems are not defined by an over-riding time-critical imperative for immediate action, they cannot be solved definitively with objective, technical planning processes, may contain competing views about the nature of the problem and typically contain multiple stakeholders who are likely to diverge in their perceptions of acceptable solutions (climate change is a good example of a societal level problem and, within the military, developing the appropriate force capability to meet future threats is probably the most obvious example of a complex and ambiguous problem). According to literature, these problems are unlikely to be solved with traditional leader-led organizational practices. By organizational practices, I simply mean the combination of the way people do things and the procedures used to get things done.

During part one of the research interview, we'll be discussing your perceptions about how effectively the most challenging and complex organizational level problems that you have been involved with were addressed. Of course, organizational level problems rarely conform to category labels, and complex problems may well contain linear[1] elements, interspersed with occasional crises[2]. The Army's contribution in Iraq and Afghanistan since 2001 are good examples of environmental contexts that contained overlapping and interconnected complex, linear and crisis type problems for the British Army. My research aims to look more deeply into the Army's organizational practices around

1 ***Linear, technical problems.*** These problems may be extremely challenging and complicated, requiring deep subject matter expertise, but they are objectively solvable with the right planning and execution (air traffic control is perhaps a good civilian example and a large-scale logistic move is a good military example).

2 ***A crisis type problem***. Crises may contain elements of complexity and ambiguity, but these elements are overshadowed by an overriding time-critical requirement for immediate, or near immediate, decisive action (for example an enemy ambush in an operational context; or an unexpected front-page headline that generates a highly time sensitive demand for information in a staff working context).

problems, identifying how and why the way that we construe and describe problems both enables and constrains organizational practices to address these challenges over time.

What sorts of problems am I interested in? I'm interested in your experiences of organizational level problems. Although I am interested in organizational (Army) level problems, the specific level that you experienced the problem may have been at a junior, middle or senior level of the hierarchy. The problems should be ones that have/had relevance throughout the Army's hierarchy; something that you might expect to be/have been on the radar of the Executive Committee of the Army Board (ECAB) (or equivalent operational command) at some stage and been identifiable down through the chain of command. Your experiences should amount to you feeling connected to the problem, at least to the extent that your experiences are meaningful in the context of the organizational level problem. Something like the Army's challenge to address the recruiting shortfall in recent years is a good example of a problem that you might have experienced at a junior or middle level, far removed from the ECAB board and yet recognise the problem as Army-level, receiving attention by its most senior leaders (and the national press for that matter). What matters are your perceptions about how effectively the organizational level problem was addressed.

I would like you to identify **six complex problems/challenges** from your experiences as detailed below. Complexity is involved in every category:

- One operational problem/challenge which has been effectively handled
- One operational problem/challenge which has been ineffectively handled
- One non-operational (HQ or in-barracks) problem/challenge which has been effectively handled
- One non-operational (HQ or in-barracks) problem/challenge which has been ineffectively handled
- Two further examples (aligning with whichever category/ies above that fit your experiences)

Note 1: One problem/challenge might appear in more than one of the categories above, for example, a problem experienced notably differently as the situation unfolded over time, or from an alternative perspective in a new position or different assignment.

Note 2: Your examples should come from some of the most challenging and complex Army level problems that you have been involved with, but may not be the top six, since I have asked you to identify examples that fit into the categories above.

Appendix C: Interview Protocols

Appendix C-1 Study 1 (RGT Interview) Protocol

My name is Miles Hayman. I am doing research at Cranfield University, UK. The purpose of this research is to examine how and why the framing of organizational level problems affects leadership actions to address the problem. In a moment I will take you through the structured interview process. First, I would like to remind you that you are here as a volunteer and are free to leave this interview at any time. In addition, the contents of this interview will remain confidential and anonymous. With your permission, the interview will be recorded.

We are going to use a particular approach that involves you comparing and contrasting a number of complex organizational level problems that you have been involved with. First, we need you to confirm the problem examples that you will compare and contrast in this interview.

*(Hand six cards, labelled **a to f**, to the participant)* Please think of the most challenging and complex **organizational level problems** you have experienced/been involved with **(see primer for explanation of organizational level problems)**. On the cards, please write down a short description of the incident, just to identify it.

I would like you to identify **six complex problems/challenges** from your experiences as detailed below. Complexity is involved in every category:

- One operational problem/challenge which has been effectively handled
- One operational problem/challenge which has been ineffectively handled
- One non-operational (HQ or in-barracks) problem/challenge which has been effectively handled
- One non-operational (HQ or in-barracks) problem/challenge which has been ineffectively handled
- Two further examples (aligning with whichever category/ies above that fit your experiences)

(*Now get some basic familiarity with each problem by discussion)* Please tell me briefly how each of these incidents unfolded... just a quick summary of the main aspects

Compare and Contrast I will now select groups of three from the six problems that you have chosen and ask you to compare and contrast them. The first group of three is a, c and e.

(Pull out the three cards (a, c and e) and lay them in front of the participant KEY QUESTION: "**Please think about how two of these problems were similar and different from the third, in terms of how you observed and experienced the problems being addressed"**

Move the cards around while asking for the interviewee to think about similarities and differences. "in what sense are they similar and different?"

(It is important to prompt the participant until they have clearly explained the contrast that they have used to compare the three incidents. Participants might find this difficult in the first instance.

In what way is [Construct] important to you in regard to describing these incidents?"

Write the construct on the protocol sheet and confirm with the participant that this is correct.) Pick out one word (xxx) that the interviewee uses.... "how would you define the two extremes of the idea of xxx?"

(e.g. if the participant has said 'time pressure' they might suggest 'immediate action' and 'no perceived deadline' as the two extremes)

Rating each incident in relation to the constructs Now, please rate these three cards in relation to [name of construct]. Please arrange them in order of how they rate according to [the construct]. You should allocate each incident with a rating of between **1 and 5** with **1** meaning [pole] and **5** meaning [construct]. You can have two incidents on the same rating if necessary.

(Remind the respondent what 1 and 5 means. Allow the participant time to order the three cards and to state which number each has been allocated)

Now please rate the other three cards on the same scale. You can change the ratings of the first three cards if need be at this point.

(Allow the participant time to order the remaining three cards and to state which rating each has been allocated. Write down the rating of all six cards and any comments that he makes throughout the process).

Please explain why you have given each incident this rating. *(LISTEN to their answer.... The recording will capture...)*

(Confirm that they are using the construct scale consistently... pick two extremes as a check) Now I want to clarify: why did you put [this card] under 1 and [this other card] under 5?

(This process should then be repeated with different triads up to 10 triads. In order to standardize the process the following triads will be used.... See below)

ELEMENTS: 6 occurrences of complex organizational problems (**a Op effective; b Op Ineffective; c Non-Op effective; d Non-Op ineffective; e & f free choice**): **CONSTRUCT RATINGS:** 5 point scale (1 on R; 5 on L)

		Elements							
Construct (score 5)		**a**	**b**	**c**	**d**	**e**	**f**	**Construct POLE (score 1)**	
	1	*		*		*		1	
	2		*		*		*	2	
	3	*			*	*		3	
	5		*	*		*		5	
	6	*		*			*	6	
	7		*		*	*		7	
	8	*	*		*			8	
	9			*	*	*		9	
	10	*	*			*		10	

Appendix C-2: Study 2 (Semi Structured Interview) Protocol

Focus	Interview questions
• **Opening question: Can you please outline your current role within the organization**	
Introductory context	In the first part of the interview you identified six of the most complex army level problems that you have been involved with. I would now like to ask you some questions about these **types** of problems, not just the six we have already discussed. I have three sets of questions. Firstly, questions about how people make sense of these problems. Secondly, questions about the actions that are taken and, thirdly, questions about the outcomes of that action.
Problem construct in relation to making sense of CAN problems Leaders' framing of CAN org problems (linking the logic of leading to leaders' communicative acts) Key areas to cover: • Power dynamic • Cognitive and affective aspects of communication • Op/non-op comparison	**Frame / narrative (How people make sense of these types of problems)** 1. How do people first come to notice, pay attention to, or hear about such problems? 2. How do people (individually and collectively) make sense of these problems and in doing so, how would you describe the relative significance of thought processes and emotions? 3. To what extent does dominant frame / narrative emerge or is there contestation with multiple interpretations / perspectives of these problems? Dominant frame / narrative o How does the dominant frame / narrative emerge? o Who tend to be the key influencers in generating a dominant frame / narrative? o How do people come to consensus around a frame / narrative? o How are differences resolved? Contested o How do competing frames / narratives emerge? o Who tend to offer alternative perspectives? o How do people create contestation around a frame / narrative? o How are differences sustained? **Context** 4. To what extent is the frame / narrative influenced by the context – like hierarchy, department or operational/ non-operational environment? o hierarchical position/power, if so, how? o different departments, if so, how? o operational context from a non-operational one, if so, how? o changes over time, if so, how? 5. Overall, is there a particular army way of making sense of and framing these problems?
Leadership action over time to address CAN org problems (evidence of framing by leaders influencing org level actions over time) Key areas to cover: • Temporal aspects • DAC factors • context	**Actions to address complex problems** **Direction** 6. Typically, how do people (individually or collectively) decide upon what needs to be done to address these problems and what sort of language is used to communicate required action? (Army Doctrine (JCN 2/17) suggests a P-S-R response for complex problems (rather than a S-A-R response for complicated problems) 7. To what extent is there agreement / disagreement about what needs to be done and does this change over time? 8. What factors affect the emergence of competing narratives about what needs to be done? o How do people come to consensus around what needs to be done?

	o Who tend to be the key influencers in deciding what needs to be done? **Alignment** 9. To what extent is there a typical process or rule set for addressing these problems or is it always different? o What steps are taken? 10. To what extent is there coordination and integration of the different aspects of the work that needs to be done and how is this achieved? o Who tend to be the key people in coordinating and integrating this work? **Commitment** 11. How willing are people to work on addressing these problems and what are the key factors influencing people's willingness? o To what extent are they willing to subsume their own interests and benefit to address these problems? If so, how? o How and why are people motivated to address these problems? o How is this willingness or buy-in achieved? o Who are the key people in motivating people to take action? **Context** 12. To what extent are the actions to address these problems influenced by the context – like hierarchy, department or operations from non-operations? o hierarchical position/power, if so, how? o different departments, if so, how? o operational context from a non-operational one, if so, how? o changes over time, if so, how? 13. Overall, is there a particular army way of addressing these problems?
Key area to cover: • Perceptions of outcome	**Outcomes** 0. To what extent have outcomes been a result of some form of new thinking or action in relation to addressing these sorts of problems? 15. What have been the key indicators of successes and failures you have experienced/observed? o How and why were some successful, when others failed? o How do you determine what is success or failure? o What tends to work well and what tends to be less effective? o Is it different in an operational context from a non-operational one, if so, how? o Does the perception of success change over time, if so, how? 16. What is the key role of leadership in addressing these problems? 14. What does effective individual leader activity look like in relation to addressing these problems? 17. Overall, how effective is the army in addressing these problems?
• **Closing question: Is there anything else that you think is in relation to understanding how the army addresses complex organizational problems that we haven't covered?**	

Appendix D University Research Ethics Approval

2 April 2019

Dear Mr Hayman ,

Reference: CURES/7911/2019
Title:

Thank you for your application to the Cranfield University Research Ethics System (CURES).

We are pleased to inform you your CURES application, reference CURES/7911/2019 has been **approved**. You may now proceed with the research activities you have sought approval for.

If you have any queries, please contact CURES Support.

We wish you every success with your project.

Regards,

CURES Team

Appendix E – List of Interviews Conducted

Participant	Cohort	Interview Date	Interview location
01	Middle	23 May 19	JSCSC
02	Middle	24 May 19	JSCSC
03	Senior	28 May 19	Army HQ
04	Middle	30 May 19	JSCSC
05	Senior	2 Jun 19	JSCSC
06	Middle	10 Jun 19	JSCSC
07	Middle	17 Jun 19	JSCSC
08	Junior	17 Jun 19	JSCSC
09	Junior	19 Jun 19	JSCSC
10	Junior (f)	20 Jun 19	JSCSC
11	Middle	24 Jun 19	JSCSC
12	Junior	25 Jun 19	JSCSC
13	Junior	25 Jun 19	JSCSC
14	Middle (f)	26 Jun 19	JSCSC
15	Junior	26 Jun 19	JSCSC
16	Middle	27 Jun 19	JSCSC
17	Junior	27 Jun 19	RMAS
18	Junior	27 Jun 19	RMAS
19	Junior	28 Jun 19	RMAS
20	Junior	2 Jul 19	RMAS
21	Middle	2 Jul 19	RMAS
22	Senior	4 Jul 19	Army HQ
23	Senior	5 Jul 19	RMAS
24	Junior (f)	9 Jul 19	JSCSC
25	Middle	9 Jul 19	JSCSC
26	Senior	10 Jul 19	Home Command
27	Senior	11 Jul 19	RMAS
28	Junior	11 Jul 19	JSCSC
29	Senior	12 Jul 19	JSCSC
30	Junior (f)	16 Jul 19	Home Command
31	Junior	16 Jul 19	Home Command
32	Senior	18 Jul 19	Tri Service location
33	Senior (f)	24 Jul 19	Tri Service location
34*	Senior	29 Jul 19	Tri Service location
35	Junior	30 Jul 19	Home Command
36	Senior (f)	31 Jul 19	Home Command
37	Senior	31 Jul 19	Home Command
38*	Senior	30 Aug 19	Field Army
39	Senior	30 Aug 19	Field Army
40	Middle	6 Sep 19	Field Army
41*	Senior	12 Sep 19	Defence Academy
42*	Middle	20 Sep 19	Field Army

* = No RGT Interview

Appendix F: Study 1 Full Coding Results by Leader Cohort

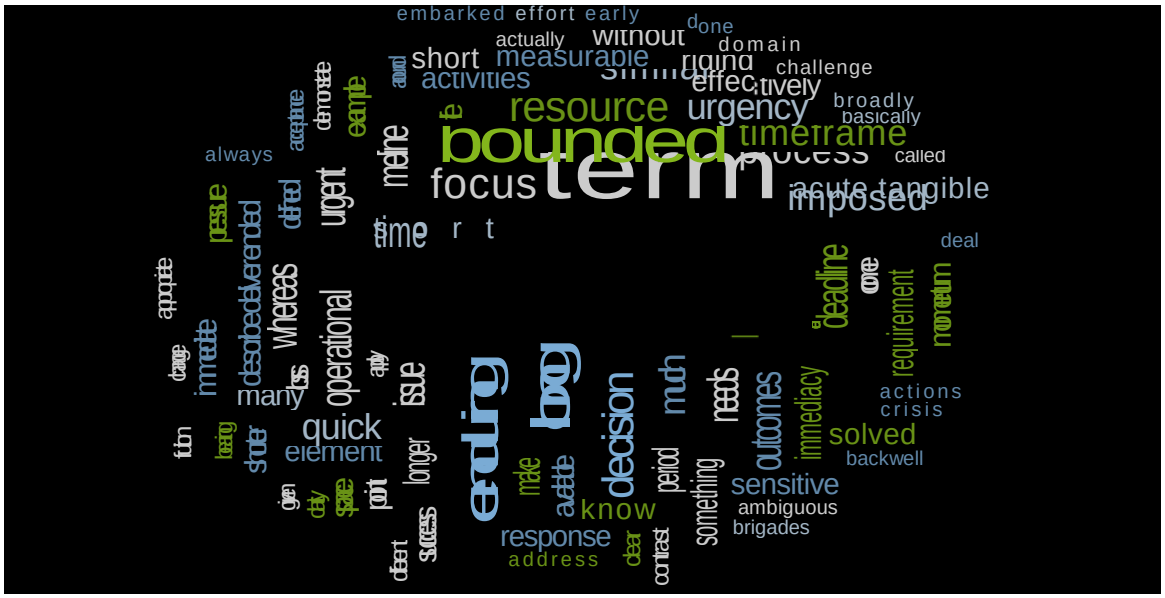
Node	Junior	Middle	Senior
1 : 1 Conceptions of Leadership	0	0	0
2 : 1.1 - Demonstrate 'special' leader quality	6	10	5
3 : 1.2- Clarity or Vision	3	5	9
4 : 1.3 - Act Decisively	4	5	4
5 : 1.4 - Provide direction	3	4	4
6 : 1.5 - Plural leadership conceptions	0	2	2
7 : 2 Conceptions of Complex Organizational Problems	0	0	0
8 : 2.1 - Recognition of planning guidelines or rules	9	9	9
9 : 2.2 - Desire to get on with or solve problem	5	6	10
10 : 2.3 - Recognition of external or policy constraints on action	4	2	7
11 : 2.4 - Recognition of broad stakeholder groups	1	3	9
12 : 2.5 - Recognition of hierarchical power structure for decision making	2	3	5
13 : 2.6 - Desire to define and fix understanding of problem	3	1	4
14 : 3 Institutional Context Categories	0	0	0
15 : 3.1 - Willingness to address problem influences	22	28	22
16 : 3.2 - Hierarchy-Power influences	39	27	30
17 : 3.3 - Operational and non-operational influences	17	15	28
18 : 3.4 - Individual leader behaviour influences	30	20	16
19 : 3.5 - Temporal influences	19	15	15
20 : 3.6 - Inter-department influences	6	6	6
21 : 3.7 - External influences	4	1	11
22 : 4 Organizational responses	0	0	0
23 : 4.1 Blocking themes	0	0	0
24 : 4.1.1 - Rigid problem framing	22	25	32
25 : 4.1.1.1 - Crises response	0	7	5
26 : 4.1.1.2 - Linear response	15	15	15
27 : 4.1.2 - Lack of willingness	14	10	3
28 : 4.1.3 - Weak stakeholder engagement or alignment	10	8	6
29 : 4.1.4 - Overly rigid processes or directives for action	9	4	9
30 : 4.1.5 - Collaboration or challenge suppressed	3	5	5
31 : 4.1.6 - Key leader churn	4	3	1
32 : 4.1.7 - Exaggerated dysfunctional processes	2	2	4
33 : 4.1.8 - Exaggerated structural misalignment	2	2	0
34 : 4.1.9 - Exaggerated self-interest	0	3	1
35 : 4.2 Enabling themes	0	0	0
36: 4.3.1 - Acceptance of compromise and uncertainty to provide a safe place for collaboration	4	14	15
37 : 4.3.2 - Strong senior leader support or permission	2	6	5
38 : 4.3.3 - Clarity of purpose	1	5	6
39 : 4.3.4 - Productive tension or catalyst for action	3	2	3

Appendix G: Repertory Grid Data Analysis

Appendix G-1 Extract from raw repertory grid data spreadsheet

			ELEMENTS						
count	INTERVIEW	CONSTRUCT	A Op (Effective)	B Op (Ineffective)	C Non-Op (Effective)	D Non-Op (Ineffective)	E Free Choice	F Free Choice	POLE
	INTERVIEWS	REP GRID RAW DATA							
			a	b	c	d	e	f	i
1	P-01	Resourced plan (funding, personnel and staff capacity)	4	3	5	2	2	2	Over ambitious plan, unrealistic expectations and lack of resources
		Ambiguity (typically over ambitious and under resourced)	2	3	1	2	4	4	Clarity of goal
		Reactive and non-discretionary	5	3	4	4	2	4	Proactive - self imposed (organizationally) improvement driven
		Competing stakeholder requirements for outcomes	2	1	1	3	4	5	Coherent and unified stakeholder requirement for outcome
		Strategic cross government partners	3	4	1	2	3	5	Army or Defence level
		Poor strategic guidance (ways)	2	4	1	2	3	4	Clarity of methods (ways)
	P-02	Establishing comprehensive and collaborative understanding of problem and agreeing & delivering solution in same way	4	2	3	2	1	3	Inaccurate understanding of problem, overly hierarchical or lack of engagement.
		Short term decision making to protect immediate interests	1	2	3	4	5	5	Long term decision making unhindered by personal interests
		Over-riding pressure to make a decision (time or other resource)	1	5	2	4	1	3	Time, space and resource available to come to a decision
		Leader self interest put before group	3	1	3	3	5	5	Leader putting group before self
		Desire to do the right thing (by decision makers)	4	4	4	3	1	1	Doing the right thing not a key element of decision making
		Disaggregated and delegated command	4	5	3	2	2	2	Rigid, centralised hierarchy

Appendix G-2: Illustrative construct category word cloud



Appendix G-3: Reliability Table (extract)

			Don't Know	CAT 1: Policy Framework	CAT 2: Process Freedom	CAT 3: Willingness to address/commitment to change	CAT 4: Time Pressure	CAT 5: Clarity - How to Address Problem	CAT 6: Clarity - Outcome
				The extent to which the approach is influenced by existing policy frameworks	The level of choice or freedom of process to think about and address a problem from the bottom up	Individual and/or organizational commitment to change and willingness to address the problem	The level of a dominant or bounded timeframe for action	The level of clarity in relation to the process or way to address the problem	The level of clarity around defined or required problem outcomes
8	CAT 1 Policy Framework	The extent to which the approach is influenced by existing policy frameworks		P-06-3 P-08-7 P-10-1 P-15-3 P-19-4 P-21-1 P-22-1 P-24-2 P-26-5 P-39-2 P-12-5 P-25-3 P-22-5					
10	CAT 2 Process Freedom	The level of choice or freedom of process to address a problem			P-02-6 P-03-4 P-06-5 P-07-5 P-09-1 P-11-1 P-13-3 P-14-3 P-18-4 P-20-1 P-28-4 P-29-3 P-35-2 P-35-3 P-36-5	P-18-1			
6	CAT 3 Willingness to address/commitment to change	Individual and/or organizational commitment to change and willingness to address the problem				P-11-4 P-33-2 P-36-1 P-37-3			
9				Poss complex (with CAT 3) P-05-2 P-18-2 P-20-3		P-15-1 P-15-4 P-21-3 P-26-4		P-12-1	
11				Poss complex (with CAT 3) P-04-4		P-1 4-2 P-21-2 P-31-3 P-32-6 P-20-2 P-31-2 P-27-3			

Appendix G-4: Repertory Grid Key Common Construct Averages by Leader Cohort

Construct Number	Construct Title	Effective Average	Effective by Hierarchy	Ineffective Average	Ineffective by Hierarchy	Operational Average	Operational by Hierarchy	Non-Operational Average	Non-Operational by Hierarchy
1	POLICY FRAMEWORK (strong/rigid framework = high)	3.0	S: 2.5 M: 3.1 J: 3.4	3.2	S: 2.8 M: 3.1 J: 3.4	2.9	S: 2.6 M: 2.8 J: 3.1	3.2	S: 2.9 M: 2.9 J: 3.5
2	PROCESS FREEDOM (feedom. = high)	3.1	S: 2.9 M: 2.9 J: 3.2	2.6	S: 2.5 M: 2.9 J: 2.6	2.7	S: 2.6 M: 2.8 J: 2.8	2.9	S: 2.8 M: 3.1 J: 2.8
3	WILLINGNESS TO ADDRESS (willingness = high)	4.0	S: 4.0 M: 4.2 J: 3.8	2.8	S: 3.2 M: 2.2 J: 2.9	3.5	S: 3.2 M: 3.5 J: 3.8	3.1	S: 3.4 M: 3.1 J: 2.9
4	TIME PRESSURE (time pressure = high)	3.1	S: 3.2 M: 2.9 J: 3.3	2.7	S: 2.6 M: 3.1 J: 2.4	3.4	S: 3.2 M: 3.4 J: 3.6	2.6	S: 2.5 M: 2.8 J: 2.4
6	CLARITY - OUTCOME (clarity = high)	4.0	S: 4.1 M: 3.7 J: 4.0	2.6	S: 2.5 M: 3.1 J: 1.5	3.2	S: 3.1 M: 3.7 J: 2.5	3.2	S: 3.4 M: 3.1 J: 2.9
7	CLARITY - UNDERSTANDING OF PROBLEM (clarity = high)	3.8	S: 4.1 M: 3.9 J: 3.6	2.5	S: 2.7 M: 2.3 J: 2.5	3.1	S: 2.9 M: 3.2 J: 3.2	3.1	S: 3.5 M: 2.9 J: 2.8
8	ALIGNMENT OF STAKEHOLDERS (alignment = high)	3.9	S: 4.1 M: 4.1 J: 3.6	2.8	S: 2.3 M: 3.4 J: 2.8	3.7	S: 3.5 M: 4.3 J: 3.4	2.9	S: 2.8 M: 3.3 J: 3.0
9	EXTERNAL VS INTERNAL (Internally bounded = high)	2.6	S: 2.8 M: 2.5 J: 2.7	3.2	S: 2.6 M: 3.1 J: 4.0	1.9	S: 1.7 M: 1.9 J: 2.3	3.6	S: 3.4 M: 3.3 J: 4.3

Appendix H: Centre for Army Leadership Insight

LEADERSHIP INSIGHT No 20 - Feb 2020

The Centre for Army Leadership (CAL) is the British Army's custodian of leadership debate, thinking and doctrine. It seeks to stimulate discussion about leadership and so further the institution's knowledge of best practice and experience. ***Leadership Insights*** *are published periodically by the CAL to feed and shape the leadership debate in the Army through a range of themes and ideas designed to inform and challenge its readership. The views expressed in* ***Leadership Insights*** *are solely those of the author and do not necessarily reflect official thinking of the British Army or the Ministry of Defence.*

Institutionalised Army Leadership – Friend

or Foe?

By Col Miles Hayman (Late ETS)

25 years ago, I was struggling to make a success of a new way of life during the first term of officer training at RMAS. As with so many of us, my army career happened while I was making other plans! Funny thing is I quickly grew to love life in the army and felt at home and comfortable in my new environment. Fast forward to the present and I am in the final year of a full-time PhD leadership study. This does not make me an expert in all things leadership, the body of literature would take 100 lifetimes to get through. But I have had the time to read, research and reflect deeply on the experiences that have influenced my development as a leader in the army. I'll aim to demonstrate why I think the institutionalised influences are so significant to the way we lead both as individuals and as an organisation.

What does it mean to be institutionalised?

I often hear conversations that refer to army personnel being 'institutionalised'. The conversation usually peters out with assertions that we need to change our culture in some way or other, often with 'leaders' assigned to the task of bringing about the change.

A little change sometimes captures the mood successfully; a big change is usually resisted or written off as absurd. A whole body of literature has grown around 'institution theory' over the past 60 years or so. Put simply, an institution is a form of social structure that has developed ways for that structure to be reproduced through self-activating processes. Broadly speaking these self-activating processes - the things that cause organizations and the individuals within them to behave in particular ways - can be aligned to three forces of influence. Regulative, normative and cognitive influences all play a key part. For regulative forces think perceived external constraints, organisational rulebook and SOPs. For normative forces think organizational group photo capturing 'how things are done around here', the implicit group practices we carry out, illuminating our organisational personality. And for cognitive forces think individual movie compilation of experiences through-career that help you build and develop your mental models of what good looks like. These forces typically strengthen as personnel become more senior (as you gather 'evidence' that your choices and methods have been the right ones) and behaviours become deeply embedded over time.

'A little change sometimes captures the mood successfully'

A quick re-cap on 150 years of leadership writing

The key premise of 150 years of leadership writing, from Thomas Carlyle in the mid nineteenth century, to Bernard Bass in the later part of the twentieth century, is that certain individuals – let us call them leaders – do things, bound in a relationship with other individuals – let us call them followers – to achieve things. This relationship was described as the leadership tripod by Bennis. There are dozens of different models and theories of course and there is no universally agreed way to describe it. I like the way that Professor Keith Grint tackles it, when he refers to the ebb and flow of normative and rational schools of thought. Normative schools focus on qualities in people (i.e. trait theories, transformational, charismatic and authentic schools); and rational schools focus on scientific or objective skill sets required to practice effectively (i.e. functional, situational and contingency schools). But what these traditional schools of thought all have in common is they conform to the leadership tripod. They privilege some form of special person who sits at the top of a tripod that binds others (the led) and their coordinated actions together in a relationship. I think the army is pretty comfortable with this conception of leadership, albeit with a focus that over the years has moved from the transactional and authoritative to the transformational and authentic. Nevertheless, our notions of effective leading are aligned strongly with these traditional schools of thought. And for many of our challenges, especially at the most adversarial end of the spectrum, this traditional leadership dynamic is probably as fit for purpose as it ever was.

Institutionalised leadership and making a break from the old routine

I am proud to serve in the British Army and think it is full of outstanding leaders practising their craft admirably, often in exceptionally difficult conditions. We work hard to live up to our most authentic and humble forebears and to be the catalyst to inspire transformational effects within our spheres of influence. So, what does being institutionalised mean in relation to leadership? It isn't necessarily a bad thing. For example, our organisational norms provide us with a crucial link back to our learned

experiences, helping us to orientate for future action. Nevertheless, being institutionalised is associated with doing things in a particular and *self-activating* way, in accordance with recognised group behaviours, which makes it difficult to break from the old routine.

Over time, dominant institutional forces have come to profoundly affect the army's leadership dynamic. These forces triangulate to prescribe leader actions aligned to decisive, time-sensitive, solution-orientated decision-making, regardless of the problem context. When these institutional forces combine with individual preferences for getting the job done and a competitive instinct to win, problems can only really be framed in one of two ways. The problem can be framed for clarity (with known solutions), or crises (with a perceived time-critical requirement for immediate action). Framing problems in either of these ways acts as a powerful constraining influence on adaptation and innovation; and the messy and imperfect outcomes associated with the type of problems often referred to as complex. Complex problems are non-reducible, mutate over time and typically require collaborative rather than individually decisive action.

'Over time, dominant institutional forces have come to profoundly affect the army's leadership dynamic.'

Institutionalised leadership - friend or foe?

Well...it's both. At their best the army's institutionalised leadership practices provide an immediately accessible link, subconsciously tuning us in to our learning from past experiences and act very much as friend. Typically, this works well with *crises* type problems, where we devote so much of our energy. We train hard to thrive in demanding and time critical conditions and most of our leadership 'tests' are delivered in the form of 'command appointments' – where time is highly constrained, and objectives need to be achieved. Time and effort is also devoted to producing well planned, synchronised and executed activity for *complicated* problems – whether that be the J5 planning function, or the technically focused skill

sets that support specialist capabilities. Unsurprisingly, our regulatory influences, normative behaviours and individual mental models relating to good leadership are closely aligned with these two areas – crises and complicated problems. However, if we are to thrive in the 21st century, we need to be effective when addressing *complex* problems and I don't think we currently have the self-activating processes to lead in this domain. Our institutionalised leadership practices act as foe, attacking across three fronts to stifle collaboration and adaptation.

Institutional theory suggests that we reproduce behaviours that maintain the legitimacy of what we recognise as appropriate action. If one considers this in relation to our conceptions of good leadership it is unsurprising that we have difficulty recognising effective leading as collaboration, compromise, uncertainty and failure as the necessarily winding route to messy outcomes associated with complex problems. We must not underestimate the challenge faced by the latest initiatives designed to promote organisational agility and empowerment. It will take a coordinated effort across all three institutional pillars to adapt and change, to create new *self-activating processes.* Focusing

on just one pillar of influence will be insufficient, we need to focus on all three. We need to change the rules (a business case without hardwired benefits anyone?); encourage and reward different group behaviours (safe spaces for collaboration and compromise to outshine individual decisiveness); and introduce new mental models (a learning and development syllabus less reliant on conforming to and reproducing DS solutions). And all this without losing the ability to thrive in crises and to coordinate a complicated plan. Good luck!

Questions

- **What comes to mind when you think of effective leading and is it compatible with addressing complexity, and supporting adaptation and change?**
- **What can you do to challenge the rules, external pressures and policies constraining action to promote adaptation and change?**
- **What can you do to provide the safe spaces for people to try new ways of doing things and promote collaborative endeavour over individual decisiveness?**
- **Are your mental models of leading based predominantly on your successful experiences of 'fixing' problems, inspiring others, thinking clearly under pressure, and delivering the 'DS solution' to problems? If so, what can you do to find space to develop alternative models?**
- **What can you do to be more suspicious when all of your sensors – the rules, group norms and mental models - triangulate to provide the 'evidence' to act decisively and with clarity regardless of the problem context?**
- **What can you do to pay more attention to the junior voices who can more naturally question 'the way things are done around here'?**