

**ATMOSPHERIC WORK:  
A STUDY OF NHS SURGICAL TEAM LEADERSHIP**

By

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## Summary

The primary aim of this study is to analyse what changes in leadership members of surgical teams in the National Health Service have experienced since the 1980s.

This is the first study to explore this issue by reference to emotional atmosphere, and atmospheric work. An emotional atmosphere is a phenomenon that creates feelings and can be created by the feelings of one or more people. Atmospheric work is activity undertaken to create or maintain a particular kind of emotional atmosphere in a team or organisation. I show that surgical team-members can create atmospheres in a systematic, reproducible way.

This study responds to calls for research regarding surgical teams' contemporary experiences of leadership, and how leadership varies in different contexts. The social constructionist methodology uses semi-structured interviews, supplemented by observational data, to explore visible and less visible aspects of atmospheric work in leadership processes. This involves collective interactions amongst people and objects.

The findings of the study illustrate four ways in which the nature of atmospheric work has changed and become an increasingly prominent component of contemporary leadership in surgical teams. First, a more collective model of atmospheric work has emerged to challenge the traditionally hierarchical, pastoral, model in surgical team leadership. Second, a process of 'templating' has emerged to create a 'safe atmosphere', in which people feel safe to speak up about matters that cause them concern. Third a process of 'virtualizing' atmospheric work has emerged from the transition from leadership using face-to-face arrangements to virtual arrangements. Fourth, atmospheric disruption occurred from the protracted use of command leadership during the COVID-19 pandemic. This resulted in 'contextual contestation': the tension which arises when people have different perceptions of the atmosphere.

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## Table of Contents

Summary .....	i
Acknowledgements.....	i
1. Introduction .....	1
1.1. Background and research question.....	2
1.2. Research findings and contributions .....	5
1.3. Structure of the thesis .....	7
2. A review of studies about leadership and atmosphere.....	11
2.1. What is leadership? .....	11
2.1.1. Leadership as the exercise of divine right .....	12
2.1.2. An individual's traits provide a natural capacity to be a leader .....	13
2.1.3. Behavioural theory: styles, situational, and contingency theories .....	15
2.1.4. Relational leadership: a process of social influence .....	18
2.1.5. Followership: behaviour to help co-construct leadership .....	19
2.1.6. The social constructionist approach to leadership.....	20
2.2. How leadership was traditionally practiced in surgical teams .....	22
2.2.1. The historical roots of surgical leadership .....	23
2.2.2. How clinicians led: professional intersections.....	25
2.3. Reforms that affected the opportunities for leadership .....	26
2.3.1. Policy intentions for increased collective leadership.....	28
2.3.2. Concepts drawn into leadership studies from other fields.....	30
2.4. Contemporary leadership: how clinicians practice leadership today .	32
2.4.1. The introduction of a 'New Firm' format.....	32
2.4.2. The contemporary use of command leadership .....	41
2.5. The study of atmosphere as a spatial liminal and affective phenomenon.....	42
2.6. Developing knowledge of contemporary surgical team leadership ...	46

2.7.	Summary .....	50
3.	Research Methods .....	52
3.1.	Introduction .....	52
3.2.	Social constructionist ontology: the ‘what’ of the research.....	52
3.3.	Epistemology: the ‘how’ of research.....	55
3.4.	Research Design and Methods .....	56
3.5.	Why choose Qualitative methods .....	57
3.6.	Safeguarding the quality of the research.....	58
3.7.	Research methods.....	59
3.7.1.	Case study .....	60
3.7.2.	Unit of analysis .....	61
3.7.3.	The environment: introduction to the research sites .....	62
3.7.4.	The granting of access to the surgical team environment.....	63
3.7.5.	Participants .....	64
3.7.6.	Interviews.....	65
3.7.7.	Observations.....	69
3.7.8.	Saturation points .....	70
3.7.9.	Field notes .....	71
3.7.10.	Documentation review .....	72
3.8.	Database .....	73
3.9.	Ethical considerations .....	73
3.10.	Data analysis .....	74
3.10.1.	The nine stages of analysis.....	74
3.10.2.	Summary .....	84
4.	Atmospheric work and Templating.....	85
4.1.	Introduction .....	85
4.2.	Atmosphere .....	88

4.3.	Atmospheric work .....	88
4.3.1.	Creating atmosphere .....	88
4.3.2.	Ways of communicating that create or destroy atmospheres .....	90
4.3.3.	Respecting people and professional roles as their status advances.	95
4.3.4.	A community atmosphere felt in established or flexible teams .....	96
4.4.	Templating: repeatable atmospheric work.....	99
4.4.1.	Implicit and explicit rules and training giving rise to templating.....	99
4.4.2.	Supporting people to feel safe to speak and to reflect on events....	103
4.4.3.	Repeating activities systematically to create a safe atmosphere ....	106
4.5.	Summary .....	108
5.	Virtualizing and Contextual Contestation .....	110
5.1.	Introduction .....	110
5.2.	Virtualizing: transitioning from face-to-face to virtual leadership .....	111
5.2.1.	Interacting with digital technology: virtualizing before COVID-19....	111
5.2.2.	Creating and maintaining a community atmosphere virtually during the COVID-19 pandemic.....	118
5.2.3.	Sustaining relational atmospheric work when virtualizing .....	128
5.3.	Contextual contestation: misaligned perceptions of context .....	132
5.3.1.	Engaging different forms of leadership during the COVID-19 pandemic .....	132
5.3.2.	Perceiving contexts differently to create contextual contestation....	139
5.3.3.	Habitually adjusting different levels of relational activities for different forms of leadership .....	145
5.3.4.	Surgical teams' 'push back' against the senior leaders' narrative...	149
5.4.	Summary .....	151
6.	Changes experienced in leadership in NHS surgical teams.....	153
6.1.	Introduction .....	153

6.2.	Disruption of leadership activities, atmospheres, and atmospheric work since the 1980s .....	155
6.3.	The nature of 'safe' atmospheres .....	159
6.3.1.	The significance of atmospheres in the move away from traditional model of leadership.....	160
6.3.2.	Team and organisational limitations on atmospheric work .....	162
6.4.	Templating for safe atmospheres .....	164
6.4.1.	Staged atmospheres achieved by leadership.....	165
6.4.2.	Organisational limitations on templating and safe atmospheres .....	166
6.5.	Virtualizing the leadership space.....	167
6.5.1.	Disruption affecting relational aspects of leadership.....	168
6.5.2.	The effect of disruption of leadership on community atmosphere and distancing.....	169
6.5.3.	Virtual external influences on community atmosphere .....	171
6.6.	Contextual contestation developing from disrupted habitual leadership and relational activities.....	172
6.6.1.	Atmospheric work during non-habitual use of command leadership	172
6.6.2.	The source and impact of contested contexts .....	173
6.6.3.	The absence of relational activities expected for leadership.....	174
7.	Conclusion .....	178
7.1.	Introduction.....	178
7.2.	Contributions and implications .....	179
7.2.1.	Theoretical .....	179
7.2.2.	Empirical.....	184
7.2.3.	Policy .....	188
7.3.	Limitations.....	190
7.3.1.	General limitations .....	191
7.3.2.	Limitations due to the COVID-19 pandemic .....	191

7.4.	Recommendations for further research .....	195
7.4.1.	Creating safe atmospheres .....	195
7.4.2.	Digital technology.....	196
7.4.3.	Command leadership .....	196
7.4.4.	Atmospherics .....	198
7.4.5.	The practice of leadership for atmospheric work .....	198
7.5.	Conclusion .....	199
	References .....	201
	Appendix A: NHS Research Ethics Committee approval .....	226
	Appendix B: Log of interviews and participant details .....	230
	Appendix C: Observation log .....	234
	Appendix D: Steps of process to obtain permissions for research .....	235
	Appendix E: Definitions of activities perceived as elements of leadership in atmospheric work.....	237
	Appendix F: Interview Themes and Questions .....	240



## List of Tables

Table 2-1. Improvements in performance.....	37
Table 3-1. Autocratic leadership indicators .....	68
Table 3-2. Definitions of leadership activities identified in previous studies .....	76
Table 3-3. Description of novel descriptions arising from the data.....	77
Table 4-1. Examples in the data of atmosphere and related terms.....	87
Table 4-2. Examples of atmosphere activities and effects from observation notes..	98
Table 5-1. Concepts and Dimensions of Relational Change and Virtualizing Leadership .....	116
Table 5-2. Examples from observations of leadership activities in virtual meetings	121
Table 6-1. Disruption of leadership activities, atmospheres, and atmospheric work .....	157
Table 7-1. Summary of definitions of theoretical contributions and empirical findings or elements within them .....	180

## List of Figures

Figure 2-1. Examples of six major elements in leadership theory.....	12
Figure 2-2. The spectrum of distributed leadership variants. Source Currie and Lockett (2011) .....	21
Figure 2-3. Command Leadership multi-layered process. Source: author. ....	42
Figure 3-1. Health research traditions, by ontological and epistemological neighbourhood. (Bourgeault et al. 2010, p.130) .....	53
Figure 3-2. Case study emergent approach. Source: Lee and Saunders (2017) .....	61
Figure 3-3. Data structure of surgical team leadership activities .....	82
Figure 4-1. Individual activities within the bundle of Communication activities .....	90
Figure 5-1. Individual activities within the bundle of Weaving activities .....	126
Figure 5-2. Individual activities within the bundle of Respecting activities .....	134
Figure 5-3. Individual activities within the bundle of Empowering activities .....	144
Figure 5-4. Levels of relational activities within surgical team leadership on a contextual spectrum. Source: author, with reference to Hällgren, Rouleau, & De Rond, 2018.....	148

# 1. Introduction

The notion of atmospheric work introduced in this thesis, forms the basis of a novel theoretical and empirical study of the link between leadership and atmosphere.

Atmospheric work is work undertaken more, or less, purposefully to create or maintain a particular kind of emotional atmosphere in a team or organisation. An atmosphere is a phenomenon that can be felt by someone, or concurrently by more than one person (Trigg 2020). It can both create feelings and be created by the feelings of one or more people. It has been distinguished from other phenomena such as 'culture' or 'climate'. The first, culture, has been defined as 'what an organization is - the *ongoing* social construction of reality that renders a collective unique' (Ashcraft et al. 2009, p.13) [my emphasis]. Whilst an atmosphere may be unique to a group, it does not define that 'collective'. Furthermore, culture tends to be difficult to change and, without intentional intervention, may only do so incrementally over an extended period (Canato and Ravasi 2015). By contrast, an atmosphere tends to be short-lasting and may change instantaneously.

The second phenomenon, climate, has been proposed by some authors as a subset of culture, a 'surface-level manifestation of an organisation's culture' (Keyton 2011, p.71). Climate is understood as the shared meaning employees attach to, or how they perceive, the policies, practices, and procedures they experience, and the behaviours they observe getting rewarded, supported and are expected (Rostila et al. 2011; Barbera and Schneider 2014). Atmospheres may contribute to climate, so that a climate may be 'characterized' by a particular type of atmosphere; also, individual atmospheres throughout an organisation may contribute to an overall organizational climate (Alvesson and Spicer 2011, p.165; Komaki and Minnich 2016).

The way an atmosphere feels may be explained by using a descriptor. Some descriptors may be vague, such as 'nice'. This reflects that atmospheres are not neutral: the use of an imprecise description can signify simply that someone, or a group of people, are aware whether an atmosphere is or is not pleasant (Barrett 2017; Brown et al. 2019). Other terms, such as a 'safe atmosphere' intimate a particular set of characteristics about, or affect experienced due to, an atmosphere. In this thesis, I focus predominantly on 'safe atmosphere', that is an atmosphere in which people to feel safe to speak up about matters that cause them concern.

However, I also consider 'community atmosphere' and a 'war zone atmosphere', which a safe atmosphere may be affected by. These different types of atmosphere are discussed subsequently based on my findings.

In this thesis, I build an understanding of how an atmosphere may arise due to leadership of surgical teams. Leadership is not a *feeling* like an atmosphere: rather, in the context of this thesis, leadership means a socially constructed *process* underpinned by relational and socio-material aspects. There have been very few studies of the association of leadership with types of atmosphere, and the examination of the use of leadership for atmospheric work in surgical teams has not been addressed.

The remainder of this chapter is structured as follows. First, the background to the study is provided within a brief overview of relevant studies. Next, the main findings and contributions of the research are presented. The chapter concludes by outlining the structure of the thesis.

### **1.1. Background and research question**

In the UK National Health Service (NHS), surgery, invasive interventions for diagnostic or therapeutic reasons, is conducted by multi-disciplinary teams comprising surgeons, anaesthetists, nurses, and other healthcare professionals. These teams were traditionally characterised by a 'Firm' model of hierarchical organisation under the control of senior surgeons, titled 'Consultants' (Rivett 1998, pp.470, 478). Since the 1980s, analysts have reported that the hierarchical Firm model has been challenged by more collective leadership approaches (Olsen and Neale 2005; Timm 2013; Iliffe 2017) little is known about the nature of contemporary leadership in NHS surgical teams.

The reportedly gradual movement towards greater collective leadership within surgical teams contrasts with the immense, extremely quick reconfiguration of leadership, organisational, and staffing arrangements undertaken after the onset of the global COVID-19 pandemic. This included the NHS implementing a form of leadership termed 'command' (NHS England Emergency Preparedness Resilience and Response Unit 2016). Command is often characterised as autocratic, with the exercise of a directive, centralised power that may help or hurt team-members (De Hoogh et al. 2015). As a result of the reconfiguration, surgical teams experienced

rapid technological and relational changes. These developments accentuate previous calls for empirical studies of surgical teams' contemporary leadership in respect of two concerns (Oborn et al. 2013; Gunzel-Jensen et al. 2018; Malby et al. 2018). First, because successive studies of performance failings in NHS hospitals identified shortcomings; these shortcomings included failings arising from hierarchical approaches to leadership which contributed to well-publicised patient deaths (Kennedy 2013; Evans et al. 2019; James et al. 2020). Secondly, because concerns were raised that the adoption in NHS policy of a collective form of leadership ('distributed leadership') may allow blame to be shifted to people nearer the frontline (Martin et al. 2015).

In this study, I sought to understand how people's experiences of contemporary leadership arrangements differ from the traditional surgical team model, and what may have brought the change about. This involved looking beyond anecdotal evidence and the visible organisational and working pattern changes. For example, in other fields *atmosphere* has been identified as possessing the power to affect how people carry out their roles and may lead to contemporaneous and future changes to established routines (Borch, 2010; Clausen *et al.*, 2018). Consequently, to develop my understanding, I explored how people describe what leadership of surgical teams means to them, what the key tensions are between their understanding, based on past experiences, and emerging work arrangements. Also, how staff adapt leadership to address, or work around, those changes and tensions. Therefore, this study asks:

Since the 1980s, what changes in leadership have members of NHS surgical teams experienced?

I pose this question in the context of research that portrays movement away from the 'heroic' form of individual leaders. This shift is towards the development of relational, collective leadership exercised by more than one person. However, the situation for short-term, flexible teams in healthcare, appear to be in contradiction to this. These arrangements, that I term 'Lego working', are being used increasingly for surgical teams and result in less opportunity than traditional teams to rely on longer term relationships.

Thus, scholarship in the field of leadership that presents 'post-heroic' leadership debates, may lead the reader to infer, perhaps erroneously, that we are moving in one direction, away permanently from hierarchical leadership to relational leadership (Crevani et al. 2010; Picard and Islam 2019). Critiques of this post-heroic leadership are offered (Grint 2010; Lloyd and Carroll 2019), one being that collective leadership as a concept disintegrates as it shifts to more plural forms which involve more than one actor sharing leadership or being involved in the leadership process. The authors contend that what may be taking place is teamwork or collaboration, not leadership (Denis *et al.*, 2012; Gronn, 2015). A response to this critique requires more research into the 'deeply intertwined dynamics of shared and hierarchical leadership' (Holm and Fairhurst 2018, p.717). There appears to be limited empirical accounts and theorisation about the essence of collective leadership activities, the context in which a reversion to top-down form of leadership might occur, and what the impact of those could be.

The empirical setting of this study led to my engagement with studies focusing on leadership in extreme organisational contexts and crises. Since the 1980s, there has been a move to provide a nuanced understanding of different types of extreme contexts (Hällgren et al. 2018). These studies highlight how contextual factors impact on the exercise of leadership (Oc 2018). My review of the studies demonstrates a tendency to consider individualistic aspects of leaders, rather than the complexity of leadership and relational aspects. This approach helps to explain why previous analyses appear to have limited discussion of the possibility that different people may have contrasting opinions of the nature of the extreme context and leadership they are experiencing.

Additionally, on considering the early data that I collected, I became aware that atmospheric work, and leadership for atmospheric work, had become increasingly important for surgical teams. However, the role of atmosphere in the field of surgical leadership, for traditional and flexible teams, requires empirical and theoretical study. Consequently, an additional research question emerged:

What are surgical teams' experiences of the use of leadership for atmospheric work, and has this changed since the 1980s?

## 1.2. Research findings and contributions

Based on the research findings, I propose how the original leadership model has been 'disrupted' in different ways, drawing on the concept of disruption in technologies (Adner 2002). I introduce the notion of *atmospheric work*, the first of the areas of leadership activities that I propose have been disrupted. I theorise, and show empirically, that the nature of atmospheric work has changed and is an increasingly prominent component of contemporary leadership practice. I consider the shared sense of safety within and amongst members of the surgical teams: what others call a 'safe atmosphere' (Abildsnes et al. 2012; Meng et al. 2016) or 'atmosphere of safety' (Ng et al. 2017). I extend the notion of a 'safe atmosphere' conceptually by identifying it as a liminal space. Liminal space is a felt, rather than physical, space, 'where the regular routines of the formal organization are suspended' (Sturdy et al. 2006; Waters-Lynch and Duff 2021). I identify that liminal space can stretch over years, so an atmosphere may cause affect years after it was originally created and felt. Accordingly, I support my proposal that atmospheric work is significant in the context of surgical leadership: this is as surgical teams move away from a traditional team model to greater use of flexible teams. I show how there is less opportunity to rely on longer term relationships on which to establish less visible aspects of team working. These include, for example, trust and communication practices. I contend that there are team and organisational limitations on atmospheric work, but that in the absence of the relational bedrock of a stable team and these limitations, atmospheric work offers an alternative means of creating an environment which engenders swift versions of relationally-based activities.

Second, I show how surgeons attempt to foster a safe atmosphere, in dynamic and highly changeable contexts. I show how in more or less systematic ways, through a process I call *templating*, not only do surgeons deliberately create a 'staged' atmosphere in their workplace, but surgical team-members use atmospheric work to prepare, or coach, people to participate in the activities that promote a safe atmosphere. I show that organisational inaction limits the potential of templating and wider application of safe atmospheres.

Third, I introduce the concept of *virtualizing* leadership. This is the transition from the execution of leadership using face-to-face arrangements to fully virtual arrangements. I envisage the *leadership space* as the space between people, a

space where they interact and changes occur in how leadership, and activities in the leadership process, happen or are resisted. I contend that virtualizing has caused *disruption* and *distancing* in leadership activities amongst surgical teams' members and with other colleagues in the organisation. This included changes to relational and power aspects of leadership, and the construction and maintenance of a community atmosphere through atmospheric work. This is an atmosphere that conveys a sense of belonging amongst the community of people the person is working in, or with, who are likely to share a goal or common interest, usually the safety and wellbeing of patients. I show one of the ways that virtualizing leadership accelerated for surgical teams during the COVID-19 pandemic: this centred on the extension of the pre-pandemic facilitation of leadership through the use of mobile phones, to the sudden widespread adoption of online conferencing.

Finally, I provide a detailed empirical analysis of bundles of visible and less visible activities of surgical teams which are integral to the production and reproduction of leadership. By doing so, I provide empirical clarification to conflicting views concerning the adoption of collective leadership, and whether hierarchical leadership prevails in healthcare. I show that physical and relational aspects of leadership have changed as a consequence of the disruption of different leadership activities. This has led to a transition from the traditional hierarchical leadership model to greater use of collective leadership in contemporary teams. I provide empirical examples of how atmospheric work is increasingly engaged with in contemporary leadership practice.

Additionally, I provide insight into the exercise and effects of command leadership which was operationalised during the COVID-19 pandemic. I establish the habituated use of different forms of leadership prior to the COVID-19 pandemic. I show how senior leaders in the organisation exercised leadership contrary to habitual operational practices. I show how a war zone atmosphere came to permeate the health service when the pandemic initially hit, but also how it was sustained by senior leaders even as the crisis abated. In doing so, hospital leaders prolonged the 'command' regime of centralised power and control. This impeded the community

atmosphere, and clinicians'<sup>1</sup> ability to make decisions and to act autonomously, eroding morale and driving employee turnover. I show contextual contestation occurred, that is clinicians contested senior leaders' representations of the context they were in.

### **1.3. Structure of the thesis**

The remainder of the thesis is structured as follows. Chapter two provides a review of contemporary leadership studies that relate to the main aspects of this thesis. First, I argue that previous research suggests a one-way *shift towards greater use of collective leadership*, and a growth of *the role of relational aspects in leadership studies*. I argue for the examination of relational activities at a micro-level to support a critical analysis of the complexity of leadership interactions, supported by drawing on concepts developed in other fields of studies, in particular psychological safety. Secondly, in the following section I consider *how leadership was traditionally practiced in surgical teams*, with consideration of the composition and atmosphere of the teams. This informs our understanding of relational connections and tensions in contemporary teams. I propose that more needs to be known about less visible leadership activities which enable or impede the leadership model evolving. The third part of the chapter sets out reforms that took place affecting organisational working patterns for surgical teams. I conclude that there has been a change in relational activities, the decline of the traditional surgical team model, and a diminution in the use of the traditional hierarchical leadership, but that hierarchical leadership is retained for certain surgical work. The effect of concepts drawn from other fields into surgical teams' leadership practices is considered. I propose studying these changes through the lens of atmosphere, by building on previous work regarding psychological safety.

The fourth section of the chapter provides perspectives of *contemporary surgical team leadership and how clinicians practice leadership today* following the organisational reforms. This includes the occasional use of command leadership. In the fifth section I propose that there are different elements applicable in the study of atmosphere, and the use of leadership for atmospheric work in surgical teams. I

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<sup>1</sup> 'Clinician' denotes a health care professional who is involved in the treatment and care of patients. Members of the surgical team are clinical professionals.



conclude that atmospheres can arise naturally but can also be purposefully designed and created.

The sixth and final section of the chapter considers four areas for the *development of knowledge* of contemporary surgical team leadership. These are subjects which have had limited empirical and theoretical consideration in previous studies.

Common to three themes is a fourth issue, the role of atmosphere in surgical team leadership. Accordingly, my first theme focuses on atmospheric *work*, the nature of which I propose has changed and has become an increasingly prominent component of contemporary surgical leadership practice. I argue for engaging with the phenomenon of atmosphere and atmospheric work, to explore how a 'safe atmosphere' is created in a more spontaneous way, than reliance on culture as advanced by earlier studies (Bille et al. 2015; Edensor 2015; Gukelberger and Meyer 2021). Building on this first theme, I recommend exploration of the systematic fostering of a 'safe atmosphere', including how this can be produced intentionally, to replace naturally occurring atmospheres. This leads to my second theme, *templating*, deliberate and systematic creation of a safe atmosphere. The third theme is *virtualizing leadership*, which is the transition from the execution of leadership using face-to-face arrangements to using virtual arrangements, which includes consideration of how atmospheres may be built 'online'. I propose a greater understanding of relational aspects and (the lack of) people's shared understandings of contexts are needed. The fourth theme I propose is developing a greater understanding of how a context may be contestable according to different people's viewpoints, and the role of atmospheric work to build on and develop a context narrative.

Chapter three explains the *methodology and methods* I have employed. These are used to focus on the participants' experiences of how leadership is generated, and the forms of leadership participants perceive. I start with an explanation of the social constructionist philosophy underpinning this research. After introducing the participants and the sites where they work, I provide an account of ethical considerations and the NHS ethical clearance process undertaken. Finally, I explain the data collection and analysis methods.

Chapter four presents, in the first section, people's experiences of leadership activities that support atmosphere work. *Atmospheric work* is work undertaken more,

or less, purposefully to create and/or maintain a particular kind of emotional atmosphere in a team or organisation. In the second section of the chapter, I describe a *safe atmosphere* which enables people to feel safe to speak up about matters that cause them concern. I contend that atmospheres are generated naturally, through relational aspects of team-working, or intentionally, through a process I call *templating*. Finally, I claim that how people are included in a safe atmosphere has changed. I establish that people undertake *atmospheric work* to support colleagues to participate in a safe atmosphere, but constraints arise from persistent historic narratives and organisational inaction.

Chapter five introduces changes to leadership practices due to *virtualizing*. I consider the gradual change from face-to-face leadership to greater reliance on digital technology, the surge in virtual communication during the pandemic, and the disruption this caused to leadership. I argue that leadership depends on the effects of people's interaction with technological objects, and involves less visible aspects of work, such as perceived distance between people. I contend that atmosphere plays a role in creating feelings of a community atmosphere in virtual environments and that leadership performs a key part in maintaining this. In the second section of chapter five, I argue that people's recollections portray the transition from the predominantly hierarchical, pastoral leadership model to a more collective one. I argue that the use of hierarchical leadership continues though, when complications occur during surgery, and in response to new working arrangements using pool-type teams. I contend that during the pandemic the surgical team-members' *perception of their work context differed* to that portrayed by the senior leaders' atmospheric work which produced a crisis narrative. I argue that certain relational activities guided the surgical team-members' perception of the appropriateness of the forms of leadership exercised during the pandemic context.

Chapter six draws the findings together into an *overarching discussion* of surgical team leadership using an atmospheric lens. First, I show how disruption to different leadership activities has affected atmospheres, and I propose future atmospheric work to avoid unwanted future outcomes from disruption. Secondly, I focus on the phenomenon of *safe atmosphere*, and I argue that a safe atmosphere is liminal space in that it draws on past experiences to support its creation. I propose collective memories and organisational inertia are allowing perpetuation of unsafe

atmospheres. I contend that stalling of the use of collective leadership affects relational aspects of working that support a safe atmosphere. I argue that the opportunities for building and retaining relational aspects, such as trust, have reduced. Next, I relate how teams are adapting to such changes in relational aspects. I conceptualise an adaptation, *templating*, which is used to create a safe atmosphere. I present atmospheric work as a means to create and maintain 'staged' emotional atmospheres. I argue organisational limitations inhibit the potential of templating and safe atmospheres.

Next, I show that the increased use of digital technology, *virtualizing*, enables greater engagement in leadership, and supports the development of the theory of leadership. This is by illustrating how *distancing* and *disruption* occur, and their impact on perceptions of leadership. I argue that using digital technology can also exclude people from the leadership process. This is due to an increased relational distance, and prevention of physical demonstration of relational aspects. Finally, I introduce the notion of *contextual contestation*, which is the tension which arises when a person's perception of the context is misaligned with other people's contextual perception. I conclude that whilst atmospheres can be used purposefully to support people speaking up, conversely damaging effects of unsafe atmospheres can be perpetuated.

In Chapter seven I restate the study's aim, then reflect on my contributions. I consider their implications for organisation studies, leadership theory, and healthcare policy. I conclude that there is a resurgence in hierarchical leadership. However, I contend that this is not a reversion to 'old school' hierarchical leadership but is invoked due to specific contexts in surgery. I argue that this change is driven by a 'new generation' of surgeons who are moulded by changes in society and training. I provide an explanation of the study's limitations, including details of the challenges the COVID-19 pandemic posed on this study, and consequent changes in the research plan and methodology. Finally, I make recommendations for future research.

## **2. A review of studies about leadership and atmosphere**

This chapter provides a review of contemporary studies that relate to the main aspects of this thesis and identifies areas for the development of knowledge of contemporary surgical team leadership.

First, I consider the different ways leadership has been perceived and the six major elements of leadership theory, and secondly, how leadership was traditionally practiced in surgical team. Thirdly, I set out the reforms that took place affecting organisational working patterns for surgical teams, and concepts that have been drawn from other fields into surgical teams' leadership practices. I propose building on previous work regarding one of the concepts drawn in, psychological safety, by focusing on atmospheric work in association with surgical team leadership. This is by considering aspects how leadership, as a socially constructed process, is used, more or less purposefully, to create or maintain a particular kind of emotional atmosphere in surgical teams. The fourth section of the chapter provides perspectives of contemporary surgical team leadership.

Section five builds on my proposal to focus on atmospheric work, by reviewing studies of the phenomenon of atmosphere. In particular, this considers the phenomenon of the 'safe atmosphere', that is an atmosphere in which people to feel safe to speak up about matters that cause them concern.

Based on this review, I conclude the chapter by stating the aims of this research by setting out the overarching and subsidiary research questions.

### **2.1. What is leadership?**

The question of what it means to be a leader, of what it is to engage in the act of leading others, to practice *leadership*, has attracted considerable attention throughout human history (Bryman et al. 2011). Plato discussed the topic extensively (Bauman 2018), as did Socrates (Stavru 2017), Aristotle and myriad others (Cusher and Menaldo 2021). However, what we understand leadership to be varies considerably and is largely contingent on how we conceptualise and make sense of our social world. Accordingly, what I aim to do in this section is provide a brief account of the different ways leadership has been understood throughout history. The goal is not to provide an exhaustive synopsis of the leadership literature, but to

arrive at a reasoned conceptualisation (definition) of what leadership is, that will provide an elementary theoretical foundation for this thesis.

In the sections that follow I explain how leadership is conceptualised within what I call the ‘six ages’ of leadership theory (Figure 2-1). In actuality, these ‘six ages’ are inter-related and over-lapping both chronologically and theoretically. As such, I invoke them only as useful tools to delineate, draw out and distinguish between the various different epistemological and ontological positions that can be traced within the leadership literature(s), and the implications these have for what we (can/cannot) understand leadership to be.

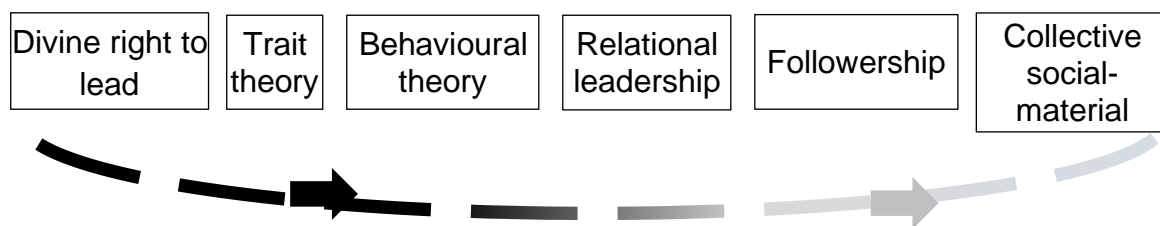


Figure 2-1. Examples of six major elements in leadership theory

### 2.1.1. Leadership as the exercise of divine right

Perhaps the earliest (first) answer we have to the question of what leadership is derived from a spiritual understanding of the world. According to this perspective, leadership is the exercise of divine right. So, leaders are people who are there to show and provide direction and should be followed unquestioningly because they are gods. Or, if not gods, people sent to us by a deity.

The suggestion that leaders are gods or people sent to us by the divine can be traced throughout history. For centuries, the Egyptians believed their pharaohs were gods incarnated in human form (Hill et al. 2013). The ancient Incans (Urton and von Hagen 2015), Romans (Hekster 2015), Chinese (Scheidel 2015) and Japanese (Smythe 1952) also sustained similar belief systems. Instances of leadership based on a religious right to lead continue to apply in contemporary Eastern cultures. For example, the Dali Lama is believed to be the incarnation of Buddha (Bentz 2012). In modern western society, both Queen Elizabeth II and the Pope have been venerated as world leaders by dint of their being touched by the divine. The monarchs of the United Kingdom claim to be divinely sanctioned (Craig 2003); the Roman Catholic

Pope claims jurisdictional power from Christ by a provision of divine law by which St Peter's power passes to his successors (Galvin 1986). The common thread through the cultures and time is that their leadership appears natural and normal. People believe them to be appointed by a divine being to lead them, and therefore their adherents follow them.

### **2.1.2. An individual's traits provide a natural capacity to be a leader**

In contrast to the above notion that leadership is simply the exercise of a divine right to be followed, in the 19<sup>th</sup> century leadership began to be conceived as based on an individual's immutable qualities (Galton 1869). Whilst not universally acknowledged as a contributor to academia, recognition is arguably due to Carlyle for providing a stepping-stone from the pre-modern spiritual forms of leadership to leaders as they have been described in the 20<sup>th</sup> and 21<sup>st</sup> centuries. Originally published in 1841, his work, "On Heroes, Hero-Worship, and the Heroic in History" drew 'The Great Man' theory into the leadership debate, asserting that great men, heroes, are naturally imbued with the characteristics needed to make a difference to the course of events (Carlyle 1993). His propositions may grate on the contemporary ear, as his propositions were of his time, demonstrating religiosity and a gender-biased view of leaders (Spector 2016).

Academic debates began to reflect this Great Man vein of thinking with trait theory. Trait theory conceptualises leadership radically differently to pre-modern beliefs. The introduction of the heroic leader to leadership theory heralded the transition from entitlement to be leader due to divine intervention, to a person's natural inherent capacity to lead. Trait theory 'proposes that certain traits differentiate leaders from other individuals', so not everyone had the natural capacity to be a leader: the leader would exceed non-leaders in respect of, for example, sociability, initiative, persistence, popularity, adaptability, and self-confidence (Colbert et al. 2012, p.670).

There were multiple efforts to explain leadership according to leaders' traits and behaviour from Cattell (1933) and Fisk's (1949) early work. However, reviews such as Stogdill's (1948) cast doubt on whether 'mere possession of some combination of traits' was sufficient to explain leadership. He proposed more needed to be understood about 'social participation, insight into situation, mood control, responsibility, and transferability of leadership from one situation to another' (Stogdill

1948, p.66). Consequently, this approach fell out of favour for a time but experienced a resurgence in the 1960s with the work of authors such as Tupes and Christal (1961) and Borgatta (1964). This established the initial trait model on which the contemporary 'Big Five' model of personality was developed by Digman (1990), Goldberg (1990) and Costa and McCrae (1991). It is based on the association of aspects of a person's behaviour and five personality attributes (neuroticism, extraversion, openness, agreeableness, and conscientiousness). In brief, by ranking people on a scale between the extremes of such qualities (for example whether a person is introverted, extroverted, or somewhere in between) it is possible to facilitate the prediction of leader emergence and leader effectiveness.

The trait theory field continues to develop, illustrated by recent studies which have shown some promise in engaging with leadership emergence in virtual teams (Cogliser et al. 2012). However, the conceptualisation of leadership based on traits assumes it is possible to select and perpetuate teams whose members demonstrate particular traits, and therefore achieve desired outcomes. Arguably, it may not always be possible to form teams that are sufficiently malleable and stable to support this assumption.

Since the early 2000s, the study of the relationship between specific traits and collective leadership has developed (D'Innocenzo et al. 2021), where leadership is distributed to some extent between one or more people. However, predominantly attention was paid to leaders' traits, not also those of followers (Uhl-Bien et al. 2014). By addressing Stogdill's critique (1948) of research into traits, trait theorists have started to consider context as well as individual differences and emotions, albeit the emphasis on context is less than on the leader's traits (Zaccaro 2007). The mechanisms by which the leadership predictions are produced, and how leadership will manifest in different contexts, remain unclear (Zell and Lesick 2022).

There is a concern that the validity of predictions is based on self-reporting of traits by participants (Colbert et al. 2012) which leads to subjective construal of traits. Consequently, the connection cannot accurately be predicted between traits and other factors, such as affect and specified situations (Wilt and Revelle 2019). Additionally, theoretical assumptions focus on predominantly observable behaviours (McAdams 1995; McDonald and Letzring 2016). This contrasts with a social and material construction of leadership, that started to appear concurrently in the

leadership literature, which gives attention to less visible activities and non-human factors too.

### **2.1.3. Behavioural theory: styles, situational, and contingency theories**

In the 1950s, a new approach was introduced that did not rely on personality traits. Behavioural theory considers behaviour as it relates to tasks and relationships with other people. This was based initially on research carried out using a 'Leader Behavior Description Questionnaire' (Northouse 2015). Whilst trait theory is based on the personality of the leader, the behavioural style approach relates to what leaders *do*, their behaviour (Crevani and Endrissat 2016). Thus, behavioural theory differs in three important ways to trait theory. First, behavioural theory attempted to specify particular behavioural aspects of leadership which took into account social exchanges between leaders and followers (Fleishman 1991). Secondly, whereas trait theory attended to innate characteristics of an individual, behavioural theory considered the impact of or on the context in which the leader was situated. Hence, behavioural theory proffered a response to Stogdill's (1948) above criticism of trait theory, that it did not address the 'transferability of leadership from one situation to another'. Thirdly, rather than relying on innate traits, behavioural theory considers that behaviour "is not a consequence of man's inherent nature" and may be changed (McGregor 1966, p.8). Accordingly, the question of nature versus nurture gained importance (Zhang et al. 2009).

Under this umbrella of behavioural theory, I turn to three varying conceptualisations of leadership: behavioural styles, situational and contingency approaches.

#### *2.1.3.1. Behavioural styles*

The behavioural styles approach to leadership focuses on patterns of behaviour. A behavioural style is 'a pervasive and enduring set of interpersonal behaviors', related to actions rather than personality or beliefs (Darling and Earl Walker 2001, p.232). An early example of the adoption of behavioural styles for organisational studies is Blake and Mouton's Managerial Grid, renamed Leadership Grid. This Grid is used as a tool to explain to leaders to achieve organizational goals by identifying leadership styles and which are suited to which task (Northouse 2015). Proponents of the behavioural approach emphasise the difference between it and trait theory. Whilst trait theory is based on the personality of the leader, the behavioural style approach



relates to what leaders *do*, their behaviour (Crevani and Endrissat 2016). To exemplify the differences between behavioural styles, I will briefly outline how three of the prominent styles are portrayed: servant, transformational, and transactional styles. The servant style was depicted conceptually early on by Greenleaf (1977) as leaders choosing to serve their followers to enable them to work and live to their full potential. Consequently, followers would be more effective and engaged at work through a holistic, developmental approach which pay attention to relational, ethical, emotional, and spiritual dimensions (Eva et al. 2019, p.111). Transformational style draws on an individual's demonstration of leadership by virtue of a particular pattern of behaviour. The pattern demonstrates leadership qualities that motivate respect, and communicate the values, purpose, and importance of the organizational mission. Whilst this portrays transformational style in a positive light, supporters of this style have been criticised for depicting it in an idealised way, the leader receiving more credit than is due, and the followers' part in the leadership process appearing to be understated (Bryman et al. 2011)

The third style I offer as an example, transactional leadership, occurs when the leader influences followers to achieve objectives by appealing to their self-interest. This may be achieved by providing rewards based on performance of the follower (Eagly et al. 2003). However, it is difficult to pinpoint the distinctiveness of these transactional and transformational leadership styles; for example, transformational leaders engage transactional leadership behaviour too, and the two styles sit along a common scale of leadership behaviours (Hater and Bass 1988; Howell and Avolio 1993). Similarly, an overlap is reported between servant leadership, Leader-Member Exchange theory (LMX), ethical, authentic, and transformational styles (Avolio and Gardner 2005; Liden et al. 2008; Lumpkin and Achen 2018). A further concern is that conceptualisations of styles have been found to contradict each other (Ahmad and Loch 2020). These concerns, indicating a conceptual cross-over between the behavioural styles, raises the question as to what extent styles are a reliable means of explaining leadership behaviour and outcomes. This apparent weakness may be explained by Eva *et al.*'s observations (2019) in their systematic review that very few of the behavioural studies are informed by theory.

Another purported flaw in the use of behavioural styles to predict or develop leadership is failing to consider leadership as often influenced by events, not just a

leader's style (Alvesson and Kärreman 2015). Overall, the drive to conceptualise leadership as shaped by a person's behavioural style produces a tendency to view it as individualistic and top-down, out of alignment with the contemporary shift to collective types of leadership (Gill 2011). Behavioural style research was critiqued for confusing conceptual and operational definitions of behaviour by leaders. Also, for producing inconsistent definitions of different behaviours and failing to produce a theoretical framework which could explain the link between leaders' behaviour and followers productivity and satisfaction with their leader (Yukl 1971).

### 2.1.3.2. *Situational and contingency theories*

Further variations of behavioural theory came to the fore from the 1960s: situational and contingency theories (Cairns et al. 1998). Unlike the behavioural style conceptualisation, situational and contingency approaches do not proffer an ideal behavioural style (Green and Nebeker 1977). Instead, situational behavioural theory favours leaders changing their style to fit the situation; whereas contingency theory focuses on choosing a leader whose behaviour suits the situation that they are to face, rather than on the leader changing their style (Gordon 2011).

The situational approach aimed to consider variables including the task at hand, the level of development ('maturity') of the followers, and what amount of direction ('task behaviour') was required by the leader given that situation (Roeckelein 2006). The contingency approach, as presented by Fiedler (1964) and Broom and Yetton (1973), concentrated on contingent factors that affected leaders influencing followers. These included the leaders' behaviours, the power of the leader's role, 'the leader-member relationship, task-structure', and the 'specific, situational context in which the leader operates' (Fiedler 1964, p.74; Fiedler 1978, p.154; Brodbeck 2001). Yukl (1981; 1989) proposed a variation of this approach: a multiple linkage contingency model. This offered original contextual effects on leadership, together with variables gathered from predecessor contingency theories. The complexity of the model rendered it difficult to test, and accordingly did not garner support (Yukl 2015).

Whilst seeming very similar, there is a main difference between situational and contingency behavioural approaches. The leader's behaviour is key to situational theory, and it is possible to change their behavioural style. By comparison, it is

contingent factors that are the crux of contingency theory, and behavioural styles are generally inflexible (Peretomode 2012).

#### **2.1.4. Relational leadership: a process of social influence**

In contrast to earlier trait and behavioural theories, relational leadership considers leadership to arise from processes. Process in this context is a 'social influence process' through which evolving social order and change, for example of attitudes and behaviour, are constructed and produced. Leadership is no longer viewed as being restricted to particular roles or hierarchical structures (Uhl-Bien 2006, p.655).

'Relational leadership' is an umbrella term for two different views of how leadership comes about: the entity and relational perspectives. The former concentrates on individuals (such as leaders and followers) and the *interpersonal relationships that connect them*: what factors they need for building and maintaining those relationships. The second, the relational perspective, takes a socially constructed process approach of considering what is 'contributing to an ongoing process of constructing realities' (Hosking 2007, p.249). It changes the focus from the individual approach of the entity perspective to a collective one. It attaches importance, for the leader and the followers' participation in the *relational dynamics*, the social processes, that are encompassed in the leadership process, and the context in which leadership takes place (Osborn et al. 2002; Uhl-Bien 2006).

A number of relational leadership approaches have been proposed based on the entity perspective. The most prominent of which is arguably Leader-Member Exchange theory (LMX) which examines the relations between leaders and their followers (Graen and Uhl-Bien 1995; Gerstner and Day 1997; Ilies et al. 2007). This dyadic theory proposes the relationship between leader and follower impacts on the organisation's outcomes. 'In-groups' and 'out-groups' featured in the identification of low and high-exchange relationships within the overall LMX form (Graen and Uhl-Bien 1995). The benefit of the leader-members' relationship is stated to be dependent on the development of mutual trust and respect, and the leader having control over resources to provide rewards sought by followers.

Falling within the relational perspective, Relational Leadership Theory (RLT) was conceptualised as 'a social influence process through which emergent coordination (e.g. evolving social order) and change (e.g. new approaches, values, attitudes,

behaviors, ideologies) are constructed and produced' (Uhl-Bien 2006, p.654). Rather than individuals' attributes, it is concerned with the 'dynamic relationship between various actors' (Bolden et al. 2008, p.360). Parallel to this, Leadership as Practice (LAP) was introduced (Raelin et al. 2018). RTL and LAP overlap conceptually in their consideration of the emergent dynamics in organisations which produce leadership.

To understand what differentiates them, it is useful to engage with the units of analysis identified by Crevani and Endrissat (2016): for RLT this is the 'interactional dynamic which unfolds throughout the organisation', focusing on leaders/followers' relations (2016, p.27). For LAP it is finding leadership amongst the patterns of routinised actions and interactions, being 'bundles of related actions, rather than a distinct unit' (2016, p.31). Relational actions in both these schools of leadership have been described using gerunds, for example 'inviting' and 'unleashing' (Raelin 2016b). The same approach is used in this thesis.

#### **2.1.5. Followership: behaviour to help co-construct leadership**

Whilst the role of followers and followership in leadership had been acknowledged in leadership research and organisational studies, Uhl-Bien *et al.* (2014) drew out followership for consideration individually. This was because they considered that this aspect of leadership had not received sufficient attention due to a misunderstanding. In the authors' view, the misunderstanding arose from leadership being underappreciated as a co-created process with social and relational interactions. Followership and following behaviours were viewed as essential components of leadership. Without them, the phenomenon is collaboration or teamwork, and the construct of collective leadership cannot be upheld (Uhl-Bien *et al.* 2014).

Since Uhl-Bien *et al.*'s call for greater appreciation of the role of followers, the followership literature is experiencing substantial growth with diverse notions of it conceptually (Andersen 2019). A central issue is that the relational aspect of leadership does not allow for clear-cut, stable roles as leader and follower (Einola and Alvesson 2019a). Indeed, the question has been posited of whether it is possible to be a follower if you do not follow, or even resist, the leader? To attempt to answer this question, trait theory has been drawn on to provide a behaviour model of followers (Almeida *et al.* 2021). Similarly, it is proposed that by 'reversing the lens' to

focus on followers rather than leaders, we can assess how certain styles of leadership are practiced by leaders; how effectively leadership is practiced and how this can be influenced by the followers (Khan *et al.* 2020).

#### **2.1.6. The social constructionist approach to leadership**

The pervading sense from the field of leadership studies is the continuing drive away from 'heroic', Great Man form of leadership, towards collective leadership (Crevani *et al.* 2010; Picard and Islam 2019). Although both hierarchical and collective forms of leadership are reported in the leadership literature, there are few empirical accounts and theorisation related to, firstly, how hierarchical and collective forms of leadership interact; secondly, identifying who 'sets' the context when a particular form of leadership is used (Holm and Fairhurst 2018). However, in common with one another, the schools of leadership introduced so far focus on a particular components of leadership: divinity, traits, behaviour, relationships, or relational dynamics. Whilst there may be acknowledgement that there are other factors involved in leadership, the focus remains on a prime component. However, with the introduction of a social constructionist approach to organisational studies, a more comprehensive lens on leadership has, and continues to be developed (Zhao 2020).

The social constructionist approach is distinct from the other leadership schools due to the emphasis paid to processual and material aspects of leadership (Lusiani and Langley 2019; Yeomans and Bowman 2021). Leadership through a social constructionist lens results from collective, multi-faceted interactions amongst people and material objects, the context those interactions take place in, and the meanings people attribute to those factors. A starting point to understand the conceptualisation of leadership as a social and material construction, is to consider the foundational theory of collective leadership.

Collective leadership views co-production of leadership by people who traditionally were considered followers, as well as leaders (Carsten *et al.* 2017). Recognising that collective leadership theory is not a 'one size fits all' concept illustrates the flexible and wide-ranging factors that need to be drawn on to apply the social constructionist lens to leadership studies. Multiple models of collective leadership have been proposed. The common denominator is that collective leadership involves more than one person contributing to leadership. Spillane (2006) and Gronn (2002) influenced

the advance of collective leadership studies with their discussions of the types of interdependence and leadership agency within teams. Their concept of concertive and conjoint agency dimensions of distributed leadership demonstrates how people's interdependent actions of team-members can result in the different models of distributed leadership (Figure 2-2).

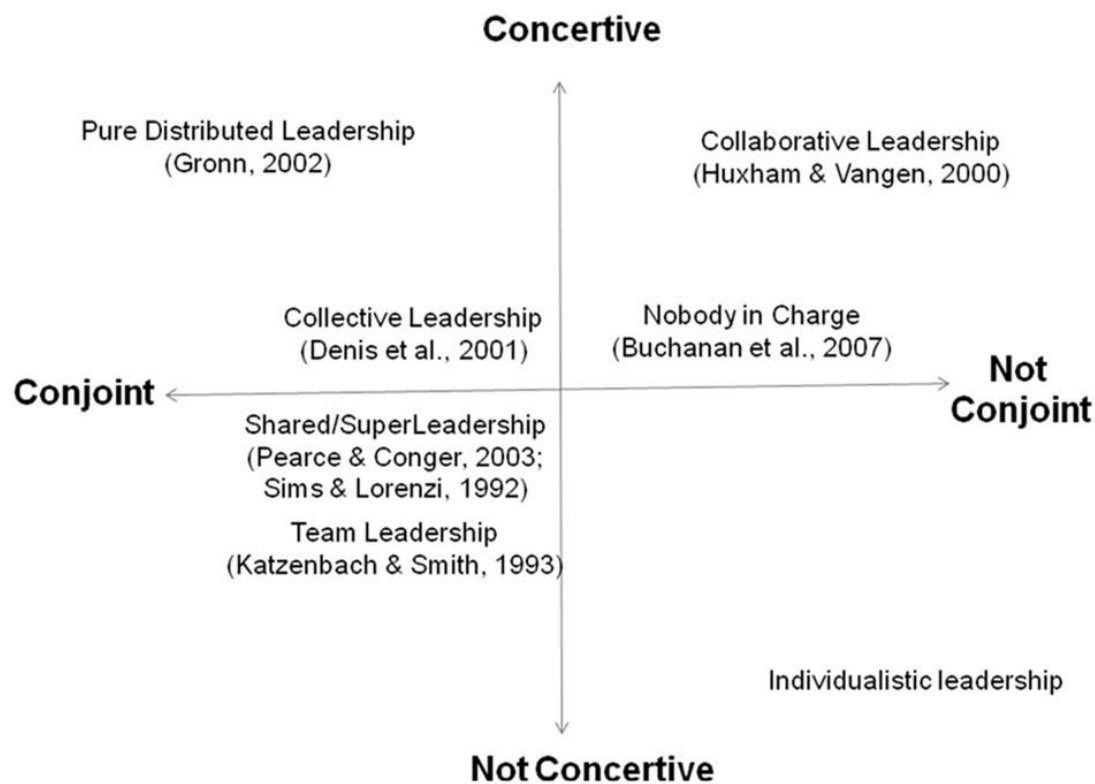


Figure 2-2. The spectrum of distributed leadership variants. Source Currie and Lockett (2011)

'Concertive' denotes the aligned conduct of multiple leaders that stretches across contexts. A key aspect of concertive action is 'conjoint agency', which requires reciprocal influence by two or more people (Gronn 2002). Based on the balance of engagement with the concertive and conjoint elements, a range of distributed leadership variants was identified in health and social care contexts, varying from individualistic to collaborative leadership (Currie and Lockett 2011).

I acknowledge the diversity, and the three authors' valuable work on differentiating between them. However, for the purposes of this thesis, it is not necessary to dwell of the intricacies of these variants. Accordingly, I use the term 'collective leadership' to encompass that array of leadership types, where leadership is distributed to some

extent between one or more people. This is whether they do so in a spirit of collaboration or due to the imposition of another's agency.

However, to understand leadership, it is not sufficient to solely understand what leaders and followers do and that they are co-producing leadership. Rather, it requires a more complex approach. One that develops an understanding of the network of changing people, contexts and relationships that contribute to the leadership process (Hosking 1988; Abell and Simons 2000). Therefore, from amongst the wide variety of conceptualisations and definitions of leadership, for the purposes of this thesis I perceive leadership as:

an effect of relational intersections—mixes of social, material, and discursive links—that are mobilized or stabilized rather than being an individual attribute, an interpersonal relationship, or a purely social construction (Wolfram Cox and Hassard 2018, p.534).

Accordingly, in the context of this thesis 'leadership' means a socially constructed process underpinned by relational and socio-material aspects. It adapts over time, in response to different contexts and influences from the past and contemporary influences. Thus, human and non-human actors, and less visible factors, provide stimuli for, or contribute to the contestation of, leadership, its direction and influence (Wolfram Cox and Hassard 2018). Examples are an external policymaker introducing changes to work arrangements, external natural forces (such as a pandemic), the atmosphere that surrounds people as they work together, and malfunctioning technology.

This differs from earlier stages of theoretical conceptualisations of leadership, by moving beyond considering leadership to be dependent on the characteristics of an individual, and beyond a dyadic approach that views leadership as derived only from (in)actions of 'the leader' and 'the follower'. It enables the theorisation of how different forms of leadership interact and change, rather than focusing on the use of one specific type of leadership, as in the behavioural style approach.

## **2.2. How leadership was traditionally practiced in surgical teams**

To understand what changes in leadership members of NHS surgical teams have experienced with a social and material constructionist approach requires examination of the past and contemporary social influences. This leads to an examination of the surgical team-members roles, their relationships, the surgical

context, and wider network of people they work with contributes to the leadership process.

A key aspect of considering how the surgical team leadership process has and continues to unfold, is to understand why surgeons are viewed as the 'de facto' leader (Nigam and Gao 2017, p.2). The surgeon's position is still deeply institutionalised: the stability of their position is one of a number of factors that may impede the leadership model evolving and cause the partial retention of a hierarchical model of leadership.

Other factors include the multi-disciplinary nature of the contemporary NHS surgical team which constitutes a range of different health professionals. The interaction of team-members from different professions, undergoing different training routes may affect how leadership is practiced by teams. Furthermore, the type of work carried out may impact on the model of leadership used. In respect of the type of work they carry out, surgical teams can be considered as extreme action teams<sup>2</sup>: that is, their work may be routine, but it can be urgent, unpredictable, interdependent, and with highly consequential tasks (Klein *et al.* 2006).

To examine the nature of changes requires an understanding of how these aspects individually or in combination have previously, and continue to, affect leadership. This requires an appreciation of the teams' historical roots, and less visible relational factors amongst team-members, which enable or impeded leadership and changes in leadership.

### **2.2.1. The historical roots of surgical leadership**

Accordingly, I start by setting out a brief account of the historical roots of the surgical teams. Surgeons have not always been viewed as elite professionals, who are educated and trained to lead. Originally starting out as 'Barber-Surgeons', their work straddled the artisanal realm of crafts and trades, and the learned heritage of medicine: the 'taint' of manual labour connected surgeons to the 'lower end of the social hierarchy and the indignities of relying on one's hands for a living' (Chamberland 2009, pp.313, 315). It was not until part way through the 18<sup>th</sup> century

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<sup>2</sup> Teams that participate in extreme action activities, such as the military, which operate in emergency, time-pressured environments, whose members carry out interdependent tasks, and that may have a flexible or changeable composition.



that surgery became a separate specialisation in the clinical<sup>3</sup> sphere, and operating theatres ('theatres') were established. Students embarked on apprenticeships, paying surgeons to be taught by them.

Whilst clinical treatment advanced rapidly thanks to a spate of scientific advances, development of modern perceptions of other roles working in surgical teams did not. Nursing started when there was a surfeit of female labour and at a time when 'Obedience was paramount and authority was worshipped' (Rivett 1998, p.104). Formal training of qualified anaesthetists started as late as 1935 and they were not well respected either (Fink *et al.* 1992). Meanwhile, surgeons emerged from relatively lowly beginnings, to rise in society and hold a prestigious position. By the time the National Health Service was introduced in 1948, doctors, including surgeons, were the longest established profession and occupied a high-status position within the healthcare<sup>4</sup> environment. This position was formalised with the surgeon at the head of the professions involved in surgical teams. Consequently, "The NHS inherited a 'Firm' system (Rivett 1998, pp.470, 478). This 'Firm' system referred to the surgical team, the membership of which was more streamlined than today. The surgical team was usually understood as a group comprised of a Consultant and other less senior doctors or surgeons, with defined hierarchy and roles. Surgical trainees were attached to the team for a specified period of training, typically six months. The surgical team was not solely about the dyadic relationship between the Consultant and the junior surgeons though. In terms of surgical education, the traditional team was a form of inter-generational cooperation and learning, which brought together novices who were inducted and taught not only by Consultants, but also by nurses and junior doctors ('juniors'<sup>5</sup>) (Timm 2013, p.3). Despite this, the nurses and other healthcare professionals who worked with the team tended not to be considered an integral part of the surgical team as they are today.

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<sup>3</sup> Clinical work relates to the examination and treatment of patients performed by qualified personnel, including doctors and nurses.

<sup>4</sup> The healthcare sector comprises public, private and community services, health ministries and departments, non-governmental organisations, professional associations and healthcare professionals (Lega *et al.* 2017, p.95).

<sup>5</sup> The terms 'trainee' and 'junior' denote qualified doctors who have not yet achieved the qualification of 'Consultant'.

### 2.2.2. How clinicians led: professional intersections

As the formal leader of the surgical team, the surgeon has traditionally wielded, sometimes unquestioned, power over the surgical team and within the wider NHS organisation. It is this heritage that surfaces in discussions about traditional leadership of the surgical team by surgeons, indicating that 'other health professionals often defer to doctors as de facto leaders' (Nigam and Gao 2017, p.2).

However, in the 1970s this began to alter. As society evolved, 'discipline was relaxed, greater informality was encouraged with the use of first names, and the nursing profession increasingly gender diverse' (Rivett 1998, p.256). Nurses became interested in no longer being seen as 'docile, compliant, tender, dedicated, the doctor's devoted handmaidens' (1998, p.347). As nursing education changed, and with the first university department of nursing studies starting up, there was less formal involvement of doctors in teaching student nurses. 'A partnership of trust, working to a common purpose, began to be replaced by mutual wariness and attempts to define territory...Doctors and nurses were beginning to speak different languages' (1998, pp.259–260). The environment that emerged was complex, intertwined with wider managerial and external challenges and tensions:

The nature of health care organisations as professional bureaucracies, the persistence of tribal relationships between doctors, nurses and managers, and the still fragile nature of leaders occupying hybrid roles<sup>6</sup> present formidable obstacles to the further development of medical leadership (Dickinson *et al.* 2013).

The line between surgeons' and nurses' work started to become blurred. Nurses were sometimes taking on the role of junior doctors, acting as assistants to surgeons, and providing leadership (1998, p.452). Opportunities for leadership appeared to become available across the different professions. However, the mix of professions in surgical teams results in ambiguity of that status, considered to be caused by the intersection of traditional hierarchy, professional type, and surgical experience. For example, should a senior theatre nurse 'outrank' a doctor training to be a surgeon or an anaesthetist? However, despite this ambiguous situation, surgeons' position as respected members of society and leaders in surgery remains,

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<sup>6</sup> Clinicians who also work as managers.

having left behind the lowly social status experienced historically by the surgical profession. The elevated professional and social status is reported to be hampering a change to collective leadership, due to surgeons' fear that such a change may diminish their professional status:

many surgical trainees in the elite teaching hospitals in Massachusetts resisted changes that they perceived would threaten the 'iron man' identity that was deeply entrenched in the culture of elite surgical departments in the USA... Similarly doctors in multiple NHS Trusts blocked the implementation of an expanded role for genetics nurses as part of an initiative to mainstream genetics care in the UK, in part because of their medical identity and their expectations of a more traditional working relationship with nurses (Nigam and Gao 2017, p.2).

The situation is illustrated by Gordon *et al.*'s (2015) account of a nurse stepping forward as leader. Despite being confident and capable to pursue the necessary action, her leadership was hampered by her ambiguous professional status. The Consultant psychiatrist she worked with acknowledged her as having relevant, experience, superior to his, to deal with the issue; but other healthcare professionals perceived her as a follower, not the leader. This perception, together with protocols for signing prescriptions, hampered her adoption of leadership. Thus, whilst in practice a more experienced nurse may guide, or even direct, an inexperienced junior doctor what to do, the surgeon continues to be thought of as the surgical team leader predominantly. This is both within the team, and the wider community and society, even if this does not necessarily produce the best results (Gordon *et al.* 2015).

Unfortunately, in medicine it ends up being the MD<sup>7</sup> in the hierarchy of things, which to me does not necessarily improve patient outcomes, if we're talking about an interdisciplinary team. (PAEDS, doctor) (van Schaik *et al.* 2014, p.589).

### **2.3. Reforms that affected the opportunities for leadership**

This stability in the surgeons' position as leader has survived major reforms that have taken place affecting the way that surgical teams work. One such major reform resulted from the Calman Report (Department of Health 1993), which took into

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<sup>7</sup> A doctor of medicine.

consideration a range of demands, including audit, costs, scientific advance and staffing constraints. It also responded to changes in surgical specialisation, decentralisation, and the greater use of outpatient services which had impacted on Consultants' ability to work to full capacity. Calman's recommendations were:

altering hospital services from being Consultant led to Consultant based. In the minds of the seniors this seemed to mean Consultant provided, not what the leaders of the hospital doctors had intended (Rivett 1998, p.444).

Restrictions were placed on the amount of time theatres were available (Audit Commission 1995) and quite junior staff were expected to carry out emergency operations at night to balance insufficient theatres being available during the daytime (1998, p.432). Hours of work and training practices changed as a result of the introduction of pressure from the junior doctors and the European Working Time Directive (EWTD), enacted in UK law (Working Time Regulations) in 1998, and the Modernising Medical Careers Programme 2005 (MMCP) (Department of Health 1993; Iliffe 2017). This restricted the number of hours staff could work (Timm 2013).

The introduction of MMCP was acknowledged to include detrimental effects, particularly for trainees. These changes in the work arrangements for junior doctors gradually became organised on a shift basis. The result was that they could be put on an on-call session with a Consultant they did not normally work with. This was seen as the start of the decline of the traditional arrangements of surgical teams (1998, p.255).

Under the old system junior doctors worked long hours in parallel teams training in specific areas (general, vascular, urology, etc). But after its demise, though junior doctors worked shorter daytime hours, when they were working 'out of hours' (evenings and weekends) they provided cover across surgical specialisms. The Consultants would thus be working with a larger pool of junior doctors, determined by who was on shift. Junior doctors on night shifts during the week might not even meet the Consultants who were working during the day. Emergency cover could be provided by junior doctors who were not known to the Consultant on call (Iliffe 2017, p.136).

Junior doctors also considered the move from traditional arrangements affected team relationships, a perception that appears to continue:

I think the way things have gone with rotas...they're [junior doctors]...off post-nights, pre-weekends and you end up having a

different junior every day, and I do wonder if sometimes that might disrupt the whole team feeling [Year 7 specialist trainee] (Price and Luszkat 2018, p.242).

There were concerns that junior doctors were 'being bounced from organisation to organisation during their training and not establishing any continuity regarding work relationships' (West 2019). Dame Sally Davies', Chief Medical Officer for England, opinion was that the changes led to a reduction in the level of pastoral care too:

I often when I'm talking to young doctors ask them how many of them have Consultants who know their names, and rarely does anyone put a hand up because of the shift system we've made it so we've got young doctors working very heavy hours and the pastoral support and the physical support has been taken out. So, they may be well trained, but the pastoral bit is generally in England not as I would want it (BBC Sounds 2019).

Without the continuity of an attachment to a particular senior professional and their team, a lack of hierarchical leadership could be expected to occur. However, in 2011 a retrospective study of operating theatre data found that supervision of surgical trainees by Consultants had increased over the decade to 2009 (in the decade up to a year after EWTD was introduced) despite trainees no longer being under the supervision of one specific Consultant (Blencowe *et al.* 2011). However, senior nurses were reported to have insufficient time to offer leadership, due to time pressure caused by managerial roles. Furthermore, when there was the opportunity for them to offer leadership, efforts to foster collaboration could be undermined by the differential in power and status, lack of interprofessional socialisation, and inadequate time to devote to team-building (Olsen and Neale 2005). This leaves open the question of what if anything has replaced the 'team relationships' and 'team feeling' that were generated within a stable team, under the leadership of one Consultant. Also, in what context it is necessary to do so.

### **2.3.1. Policy intentions for increased collective leadership**

Overlapping with these reforms, from the early 2000s, UK Healthcare policy began to contribute towards empowering patient-facing staff, by encouraging them to become leaders (Martin and Waring 2013), with an emerging:

emphasis in the NHS on empowering clinicians and other front-line staff in terms of their decision-making competencies, also emphasises implicitly the need for collective leadership that includes

a broader practice of leadership by clinicians and other front-line staff, rather than by designated managers alone. Such collective leadership is best achieved by a developmental focus on the collective, rather than on individual leaders alone (West *et al.* 2015a, p.4).

The Faculty of Medical Leadership and Management (FMLM)<sup>8</sup> and the King's Fund<sup>9</sup> advocated a reorientation of leadership based on collective, rather than hierarchical leadership too. In its review of leadership theory and research in healthcare, the FMLM identified the responsibility for leadership existing at a number of levels: individual, team, organisational and nationally. Accordingly, collective leadership for the NHS was defined by:

the three key leadership outcomes: (1) direction: widespread agreement in a collective (team or organisation) on overall goals, aims, and mission; (2) alignment: the organisation and coordination of knowledge and work in a collective; and (3) commitment: the willingness of members of a collective to subsume their own interests and benefits within the collective interest and benefit (Drath *et al.*, 2008). Viewing leadership in such terms means that the practice of leadership would not only involve leaders, followers and their shared goals but would include the production of direction, alignment, and commitment) (West *et al.* 2015a, p.21).

This collective leadership approach was evident in the leadership development programmes designed for NHS staff. The NHS Leadership Academy's<sup>10</sup> Framework (2011) set out a single model of leadership for NHS staff. This reflected the basic assumption seen in the NHS' organisational approach that acts of leadership can and should come from anybody, not only those in formal positions of authority (West *et al.* 2015a, p.22).

However, engagement with collective leadership may be expected to differ according to the team-type and the nature of work being undertaken (Meier 2015; Rydenfalt *et al.* 2015; Forsyth and Mason 2017). Whilst evidence from within the healthcare leadership literature does not appear to discuss this directly, studies in other fields give indications of what may be expected when assessing situations in which

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<sup>8</sup> FMLM is an organisation which supports leadership development in healthcare.

<sup>9</sup> The King's Fund is an independent charitable organisation whose goal is to improve health and care.

<sup>10</sup> The NHS Leadership Academy is part of NHS England and delivers leadership training programmes to NHS staff.

collective leadership can be used. Livingston's (2015) research into US Naval Seal teams and Johannessen's (2015) research into subsea operations leadership suggest a trigger for instability acts as the mechanism for using collective leadership in extreme action teams. Also, studies posit an appropriate underlying culture needs to be in place to facilitate the use of collective leadership, such as a cultural acceptance of error (Johannessen *et al.* 2015; Meier 2015; Sonnenberg *et al.* 2018a). Accordingly, it is arguable that an established, familiar leadership structure would be an apt foundation for collective leadership in an extreme situation, such as emergency surgery or complications during elective surgery<sup>11</sup>. Conversely, Livingston (2015, p.102) gives evidence which, if extrapolated to the surgical environment, could be taken to indicate that the contemporary flexible format of surgical teams may be better positioned to use collective leadership to advantage.

The dynamic instability of a SEAL unit is the source of this fluid collective adaptation.

However, anecdotal accounts of surgical work suggest that surgeons assume hierarchical leadership to deal with a crisis during surgery. It may be that some of the divergence expressed in these studies is because of a difference in opinion about what leadership means and entails. This has been noted in healthcare settings.

It was clear leadership meant different things within different specialities and STs were aware their understanding was different to some of their senior colleagues (Moen *et al.* 2018, p.105).

### **2.3.2. Concepts drawn into leadership studies from other fields**

This lack of concurrence about the use of hierarchical leadership in healthcare settings, is indicative of the distinct nature of the surgical environment. It is considered to stand apart, not only from other non-healthcare organisational environments, but from other areas of healthcare. This is even after the reforms to clinical work in the NHS as described in this chapter.

The theatre environment is typically physically isolated from the rest of the hospital, and staff wear a different uniform from the rest of the hospital staff (Katz 1999). This distinct working environment within the theatre department (Barry 2009) creates not only a physical barrier but

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<sup>11</sup> Planned rather than emergency operations.

also a cultural one, enforcing an area with restricted access, unique to the operating theatre (Jaffrey 2019, p.163).

This makes the generalisation of the research that is available problematic, even if it relates to other areas of healthcare. However, concepts have been drawn into the healthcare industry and the surgical team environment from leadership studies in other fields. These aimed to change how surgical team-members worked together, in order to improve patient safety. They include lessons learnt in the aviation industry, in an effort to improve patient outcomes. This effort culminated in World Health Organization (WHO) surgical safety checklist (WHO checklist). Introduced in 2009, it is a mandatory process in the NHS to safeguard patients during surgical procedures. It addresses tensions in the hierarchy and encourages collaborative work (Haynes *et al.* 2011).

Another illustration of drawing on other fields is the development of a process in the NHS to encourage a shared sense of safety amongst surgical team-members. Within its strategic policy for patient safety (NHS England and NHS Improvement 2019) the NHS acknowledges the need for an environment in which people feel they may speak up, and leadership to promote that. To address this need, the policy adopts the concepts of systems error and psychological safety. Drawing on systems theory, James Reason (1990, p.194) in his seminal publication 'Human Error' emphasised the importance of understanding that individuals 'do not plan and execute their actions in isolation', but within the context of the relational environment. Kahn (1990) conceptualised psychological safety based on the perceptions of individuals, with the concept subsequently extended to teams: 'the shared belief held by members of a team that the team is safe for interpersonal risk taking' (Edmondson 1999, p.350; Nembhard and Edmondson 2006). This complements the use of the surgical safety checklist.

Leadership to promote this is seen as crucial in creating or boosting the ability to speak up 'by signalling to employees that they can be trusted to make important decisions (i.e., autonomy) and by giving employees a clear understanding of their role expectations (i.e., role clarity)' (Frazier *et al.* 2017, p.119). However, Manthous *et al.* report that frequently health workers feel unsafe and that the 'sense of psychological safety mirrors the professional hierarchy' (Manthous *et al.* 2011, p.307). Accordingly, examining relational activities at a micro-level is necessary to



consider not only normative experiences of leadership, but to support a critical analysis of the complexity of hierarchical and collective leadership interactions (White *et al.* 2016).

## **2.4. Contemporary leadership: how clinicians practice leadership today**

### **2.4.1. The introduction of a 'New Firm' format**

The governance of the NHS came under pressure from the 2010s to provide greater transparency and patient safety, substantially due to the influence of adverse reports, such as the Mid-Staffordshire 'scandal' (Exworthy *et al.* 2016; Francis, 2013). Despite the hospital services reforms and changes to procedures that had attempted to do so, to improve patient safety, surgical teams were judged by the Health Secretary, Jeremy Hunt, to have gone into decline. He proposed the reintroduction of certain aspects of the surgical team arrangements that had been in place prior to the reforms outlined above, such the Calman Report (Department of Health 1993) and MMCP. It was clear that a return to the 'days gone by' of the surgical team was not possible, due to changes in working hours, the emphasis on shift working, a reducing numbers of surgical trainees (Williams *et al.* 2016), and fewer opportunities for trainees to gain surgical experience (Bodkin 2016). Consequently, a 'New Firm' format of a wider surgical team arrangement was proposed in 2016. This was comprised of different professions: surgeons, anaesthetists, nurses, operating department practitioners, and new clinical specialist roles, such as the Operating Department Practitioner (ODP) and Surgical First Assistant (SFA) (Rimmer 2016). Hence, contemporary 'New Firm' teams are typically multi-disciplinary, containing professionals who have progressed through different training programmes, with an identity linked to their particular profession. The teams may be short-lived, with team-members changing from day-to-day or even during an operating list<sup>12</sup>. The surgical chain of command has a separate chain of command from nursing and anaesthetics. The three chains do not have a mutual point in their reporting lines until they reach the Medical Director. This linear, interdependent structure which necessitates input from various professionals has been observed to create weaknesses in coordination (McDermott *et al.* 2019).

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<sup>12</sup> The performance of a series of operations, based on a list of all patients to be operated on that day or in that session (McNally 2016).

In this era of the 'New Firm', there remains lack of clarity about the status of surgeons as the leader and the move to collective leadership. The NHS England's Director of Workforce and Organisational Development and Improvement expressed the view that the shift away from hierarchical leadership is an individual responsibility, not just dependent on correctly focused development programmes.

Hierarchy, teams need different [sic] skills/knowledge to be successful, it isn't always necessary for the obvious leader to lead a team. Those working closest to the task are often better equipped [sic] and sometimes a great leader steps back and the team get on with the job. #OurNHSPeople (Tewkesbury 2019).

It appears that it cannot be assumed that the cementing of a hierarchical culture is necessarily happening at the bidding of individuals at the top of the hierarchical structure though. The Consultant surgeons' command of centre stage may be by reason of the wider team, or the organisational culture, that refers back to the status surgeons held decades ago.

The ritualistic nature of the operating department has been documented for decades. Nurses seen to be a hand maiden to surgeons (Steevenson 2006) is still an assumption both outside and within the operating theatre. Even the placating nature of the scrub team was commented on as recently as 2016 (Spear 2016) (Jaffrey 2019, p.163).

Montgomery's (2018) study showed that while medical students generally have positive attitudes towards multi-disciplinary teams, they believed that the Consultants should lead the team still. However, in a mixed-methods study for the FMLM, senior trainee doctors identified that how they perceived leadership individually may be outdated or may have been tainted by traditional views held by Consultants and other senior staff. They considered that this was due to a continued reinforcement of 'the hierarchy, culture and the nature of a doctor's role' (Moen *et al.* 2018, p.105).

The hierarchical status remains despite, firstly, evidence that people attracted to becoming doctors may not be the people most suited to developing as leaders who promote a collective leadership style within healthcare (Montgomery 2018). Also, secondly, the harm that can result due to the assumed superiority of surgeons. The example of the well-publicised death of a patient, Elaine Bromiley, during elective surgery demonstrates the complexity of resolving the issue of whether hierarchical or collective leadership is needed in the surgical environment. In the Bromiley case,

Consultants debated in theatre what course of action to take to deal with an unexpected problem during surgery. Their reluctance to perform a surgical airway intervention was due to a confusion of each team-member's role and the absence of a clearly defined leader (Kamensky 2014, p.53). They collectively tried to come to a decision but that resulted in what was identified as 'group think'<sup>13</sup> amongst the Consultants. Meanwhile, other team-members did not feel able to speak up to voice their concerns (McClelland and Smith 2016). McClelland and Smith suggest that the situation could have been addressed by hierarchy, but not too much hierarchy<sup>14</sup>.

This emphasised the importance of a hierarchy to promote effective leadership and facilitate decision making, whilst ensuring that the hierarchal gradient remains sufficiently flattened to allow Consultants' decisions to be challenged by junior colleagues (2016, p.116).

Although there remains, at least in some people's opinion, this view that doctors should be retained as the leader, there is mixed evidence about the use of collective leadership by surgical teams in the contemporary environment. Some authors consider that use of collective leadership occurs, with informal leaders taking decisions and inspiring others to make change; whereas other authors believe the heroic hierarchy still prevails (Beirne 2017; Forsyth and Mason 2017; Sonnenberg *et al.* 2018a).

It may be that it is the drive for improvements in processes and patient outcomes that is pushing healthcare practitioners to adopt a more collective approach to leadership. Where surgical teams have adopted innovations, such as the WHO checklist, there has been a shift or break down observed in the complex hierarchies (Walker *et al.* 2012). At Great Ormond Street hospital, surgical practitioners noticed a flattening of the operating theatre hierarchy after the introduction of the WHO checklist. However, the shift in culture is attributed to senior surgeons' and anaesthetists' leadership rather than collective leadership (Lambert *et al.* 2009). Practitioners have said that a shift is needed from relying on the status of the

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<sup>13</sup> 'The practice of thinking or making decisions as a group, especially when this results in bad decisions being made' (Oxford University Press 2005).

<sup>14</sup> Too much hierarchy may be the result of what is viewed in critical leadership studies as a dark side of heroic leadership, driven by arrogant, narcissistic and manipulative leaders (Willcocks and Wibberley 2015).

surgeon as leader, to a wider sharing of responsibility, and claim that a transition in surgeons' behaviour is taking place (Glomsaker and Søreide 2009; Galandiuk 2013):

the days of the top-down command and control approaches taken in the past are ebbing away and are being replaced by an understanding of collaboration and the need for effective team working (Tweedie and Dacre 2017).

Nigam and Gao's study (2017) provides an example of this, with Consultants collectively implementing changes to improve prostate cancer care in an acute care trust in the UK. They did so by working in collaboration with nursing managers, sharing leadership, and respecting and incorporating the input of nursing managers into their shared service improvement efforts. Thus, changes within NHS surgical environments appear to provide an opportunity for a shift in leadership practices. However, this does not seem to be the case throughout the healthcare environment.

In summary, conceptualizations of leadership on health-care teams are shifting. For the nonphysician group, they are seeing themselves as leaders, where the opposite rings true for some physicians<sup>15</sup>, whose identities may have been tied to hierarchical position rather than leadership practice (Sonnenberg *et al.* 2018a, p.176).

The divergence in perception of the move from hierarchical practices may be attributable to a difference in opinion about what leadership means and entails (Moen *et al.* 2018). Another explanation offered by authors is that these different forms of leadership are being seen concurrently (Day *et al.* 2006; Gronn 2009; Bolden 2011; Gronn 2015; Feng *et al.* 2017). This latter possibility has been identified in a healthcare setting: a study in a Canadian hospital reported how collective leadership emerged from hierarchical teams to provide a response to urgent situations. This was when superior knowledge, rather than status, was perceived as necessary to provide an effective solution.

Clinical leadership can be defined as the process of sharing responsibility for leadership by health-care professionals. It involves the facilitation of dialog, integration of perspectives and expertise, and collaborative planning for the purpose of exceptional patient care. Clinical leadership does not default to one person but is rather assumed by the individual most prepared and competent to lead a particular task (Sonnenberg *et al.* 2018b, p.179).

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<sup>15</sup> Physicians are qualified doctors.

It may be that the observations above relate to different styles of leadership being used during the attempt to engage collective leadership. This is demonstrated by Feng *et al.*'s study (2017) in which they posit that a leader's style, such as participatory or autocratic, influences the configuration of collective leadership. Consultants engage a mix of styles: 'The leadership style of Consultants covers a broad spectrum that could be described as ranging from huggy touchy feely all the way up to Attila the Hun meets Genghis Khan (Dudley 2002)'.

Overall, it appears from the researchers' and healthcare practitioners' observations above that at least in some sections of healthcare, there have been reports of changes to the uptake of collective leadership or hybrid forms of leadership. Where changes in the form of leadership are identified, there are mixed views as to whether its use is beneficial or not in the NHS environment (Gordon *et al.* 2015). Martin *et al.* (2015) recount clinicians' perceptions that leadership did not impart internal power within the organisation, despite carrying responsibility for outcomes. There appears to be no mechanism to resolve the disconnect between collective leadership and the power to make policy and regulation changes based on clinical experience. The continued importance of clinical professionals' influence in relation to organisational issues is acknowledged though:

Collectively, front-line doctors have a great deal of influence over the organisations in which they work. As a result, thinking about clinical leadership on the front line is critical to understanding the future of clinical leadership more broadly (Nigam and Gao 2017, p.1).

#### **2.4.1.1. Benefits of collective leadership**

Generally, studies tend to provide a positive perspective of the outcomes of the use of collective leadership. An exception is Martin *et al.*'s (2015) supposition that collective leadership may be used as a tool to redirect responsibility, and ultimately blame, to other stakeholders, healthcare workers and the public. The Bromiley case, described above, demonstrates too that if adopted incorrectly collective leadership can cause harm.

However, where analysts have assessed there are benefits of collective leadership, they have included improved performance, increased individual confidence, and team confidence (Jackson *et al.* 2022). One of the participants in Akhtar *et al.*'s study (2016, p.15) illustrates this:

We also developed confidence and a greater understanding about how we are as leaders individually but also that we are collectively stronger when we work together as a group.

This confidence is defined as the confidence to straddle what would otherwise be considered hierarchical boundaries. For example, Günzel-Jensen *et al.* (2018) describes employees becoming confident in performing outside traditional hierarchical ‘norms’. Whilst Boak *et al.*, Dearmon *et al.*, Jain, and Klinga *et al.* (2015; 2015; 2016; 2016) describe the direct, positive impact of collective leadership on job performance and developing peers’ capacity, other studies identify collective leadership has effects which may lead to improvements in confidence and performance indirectly (Table 2-1). This is in both crisis and non-crisis situations. In respect of this, collective leadership is reported to:

- be a factor in improving perception of involvement in decision making (Fischer *et al.* 2017) (although this result is treated with caution in view of the methodological concerns about the study);
- contribute to the successful implementation of a training programme (Pinelli *et al.* 2016); and
- support the implementation of clinical debriefing protocols (James *et al.* 2022).

Table 2-1. Improvements in performance

Study	Benefit
Boak <i>et al.</i> (2015)	Fewer follow-up appointments and improved patient flow
Dearmon <i>et al.</i> (2015)	Reduction in number of missing medications
Jain (2016)	Promotion of work motivation and consequently job performance
Klinga <i>et al.</i> (2016)	Faster, more holistic decisions about health and social care interventions
Sanfuentes <i>et al.</i> (2021)	Contributes to resilience in a crisis: harnesses individuals’ capacities flexibly and effectively
Spyridonidis <i>et al.</i> (2022)	Collective leadership in conjunction with individualistic [hierarchical] leadership supports the complexities of a crisis

The use of collective leadership to address complexities of the hospital environment, and to provide indirect improvements through a wider organisational perspective, is suggested as well. Forsyth and Mason (2017) propose that this can be achieved by bridging the varied epistemological views and subgroups produced by distinct forms of training within inter-professional teams. Expecting one leader in such teams to be able to drive vision and change is 'unfeasible' according to Gooran *et al.* (2016); they propose using collective leadership to achieve these aspects instead. Similarly, engaging staff through collective leadership in processes, and succeeding in change processes and innovation is illustrated by Forsythe *et al.*'s (2016) and Erlingsdottir *et al.*'s (2018) studies. FMLM's review supports the benefit of collective leadership in the NHS, and that:

Research evidence suggests the value of this, particularly at team level: meta-analyses demonstrate that shared leadership in teams predicts team effectiveness, particularly but not exclusively within health care (2015a, p.21).

Within the NHS setting, collective leadership is reported to have gathered support as a means to achieve sustainable care<sup>16</sup> and other service improvements (Fitzgerald *et al.* 2013; Beirne 2017). It has also been cast as in the best interests of the patient and pertinent to addressing 'wicked' problems<sup>17</sup> (Gordon *et al.* 2015). The complex situation faced by surgical staff can be categorised as an example of a wicked problem: attempting to participate in learning and safety processes whilst faced with workflow barriers, traditional hierarchical frameworks, and ambiguous status-levels in interdisciplinary teams (Edmondson 2003a; Finn *et al.* 2010; Freeman 2013; Bergs *et al.* 2015; Currie and Spyridonidis 2016).

Where there are negative observations about the use of collective leadership this appears to be because it has not been embraced by all the stakeholders, because more time was needed for consensus to be reached, or when a conflict of clinical opinion occurred across disciplines (Hepp *et al.* 2015; Meier 2015; Klinga *et al.* 2016). However, Forsyth (2017) subsequently proposed that divergent perceptions of collective leadership are changing to more commonly held positive views. This is

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<sup>16</sup> Sustainable health care delivers simultaneous economic, social and outcomes promoting healthy and resilient individuals and communities. It depends on internal and external factors, including public and political support (Crisp 2017).

<sup>17</sup> Wicked problems are complex issues without obvious related causes and effects.

evidenced by changes in clinical practice to encourage the use of collective leadership; for example, empowering staff to direct their own practices, to make changes in physical practices, such as introducing 'huddles'<sup>18</sup>, and changes in cultural perspectives, by developing a 'no blame' environment. At the organisational level, steps reported to be used to facilitate collective leadership include team design, coaching staff, ensuring sufficient external resources, and the creation of fora to discuss problems and produce solutions (Dearmon *et al.* 2015; Akhtar *et al.* 2016; Erlingsdottir *et al.* 2018). However, whilst these studies provide evidence of the benefits of collective leadership in healthcare environments, they are not necessarily generalisable to NHS surgical teams.

#### **2.4.1.2. Overcoming hierarchical barriers to voice concerns**

On a cognitive level, the NHS' traditional, hierarchical leadership culture is considered to hamper the raising of concerns about areas of performance, including patient safety, and wider participation in leadership activity. This is despite the acknowledgement of the importance of the culture in which a team works, for example as a key indicator of patient mortality (West *et al.* 2015a). There are mixed reports about whether these barriers can be overcome (Edmondson 1999; Kennedy 2013; Currie and Spyridonidis 2016).

A common challenge is that some members of staff find it difficult to communicate across the hierarchies but that even when they do they may not be heard: Regrettably the anaesthetic practitioner's voice was not loud or assertive enough, to register with his colleagues (Kamensky 2014).

As the most junior team-member, I was wary of challenging 'the way it has always been'. However, I was well supported and led successful change in the department, and perhaps soon the entire hospital. I hope to inspire junior healthcare professionals to effect change (Bell *et al.* 2017, p.A30).

The introduction of new technology and communications appears to be overcoming some barriers (Schmidtke and Cummings 2017; Khandelwal and Upadhyay 2021) that were reducing opportunities for learning by osmosis. However, the implementation and sustainability of technology can be hampered by feelings of

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<sup>18</sup> Commonly in clinical settings huddles are brief, stand-up meetings to review patient and/or work arrangements.



professional collegiality and a reticence to allow technology to violate professional autonomy (Bernardi and Exworthy 2020). Additionally, use of these new digital forms has been constrained by privacy requirements, potential patient safety, systems integration, and compliance with data protection legislation. Despite this, the uptake in the use of mobile phones and the use of instant messenger applications has opened up a new non-hierarchical type of communication within surgical teams.

I might not pick up the phone and contact a senior Registrar<sup>19</sup> or Consultant, but in the friendly forum of a group WhatsApp chat, it's brilliant [Specialist trainee] (Thomas 2018).

Another answer to overcoming the hierarchical leadership culture appears in part to lie in whether there is the creation of a climate of mutual respect, caring and trust. This may provide a foundation for further development of the interpersonal beliefs that constitute team psychological safety<sup>20</sup> (Edmondson 1999, p.375). Leadership has been shown to play a key part in influencing climate, performance in healthcare and patient mortality (West *et al.* 2015a, p.15). Training programmes that are now offered allow for clinical staff to learn to deal with these less visible components of surgical team-working. For example, a 'Non-Technical Skills for Surgeons' (NOTSS) training programme has been provided by the Intercollegiate Surgical Curriculum Programme. It tests surgeons' leadership skills, as well as their situational awareness, decision making, communication, and teamwork skills. This appears to acknowledge the need and support for the development of psychological safety.

It's all about being aware of what's going on and communicating with the nurses and junior staff, allowing other people to speak up in theatre and say, 'I think you're getting this wrong; this isn't right.' All of these things we didn't really do in surgery. Consultants in the past didn't really like to be questioned by their junior staff (Rimmer 2014, p.1).

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<sup>19</sup> A Registrar is a qualified doctor who has not completed surgical qualifications, the level below Consultant.

<sup>20</sup> The shared belief held by members of a team that the team is safe for interpersonal risk taking (Edmondson 1999, p.350) including speaking up. The theoretical explanation of speaking up behaviour within the patient safety field expresses this as professionals' readiness or reluctance to voice concerns (Henriksen and Dayton 2006; Kobayashi *et al.* 2006; Okuyama *et al.* 2014).

Another barrier to achieving better patient safety outcomes is the rigidity of the surgical team hierarchy. Research in high reliability organisations<sup>21</sup> indicates that, in order to succeed, organisations need to be structured but flexible (Weick *et al.* 1999; Faraj and Xiao 2006). Studies in these other fields explore how the existence of flexibility works to facilitate the shift from hierarchical authority within a system (Barton *et al.* 2015). With more flexible working arrangements now in place, the shift in the leadership model may contribute to addressing the reported barriers that are due to hierarchy.

#### **2.4.2. The contemporary use of command leadership**

Despite the trends noted above, the COVID-19 pandemic brought about the imposition of another top-down type of leadership, that is at odds with the overall encouragement to utilise collective leadership in the NHS. The COVID-19 pandemic brought about the fastest repurposing in NHS history of standard operating procedures nationally, regionally, and locally (Sykes and Pandit 2020). This was supported by engaging responsibility for leadership at the organisational level. Command leadership for NHS sites was established at a national level by the NHS England Emergency Preparedness, Resilience and Response Framework (2016) ('NHS Emergency Framework'). Arrangements were made across regions in England and Wales, to coordinate hospitals regionally (NECSU 2020; Public Health Wales 2020). Command leadership usually exists for a short duration in the NHS. This is to respond to brief disruptive 'major incidents', such as terrorist attacks, and winter peaks in demand for hospital stays. However, it was implemented for a longer period than normal due to the pandemic.

In the military sense, command leadership follows a forked, multi-layered process (Figure 2-3). Leadership emerges from a central point from which it is coordinated and may be controlled when required, but principally is decentralised and delegated in a structured way. Nonetheless, it is required to be adaptable, allowing a more informal networked structure to emerge if the situation requires it (Ministry of Defence 2017). In the NHS, at the clinical management level, the structure differs. It is predominantly linear, rather than forked.

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<sup>21</sup> Organisations with high-risk technologies and environments that operate successfully (Johannessen *et al.* 2015).

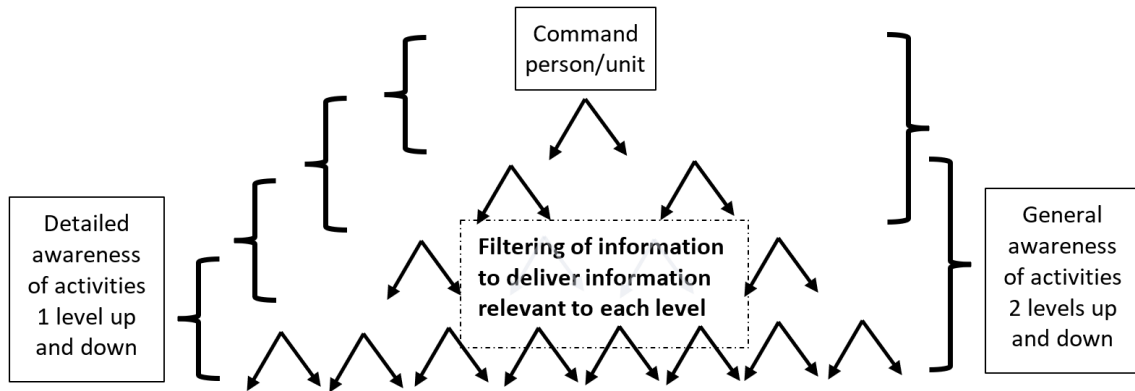


Figure 2-3. Command Leadership multi-layered process. Source: author.

The ‘crisis has been like no other that most healthcare workers have been exposed to during their careers or lifetimes’ (Pandit 2021, p.1). Surveys carried out during the COVID-19 pandemic reported 36% of nurses (increased from 27%), and over 30% of doctors (more than double the previous year) are considering leaving the profession since the pandemic (Dean 2020; British Medical Association 2021). Evidence suggests command leadership has contributed to these decisions. A respondent to a doctors’ survey described command leadership as ‘the worst thing for my wellbeing and for the ability of teams to work in a professional manner’ (Cubitt *et al.* 2021, p.5). Command leadership was ‘perceived by many respondents as having a negative impact on a sense of autonomy and value’ (Cubitt *et al.* 2021, p.6).

The imposition of command leadership appears at odds with critical studies that propose a shift from the predominantly vertical, top-down view of teams to a ‘post-heroic’ perspective. The shift was said to be needed, as ‘power in the hands of a few has not been a successful experiment’ (Tourish 2013, p.7): this was due to the imbalance in power that is perceived to emanate from traditional leadership.

## 2.5. The study of atmosphere as a spatial liminal and affective phenomenon

Following the above review of contemporary leadership studies, I now turn to studies of the phenomenon of atmosphere and the use of leadership for atmospheric work in surgical teams. As explained above, Edmondson’s studies on psychological safety have played a role in understanding leadership in healthcare and surgical teams. She very briefly touches on surgeons fostering an atmosphere of learning, indicating that atmosphere is a contributing factor for feeling safe to speak up (Edmondson

2003b; Edmondson 2004; Edmondson *et al.* 2016). She does not develop this conceptually though. I propose developing our understanding of the changes in leadership in relation to atmosphere that surgical team-members have experienced.

Atmospheres are a phenomenon that can involve more than one person, be short-lasting, but capable of intentional creation and re-creation. Atmosphere has surfaced in studies of leadership, such as in studies of atmospheres conducive to leadership development sessions (Clausen *et al.* 2018), how atmospheres may enhance performance and reduce staff turnover (Walumbwa *et al.* 2018), the importance of creating an atmosphere of tolerance or spirituality in higher educational institutions (Mei and Symaco 2022; Sapra *et al.* 2022), and support of innovation by virtue of an atmosphere in which diverse views can be expressed Telyani *et al.* 2022). However, generally atmosphere has not appeared as the focal point in leadership studies, particularly using qualitative research methods. Atmosphere has been considered in empirical studies but not developed conceptually, as evident in Peng *et al.*'s study of service creativity (2020). Nonetheless, there are recent rare examples of novel extensions to the concept of atmosphere, such as Lei *et al.*'s (2021) development of the notion of innovation atmosphere based on an empirical study in an industrial setting, Chou *et al.*'s theoretical modelling with reference to a sarcastic atmosphere (2020), and other quantitative studies offering empirical and theoretical contributions concerning the relationship between leadership and types of atmosphere (van Breukelen *et al.* 2012; Fors Brandebo *et al.* 2016; Kanadlı *et al.* 2018).

Consequently, previous theoretical and empirical study about the link between leadership and atmosphere has produced only a few indications that specific atmospheres are associated with particular types of leadership. For example, the nature of certain types of leadership may result more readily in relationally-rich atmospheres: collective leadership can be demonstrated by the emergence of leadership from everyday relationally-responsive leadership activities (Ospina *et al.* 2020) that are evident in atmospheric work. A rare example of the study of an association between certain types of leadership and specific atmospheres is Chen *et al.*'s study (2022). This indicates indirectly that the use of command leadership produces an atmosphere in which employees do not feel safe to speak up. Their study proposes the use of servant leadership style to promote speaking up.

As 'an affective phenomenon' that is intersubjectively perceived by people (Trigg 2020, p.1006583), the study of atmosphere supports theorisation of the relationship between leadership theory and relational aspects of leadership. The wider examination of studies regarding atmosphere reveals that the phenomenon contains different elements. Previous studies and theorisation engage the terms 'atmosphere', 'atmospheric', and less widely, 'atmospherics'. As a broad definition, 'atmosphere' denotes a mood or feeling in a situation. Previous studies have identified 'atmospheric conditioning' of people's moods, when a particular mood, emotional or aesthetic quality is invoked by the atmospheric nature of the atmosphere (Beyes 2016).

'Atmospheric' indicates a feature that resembles or is suggestive of the atmosphere, such as the 'homely' feel of a house. It can be understood as a descriptor of an atmosphere. Attributing an atmosphere with a nondescript label, such as 'nice' or 'good', reflects that atmospheres are not neutral (Brown et al. 2019). Other descriptions, such as a 'safe atmosphere' intimate a particular set of characteristics of the atmosphere, or the affect experienced by people due to the atmosphere.

There is a marked distinction between 'atmospheric' and 'atmospherics'. Turning to the literature for military and related fields, 'atmospherics' is defined as:

unique insights from local peoples' perceptions, beliefs, behavior, gossip, interests, and cultural factors which affect their attitudes and decision-making processes. Atmospherics have a role in military intelligence analysis, and military personnel often use atmospherics to better inform the command of local situations and environments. While an imprecise science, atmospherics have utility in coloring the big picture (Carter 2017).

Atmospherics is described as enabling people to sense what is happening before it can be measured, arising from 'immediate senses and low or banal descriptions of mood to the tone of feeling and senses of opinion—a vibe of a situation evidenced in banal things and events, sensed and felt but ultimately measured and potentially an assessment of disparate data' (Adey 2014). I characterise atmospherics as the attunement to an atmosphere, arising from people's perception of the atmosphere, that can be used as a tool to inform future (in)action and to identify why a particular atmospheric label is attributed to an atmosphere.

Hence, atmospheres and atmospherics are spatial phenomena, considered to involve sensory and emotional aspects, as they intermingle with human and non-human elements. An atmosphere does not 'belong' to that specific place though, reflecting what Böhme describes as 'ontological unlocalizability' (Böhme 1993). Atmospheres are in flux due to the changing influences inside and outside of the place they are perceived. As such, a safe atmosphere can be said to demonstrate liminality. Previous studies of space have been attentive to the physical nature of 'liminal' spaces, where they are located and physical features (Shortt 2015). However, liminal space is also viewed as a felt, rather than physical, space, 'a space where the regular routines of the formal organization are suspended' (Sturdy et al. 2006, p.930). Due to its liminality, an atmosphere may originate from elements outside the current space, drawn from the mood, emotions, relationships, and longer-term experiences of the team-members. Thus, encompassing historic influences, atmospheres are capable of a push and pull dynamic. So, in addition to atmospheres being created by feelings, atmospheres can also cause affect<sup>22</sup>: they are 'affect-transmitted, as well as affect-directed' (Leclair, 2022; Philippopoulos-Mihalopoulos, 2013, p. 40). These affective atmospheres are:

the collective products of bodies (human and nonhuman) acting together, encountering one another, affecting one another, producing a shift in the atmospheric tone of a space and so transforming what bodies might be capable of producing in concert within that space (Waters-Lynch and Duff 2021, p.390).

Atmospheres can arise naturally in this way. However, knowledge of the potential of affective atmospheres supports the creation of 'staged' atmospheres, ones that are purposefully designed. Böhme (2013, p.3) describes this in a theatre setting as creating an 'atmospheric background to the action, to attune the spectators to the theatrical performance and to provide the actors with a sounding board for what they present'. Böhme refers to the staging of a drama or opera in theatre but application of his notion of staging atmospheres to facilitate the performance of surgery seems apt. Firstly due to the historic beginnings of surgical operating theatres as an

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<sup>22</sup> Affect is a basic feeling, for example being (un)consciously aware of a situation as somewhere between pleasant and unpleasant (Barrett 2017). This compares to emotion which is more complex. Emotions may be 'building blocks of affective phenomena' or a discrete 'kind of' response to objects or situations (Scarantino 2012, pp.358, 367).

amphitheatre, where the public could witness surgery as entertainment (Zimmerman 1963; Foss 1989). Also, because the performance of contemporary surgery continues to be observed frequently by non-participants for training purposes, and also by millions of people via television or online recordings for entertainment (Huxtable 2013).

## **2.6. Developing knowledge of contemporary surgical team leadership**

At the start of this chapter, I proposed that despite a diverse and persistent interest in leadership, we still lack a clear, reasoned conceptualisation of what leadership is. I set out a brief account of the different ways leadership is, or has been, understood throughout history generally. Next, I explained how and why the perception and use of leadership in surgical teams has evolved. Now, from this knowledge base, I turn to consider what further empirical studies and theorising about surgical team leadership is required.

In the time leading up to the latest episode of leadership experiences in the NHS due to COVID-19, there have been anecdotal accounts about what has caused changes in leadership and the effects of that over the years (Olsen and Neale 2005; Timm 2013; Iliffe 2017). However, there are limited empirical studies and theorising about them. There is mixed evidence concerning the use of collective leadership in healthcare. Some authors consider that the use of collective leadership is already happening in healthcare, with informal leaders taking decisions and inspiring others to make change; whereas other authors believe the heroic hierarchy still prevails (Beirne 2017; Forsyth and Mason 2017; Sonnenberg *et al.* 2018). West *et al.*'s above remark that 'there is still a formal hierarchy' but a concurrent 'ebb and flow' facilitating collective leadership, provides a third option: that collective and hierarchical leadership co-exist. This co-existence, and its effects, requires further theorisation (Holm and Fairhurst 2017; van de Mierop *et al.* 2019).

In particular, we lack a clear understanding of the nature of Consultant surgeons' leadership in contemporary surgical teams. Whilst the use of collective leadership may be growing, empirically it is unclear whether Consultant surgeons still wield, 'unquestioned', power over the surgical team and within the wider NHS organisation. If they do, we lack theorisation about how hierarchical leadership is maintained in this organisational environment: how can this occur in an environment in which

collective leadership has, and continues to be, supported at a policy level? In this vein, previous studies have tended to examine hierarchical culture within stable teams. Development of conceptualisation of leadership harnessing atmospheric work and virtual leadership activities in the newer flexible surgical team format has yet to be developed. Providing theorisation of these issues may answer the question of what, if anything, has replaced the 'team relationships' and 'team feeling' that were traditionally generated within a stable team, under the leadership of one Consultant. Also, in what context it is necessary or possible to do so.

It is notable that in these earlier discussions about, and conceptualisation of, collective leadership, the focus appears to be uni-directional, emphasising the movement towards, and growth in the use of, collective leadership. Empirical studies and theoretical consideration have not been undertaken concerning the possibility of a shift back to a 'top-down' form of leadership once collective leadership has been adopted, and what the effect of this would be. Empirically such a reversal has been demonstrated by the latest challenge to the surgical team structure during COVID-19. However, yet to be developed is a theoretical proposition for why the detrimental effects that have started to be reported are evident. These effects are in respect of diminished morale and the intentions of staff to leave the NHS.

Additionally, earlier studies in other settings indicate collective leadership is suitable to address wicked problems; but we have limited knowledge of whether collective leadership (in the form proposed by NHS policy) is appropriate to address wicked problems in surgical settings. The (partial) retention of hierarchical leadership warrants attention, in particular because it has been acknowledged that it can hamper people raising concerns and their wider participation in leadership. It remains unclear whether there is a basis for overcoming these barriers, so surgical team-members feel able to challenge colleagues.

There is an indication in previous studies that atmosphere and the use of digital technology may support inclusivity and people's readiness to speak up. Accordingly, further exploration is needed of the experiences of surgical teams of atmosphere, and digital technology, to allow conceptualisation of atmospheric work, and the transition to virtual leadership activities.



By contrast to the limited empirical studies and theorising about surgical team leadership, the remarkable expansion of non-hierarchical leadership between 2005 and 2013 is widely commented upon in other fields, one example being the use of alternatives to hierarchical leadership in the field of education. At the time of their studies, West and his colleagues (2015b) and Kline (2019) indicated that despite thousands of publications on the topic of leadership in healthcare, relatively little research had been conducted to a high academic. Reasons for this included poor methodology.

Many organisations use instruments with poor psychometric properties, inadequate theoretical grounding and unknown validity.... Within the NHS there is extensive use of such poor instruments at every level (2015a, p.17).

In considering how to address this limited empirical and theoretical knowledge, and the methodological concerns, I consider the recommendations put forward in the studies that are available. The proponents for post-heroic leadership call for attention to be focused on the processes and practices of leadership, rather than individual leaders' attributes (Barker 2001; Grint 2005; Raelin 2011). Advocates for social and material constructionist leadership also call for attention to be focused on the less visible components of leadership such as relational aspects. This is echoed by West *et al.* (2015b) who propose a broader focus in studies because leadership may be adopted by people not in formal hierarchical positions:

collective leadership culture is characterised by shared leadership – by a constantly swirling mix of changes in leadership and followership, dependent on the task at hand or the unfolding situational challenges. Of course, there is still a formal hierarchy with dedicated positions but the ebb and flow of power is situationally dependent on who has the expertise at each moment (West *et al.* 2015a).

Also, examining relational activities at a micro-level is advanced as necessary to support a critical analysis of this complexity of hierarchical and collective leadership interactions (White *et al.* 2016). However, there has been little examination at this level, 'recognizing leadership in terms of the relational outcomes that enable people to combine their efforts in service of collective goals' (McCauley and Palus 2021, p.14).

Therefore, to explore how members of NHS surgical teams have experienced changes in leadership, I will engage with four main themes. These arise from my review of the literature and, as identified above, each are the subject of limited empirical and theoretical study to date. Accordingly, I propose to focus for the remainder of this thesis on one specific less visible theme that is common to the other three themes below: atmosphere.

Consequently, my first theme is the role of atmosphere in surgical team leadership. In their research related to teams, including surgical teams, Edmondson and her co-authors highlight the connection between hierarchy, feeling safe to speak up, and the introduction of new technology. Edmondson very briefly touches on surgeons fostering an atmosphere of learning, indicating that atmosphere is a contributing factor for feeling safe to speak up (Edmondson 2003b; Edmondson 2004; Edmondson *et al.* 2016). She does not develop this conceptually though. However, I engage with the concept of atmosphere in this thesis because focusing on atmospheric characteristics is claimed to offer a means to explore ‘the intersubjective, intertwined and relational forces of organizational life’ (Beyes and Steyaert 2012).

My second theme considers how atmospheric work may be used to create an atmosphere in which people feel able to speak up about issues that concern them. I consider how this may occur naturally and deliberately.

Related to this is my third theme, the introduction of new technology and communications. This arises from an indication in previous research which suggests this topic offers promise in explaining what changes may have occurred. Technology has been posited in the literature to be overcoming some cultural and process barriers in the field of learning (Schmidtke and Cummings 2017; Khandelwal and Upadhyay 2021). Therefore, it seems apt to consider if the rise in the use of technology by surgical teams serves to overcome hierarchical barriers. This may address the issue raised in official reports that hierarchical leadership hampers surgical team-members from raising of concerns about areas of performance, including patient safety, and wider participation in leadership activity (Francis 2013; Kennedy 2013; Evans *et al.* 2019; James *et al.* 2020).

My fourth theme develops a greater understanding of how a context may be contestable between different people and how this intersects with the type of leadership exercised. I propose first identifying in what circumstances hierarchical leadership continues to be used in contemporary surgical teams. Studies in other fields have suggested that the existence of flexibility works to facilitate a shift away from hierarchical authority (Barton *et al.* 2015). This study will explore if that is the case for surgical teams working in the more flexible team arrangements introduced predominantly since the 2010s, as well as stable teams. Also, how hierarchical and collaborative leadership are affected by context or used differently depending on the context.

Currently, despite the reports of changes over time to relational aspects of surgical team leadership, how relational aspects affect leadership in different contexts requires more extensive consideration. In the light of West *et al.*'s (2015b) suggestion that hierarchy exists in an 'ebb and flow' relationship with collective leadership, it will be necessary to consider evidence of the use of collective leadership alongside hierarchical and command leadership. In particular, whether this has changed for surgical teams following the changes in relationships amongst team-members, due to the organisational reforms.

## **2.7. Summary**

An empirical response to consider the under-explored areas of leadership of surgical teams in this distinctive setting was to apply an interpretative approach. This approach allows the development of an understanding of what has changed in the leadership of NHS surgical teams since the 1980s, what types of contemporary leadership are used for surgical teams in different contexts, and the associated changes in experiences of relational aspects of leadership. Accordingly, the overarching research question for this thesis is:

Since the 1980s, what changes in leadership have members of NHS surgical teams experienced?

Subsidiary questions used to explore the overarching research question include (1) how was leadership traditionally practiced in surgical teams, (2) how is leadership practiced in surgical teams today, and (3) what aspects of contemporary surgical

team leadership do we have a weak theoretical understanding of? After the early data collection, an additional emergent question arose:

What are surgical teams' experiences of the use of leadership for atmospheric work, and has this changed since the 1980s?

I bound consideration of these questions within the four themes set out above.

In the next chapter I provide details of the *methodology and methods* I have employed to seek the empirical data necessary to answer to these questions.

### **3. Research Methods**

#### **3.1. Introduction**

In the introductory chapter, I set out my intention to develop an understanding of what changes in leadership members of NHS surgical teams have experienced. This included exploring whether there has been a shift towards greater use of collective leadership, and a growth in the role of relational aspects of leadership. I intended to investigate how leadership was traditionally practiced in surgical teams, how leadership is practiced in surgical teams today, and what aspects of contemporary team leadership contributing to changes requires theoretical development. To understand contemporary leadership in surgery, and the changes which have occurred, it is necessary to have an appreciation of the historical and social roots of the surgical environment in the UK (Ropo *et al.* 2013, p.388).

This chapter contains details of the methodology and methods I have employed to explore this complex multi-disciplinary team environment. My description of the methodology starts with an explanation of the social constructionist philosophy which underpins this research. There follow details of why I chose the participants to study and the sites at which they work. After an introduction to those sites, I explain the methods used to collect the data. The chapter concludes by explaining how the data were analysed, and by identifying the most relevant types of data gathered, related to leadership forms and types.

#### **3.2. Social constructionist ontology: the ‘what’ of the research**

Health research traditions have traditionally been situated in the idealist ‘neighbourhood’ of ontologies (Figure 3-1). To enable greater theorisation of leadership practices, there has been encouragement for empirical research to move along the research spectrum, towards a more realist stance (Bourgeault *et al.* 2010, p.130; Kempster and Parry 2018).

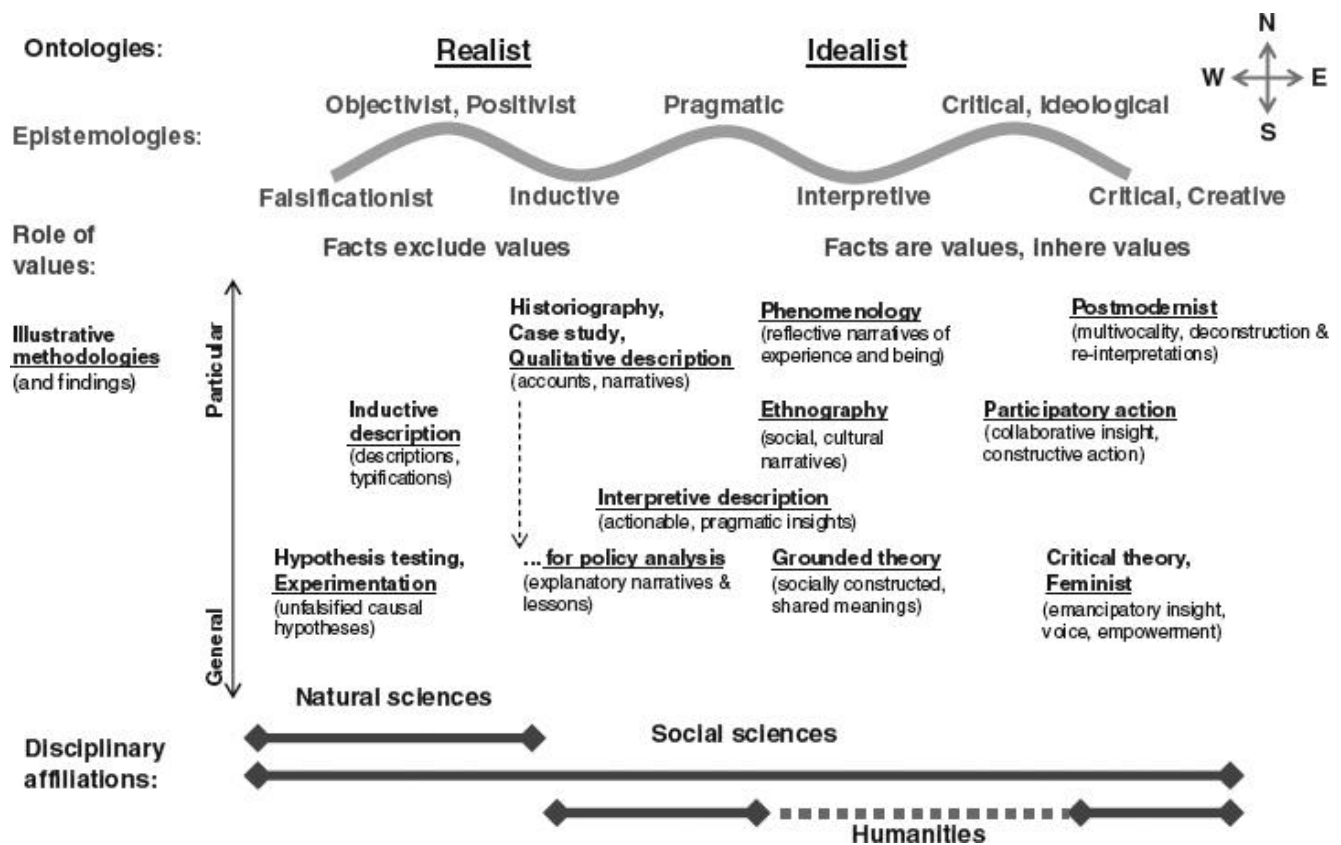


Figure 3-1. Health research traditions, by ontological and epistemological neighbourhood. (Bourgeault et al. 2010, p.130)

To position my research accordingly, and in setting out to establish my ontological beliefs, I needed to have a notion about what the research might find empirically (Blackburn, 1996, p. 320). There were anecdotal indications that I may find collective as well as hierarchical leadership. I anticipated that this could be delivered by a number of role-holders, not only those in a traditional, hierarchically higher job role. My ontological stance needed me to be able to set aside the word *leader* to compel me to consider ‘what is causing and doing the leading and the leadership effect that follows’ (Kempster and Parry 2018, p.65). Studies of collective leadership have pursued two main trajectories, post-heroic and constructionist. I used the latter, being in agreement with Meindl’s observation (1995, pp.339–340) that this ontology enables us to ‘focus on what actors and observers construct as a normal part of their social experiences’.

The use of social constructionist language has been criticised as being ‘used indiscriminately; too many studies offer up broad, nonspecific definitions; underspecified constructs; and a bewildering array of methods, approaches, and

perspectives' (Fairhurst and Grant 2010, p.173). To avoid falling into this trap, this section sets out the social constructionist definition used for this study, arising from its historical roots, and the justification for the methods used, underpinned by this ontological perspective.

According to social constructionist views, leadership is, by definition, a process of co-construction involving leaders, followers, and context and is therefore contested and fluid (Crevani 2018; Sklaveniti 2020). Generally, 'context' may indicate the organisation, department, specialism, team, team-component (for example role), or work-type (for example emergency or elective/planned) in which the phenomenon being studied occurs. Even in situations in which heroic leaders seem to arise and dominate, scholars assume that the leaders depend on interactions, institutions, subordination, and on the reproduction of power relationships in social interaction. Thus, they posit, leadership is always collective and dependent upon social processes (Alvehus 2019). Whilst it was not anticipated that the findings of this research would support the proposition that leadership is always collective, the ontological stance provides a platform from which to explore the possibility of diversity in surgical team leadership. Also, it provides the means to take into account that, in framing a study based on changes over time, the researcher needs to be able to draw in aspects springing from temporal, spatial, and social aspects of the context in which the leadership occurs. The context is neither unambiguous nor entirely controllable, 'different frames can exist simultaneously' (Goffman 1974; Alvehus 2019, p.539). Further, what is being explored is more than simply what is visible.

As Engestrom (2000b) has written, the baseball game you are watching at the stadium involves more than the action of the players. It is the whole institution of the sport, made contingently present, on this day, in this park (Sannino *et al.* 2009, p.229).

This requires identifying 'the whole', engaging with the various aspects of the individuals' experiences, and reaching a point at which it may be possible to develop theory based on the findings. To do so, it is important that the ontological and methodological underpinnings of the research enable the researcher to keep leadership effects and the underlying dimensions distinguishable. They 'should not be amalgamated into a meaningless singular construct' (Ashford and Sitkin 2019, p.457).

More recently, collective leadership studies have been embracing social constructionist approaches to understand how leadership roles are continuously negotiated in relationships (Ryömä and Satama 2019). Social construction considers relationships and interactions, rather than individual dimensions and agency. It infers that social effects are outcomes of interactions between individuals, as opposed to being a phenomenon 'out there', separate from individuals taking part in its construction. It allows for an 'understanding of the social world through an examination of the interpretation of that world by its participants' (Bryman 2012a, p.380). Attention to interactions may encompass potential 'bad or destructive forms of influence processes'. Thus, it incorporates both positive and negative aspects of leadership (Endres and Weibler 2017, p.228).

### **3.3. Epistemology: the 'how' of research**

The epistemological basis of this research, that is to decide how I will find out about whether changes have been experienced in leadership, is based on the above ontological foundations.

Epistemologies (how we must find out) flow necessarily from ontological beliefs (what we want to find out about) (Bourgeault *et al.* 2010, p.131).

The epistemological stance for this study needs to allow for the exploration of potentially alternative forms of leadership arising out of the context(s) studied. The choice of studying experiences of leadership has been demonstrated as suitable for exploring varying face-to-face and virtual work contexts (Avolio *et al.* 2014; Conway *et al.* 2018; Snelling *et al.* 2020). This is by eliciting from participants 'candid accounts of personal experiences as well as how they see others involved in the leadership or followership process' (Einola and Alvesson 2019, p.891).

This study does not hold out that the research methods enable the researcher 'to create finite truths' (Ford 2010, p.52). I did seek, though, to proactively plan to avoid flaws, such as the above example, by careful research design and implementation. Qualitative research, including the analysis of activities, provides insights into the nature of leadership, rather than firm conclusions (Yukl 1989). What it purports to do, is to explore the lived experience of leadership in surgical teams, elucidate the changes in the way leadership is produced and used, and describe their perceptions of leadership within their particular social environment. Employing a qualitative



research methodology opens the way to being able to capture and relate the complexity of the environment, through thick description of the context in which activities take place (Yukl 1989; Rosenhead *et al.* 2019). It does so in recognition that this is not done in a generalisable manner (Kempster *et al.* 2016). However, I propose that, by moving to the left on the above ontological scale (Figure 3-1), my philosophical stance allows for the methods to produce empirical findings that lead towards a model of leadership on which future research may be based. The model supports studies of leadership across the range of activities and contexts that may exist within the overarching work of NHS surgical teams. This is by exploring and framing the complexity of the experiences, but not trying to measure, solve, simplify, or generalise the data and findings.

Having considered the ontological and epistemological underpinnings, in the next section I detail the research design and methods chosen, based on the above philosophical perspectives, and the steps taken to safeguard the quality of the research.

### **3.4. Research Design and Methods**

A social construction ontology is apt for a study which methodologically requires studying leadership as a 'lived' experience rather than as a 'reported' experience in standardised questionnaires. It requires paying attention to the specific context in which the phenomenon takes place including possible contradictions and ambiguities. Qualitative methods are 'acutely sensitive to the context in which leadership happens. This feeds through to the choice of research design and methods. A research design is:

*a logical plan for getting from here to there [...] dealing with at least four problems: what questions to study, what data are relevant, what data to collect and how to analyze the results [...] The main purpose of the design is to help avoid the situation in which the evidence does not address the initial research questions (Yin 2014, pp.28–29).*

Interviews have been the methods of choice for research in the healthcare environment and concerning leadership experiences (Ford 2010; Waring *et al.* 2018; Shale 2019). The aim is to study people in their 'natural' context and to explore the nature of a social phenomenon over time/space; to study mundane activities in

organisations as they take shape on a daily basis to capture the lived experiences of individuals and working dynamics (Nicolini 2012).

### **3.5. Why choose Qualitative methods**

Given the exploratory nature of this investigation, I adopted a qualitative approach, underpinned by an interpretive epistemology. Viewing leadership using an interpretive lens is apt to study lived experiences and allow the emergence of key issues (Currie and Spyridonidis 2018). This is because it enables us to appreciate points of interest over time, 'conflict, obstacles and sometimes failures' in accomplishing leadership (Ospina and Su 2009, p.139; Dy *et al.* 2017). Qualitative methods are appropriate to study emergent phenomenon and 'can reveal critical insights to inform development, translation, and dissemination of interventions to address health system shortcomings' (Bradley *et al.* 2007). The approach is apt to build an understanding of the relational process leading to the development of collective leadership (Croft *et al.* 2021).

This sensitivity of qualitative methods to the context leadership is an important reason for their use in my study (Bryman *et al.* 1996). Also, by asking the 'why', rather than solely 'how many' questions, they enable the researcher to address far more variables in one study. By doing so they achieve what quantitative methods generally cannot (Klenke 2014a). Qualitative methods provide viable opportunities to allow the study of people in their natural settings (Bryman 2012b). In studies before the COVID-19 pandemic, this would have included the observation of people in the field carrying out their day-to-day work. However, due to the nature of the pandemic and the restrictions understandably imposed on visiting hospital premises, observations were restricted to virtual ones.

This is a complex, multi-disciplinary, multi-layered environment, which, as described in the literature review, extends beyond the immediate work environment and relationships, taps into historic and societal influences, and is affected by policy and legislative factors. Qualitative methods allow for a wide-ranging, multi-faceted analysis of such real-world contexts, including the change and tensions that can arise between different subgroups within organisations (Bourgeault *et al.* 2010; Yin 2014, p.214)

The potential difficulty of studying these issues lies in their complexity and multilayered nature: they involve professional practices and identities; patients' experiences and rights; health care organizations' structures and cultures; and the broader societal values and belief systems. Exploring and understanding these issues requires research methodologies that not only are able to analyze process and change but also allow for diverse and possibly contradictory perspectives. Qualitative methods, such as organizational ethnographies and case studies, are best suited to address these complexities (Bourgeault *et al.* 2010, p.71).

Additionally, they are apt to gather information about incremental changes, rather than taking a 'snapshot' of a moment in time. Longitudinal versions, that study a phenomenon over years or decades, allow for the analysis of a temporal pattern to indicate the 'unfolding of key events [...] that traces human or animal behaviour over a specified period of time' (Yin 2014, p.214). This may assist, as envisaged by Sannino *et al.* (2009, p.135), in identifying whether the actions of surgical team-members provide a teleology of leadership, that is to explain what purpose(s) leadership fulfils, rather than only the cause of it:

...at whatever rate cultural innovation occurs, it is to some extent constantly transforming while maintaining the cultural medium of the group, in this sense it continues to act as a teleology for the development of its members, albeit under changed social and ecological conditions (Sannino *et al.* 2009, p.135).

### **3.6. Safeguarding the quality of the research**

I have taken steps in this study to proactively attend to potential weaknesses, as addressed in this section. The diversity of qualitative research designs has resulted in challenges when evaluating the quality and rigour of studies. It is generally accepted that the positivistic, quantitative criteria may not be appropriate when assessing qualitative research's quality (Klenke 2014a). Alternatives have been suggested.

There exist substitute criteria (called credibility, transferability, dependability, and confirmability) together with corresponding empirical procedures that adequately (if not absolutely) affirm the trustworthiness of naturalistic approaches (Lincoln and Guba 1985a, p.43).

Trustworthiness relates, not to the statistical significance of the findings, but rather whether they are meaningful and achieve an understanding of the object of the

research (Klenke 2014a). Yardley provides a clear explanation of other criteria by which qualitative research may be assessed:

Commitment and rigor can be demonstrated by in-depth engagement with the topic, including thorough data collection, displaying expertise and skills in the methods employed, and undertaking a detailed, in-depth analysis. Transparency means that the reader should be able to see clearly how the interpretation was derived from the data, while importance refers to the requirement for all research to generate knowledge that is useful – whether in terms of practical utility, generating hypotheses, or even changing how we think about the world (Yardley 2016, pp.295–296).

However, she emphasises that such criteria should be approached reflexively and flexibly, rather than being prescriptive. This is because there are different ways in which researchers may comply with them (Yardley 2000; Yardley 2016). The above criteria have guided the conduct of this current research.

To explore leadership in this study, it was necessary to give adequate attention to different perspectives of them and not to assign more importance to a particular one. This was to understand how leadership is experienced, and the direction in which the form of leadership is taking, for example becoming more, or less, hierarchical, or collective. By doing so, several activities became apparent which are an integral part of the different forms of leadership. Examples of the participants' experiences of these are provided in the findings chapters.

When using the term '*activities*' I do so for methodological and theoretical clarity. *Practices* refer to routine behaviour, which may involve physical and mental actions, objects, emotions, motivations and understanding arising out of background knowledge or experience (Jarzabkowski *et al.* 2007). I wanted to signify that I recognise that I have been unable to carry out field observations to verify if these activities are indeed routinely used and so I used the term '*activities*'.

### **3.7. Research methods**

Whilst the above methodology provides a framework of 'logically related means and ends to guide' my empirical research design, this section sets out the specific methods, or research procedures and techniques, that have been used to affect the methodology (Bourgeault *et al.* 2010, p.129). These have been selected as appropriate to the emergent nature of the phenomenon studied. The importance of

using multiple methods to produce a high enough quality of research has been explained above. This section explains the methods selected and limitations imposed on their use due to the COVID-19 pandemic.

### **3.7.1. Case study**

A case study is an empirical inquiry that aims to provide a detailed analysis of a subject. The investigation is detailed and encompasses the case's real-life context. It may be an example of a wider phenomenon and may include sub-cases within the overarching case (Waring *et al.* 2018). Case studies have 'become something of a mainstay within contemporary social science' and have an established application in healthcare settings, and for health services and policy research (Bourgeault *et al.* 2010; Exworthy *et al.* 2011, p.22). Using a case study approach is suited to researching areas with inadequate theorisation and supports building novel theory (Eisenhardt 1989).

Case studies are acknowledged as a separate method, with its own research designs, although there is no established standard research design for them. However, Yin goes some way to addressing this shortage of standardisation by describing sets of designs for single and multiple case studies (Yin 2014). One of the strengths of case studies that Yin identifies is that they enable the researcher to explore the relevant conditions of the real-world's context fully, including the historic context and events. He explains that this leads to unexpected clarity about the object of research:

...real-world affairs do not readily fall into clear-cut categories. The ability to appreciate any such blurring as part of a case study is considered a strength of case study research. The contextual conditions even can lead to an entirely new understanding of a case (Yin 2014, p.214).

Traditionally, to ensure the reliability of the research, a case study protocol was used (Yin 2008). Set out within this are the research questions, propositions (rationale and direction for the research), the unit(s) of analysis, the logic linking the data to the propositions, and the criteria for interpreting the findings. However, a case study protocol 'could become a straitjacket that precludes new opportunities to gather evidence as they arise', and an alternative approach of emergent case studies has been advocated (Lee and Saunders 2017, p.5). This allows flexibility for unexpected events, and the opportunity to collect data about aspects of interest in the case that

arise during the research. The emergent case study approach allows for an abductive approach, with movement backwards and forward between reviewing the literature, collecting data, refining research questions, and analysing the data (Figure 3-2).

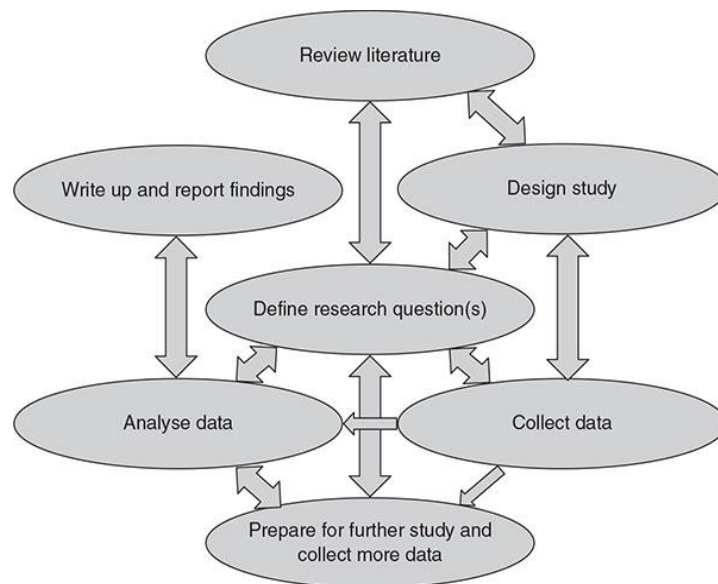


Figure 3-2. Case study emergent approach. Source: Lee and Saunders (2017)

In doing so it answers the call for ‘research designs and methods that foreground dynamic interactions and emergence’ to research the changing contexts and complexities of health services (Greenhalgh and Papoutsis 2018, p.1).

### 3.7.2. Unit of analysis

The unit of analysis for this study is the change to leadership of NHS surgical teams. Specifically, leadership as studied through the activities of participants whose details are provided in section 3.7.5, and within the environment specified in section 3.7.3.

At the outset of the research, the unit of analysis was anticipated to be the phenomenon of change in surgical team leadership due to the alleged ‘demise’ of the model of Firm leadership. However, as the research progressed it became apparent that the change to surgical team leadership was not solely by virtue of the change in the Firm model of leadership. Sub-units of analysis emerged; these were changes to leadership due to the increased emphasis on ‘safe atmosphere’, leadership in a virtual context gradually augmenting face-to-face leadership, and the use of command leadership during the COVID-19 pandemic.

### **3.7.3. The environment: introduction to the research sites**

Data were predominantly gathered from staff employed at three hospitals, geographically located in urban areas. One belongs to a NHS Trust based in England ('Hospital E') and the other two NHS Trusts are based in Wales ('Hospital W1' and 'Hospital W2'). Hospital E serves approximately one million residents. It is comprised of three hospitals and employs more than 15,000 staff. Hospital W1 employs over 13,000 staff and is comprised of two large district general hospitals, providing acute surgical and medical services and two local general hospitals, supported by a number of community and mental health hospitals and day care premises. Hospital W2 provides primary community, hospital, including acute surgical services, and mental health services. It employs over 15,000 staff in four hospital sites.

Responsibility for the NHS in Wales is devolved to the Welsh Government, funded by a proportion of a block grant from the UK Central Government. The Care Quality Commission (CQC) monitors, inspects, and regulates hospitals in England but not in Wales. Healthcare Inspectorate Wales (HIW) is the CQC's equivalent in Wales. The latest inspection reported by the CQC in March 2018 gave Hospital E an overall rating of 'requires improvement'. According to the most recent Welsh Government report at the time of writing (2020), both NHS Trusts in Wales are currently classed as in 'routine arrangements' under the Welsh Escalation and Intervention Arrangements, informed in part by HIW inspections. This means there are no overall concerns requiring action to be taken to improve service and performance.

The participants from the hospitals were mainly in teams that specialise in colorectal surgery or interact with those teams by virtue of their role, for example, in a managerial or ancillary clinical capacity. It is recognised that the teams may not be static in terms of members of the team, throughout the course of the collection of data and this may affect the data. However, whilst this could be considered problematic in an experimental design or research with a positivist approach, in this study it may be of benefit to the overall findings. This would be the case, for example, if a change in a member of the team influenced the type of leadership used.

Members of surgical teams can include Surgeons, Anaesthetists, Nurses, Operating Department Practitioners (ODP), Surgical Care Practitioners (SCP), Surgical First Assistants (SFA), Physician Associates (PAs) and Advanced Clinical Practitioners (ACPs). More details about the participants are included in section 3.7.5 below. In recognition that it is important to 'bound' the case, I will explain who has not been included as participants. Whilst individuals outside of the NHS may contribute their perception of leadership and the NHS context it operates in, external participants' activities are not included in the unit of analysis. These include people working at other hospitals at the time of data collection and legislative policy makers.

The team's full working week has been the source of data. This includes the normal working shifts but also when the team, or members of it, are on call, say overnight or at the weekend. Whilst the time period for the research primarily relates to when the interviews and observations took place, there is a wider temporal boundary (longer timeframe of analysis) using secondary sources, such as previous research and the experiences of retired surgical team-members. This is to allow consideration of what changes have occurred since events leading to the alleged erosion or disappearance of the Firm structure.

#### **3.7.4. The granting of access to the surgical team environment**

The environment of surgical work is not one that is usually open to view, particularly 'behind the curtain' when surgery is undertaken. This is in comparison to the more visible work of surgical teams on the wards, and when the public may see their work in clinic for pre and post operation consultations. My own background and experience was not the subject of direct questioning during meetings with senior management, to discuss whether I could have access to the hospitals and surgical teams, nor with participants. However, my own professional experience as a lawyer specialising in employment matters and my personal link to the NHS (my husband is a surgeon) were the subject of conversation before and during data collection, particularly when attending the NHS Research Ethics Committee hearing to decide whether overall permissions to carry out the research would be granted. Reflecting on this, my impression was that people felt that my background and experience made me a trustworthy person; and because I was married to someone working in surgical teams, I had an understanding of what to expect of the environment I would be stepping into. I had 'the vocabulary' to interact with surgical teams and NHS staff



more widely. However, despite what I had previously been told about the environment, I adopted an open mind, and guarded against my prior knowledge influencing my analysis.

### **3.7.5. Participants**

The participants were selected initially through purposive sampling. A purposive sampling approach was appropriate, rather than probability sampling, as it is not expected that it will be possible to generalise the findings across a wider population. However, shortly after data collection started, the COVID-19 pandemic resulted in data collection for non-COVID-19 research in hospitals being suspended. In response, I began to recruit individuals who were (a) not currently employed by the NHS, and (b) who were not being recalled to work in the NHS in response to the pandemic. Also, I adapted my recruitment to snowball sampling, allowing for greater flexibility in contacting people, and to counter the barrier in communication imposed by being unable to visit hospitals.

The research questions indicate that the sample should include members of staff from as many of the different types of professionals and seniority within those professions as possible. The literature review indicated that different perspectives of leadership may be evident in different types of teams and work. To assess this, it would be necessary to draw participants from more than one type of surgical specialism and type of work. Accordingly, interviews were conducted with people working in a variety of roles, both in and with surgical teams. This was to ensure a multitude of perspectives and that I was not privileging the experiences of a particular role or profession. This enabled me during the analysis to better reflect on and understand the issues, and to ensure credibility for my inquiries (Lincoln and Guba 1985b; Pratt *et al.* 2020).

Differing views are held as to the appropriate number of participants to interview in order to draw convincing conclusions. The size of the sample may vary depending on the context from which the sample is drawn and the depth of the interview, for example if it is the life story of one or two people (Gerson and Horowitz 2002; Warren 2002). In turn, the depth of the data may impact on the number of participants needed. Additional participants could be needed to ensure the richness of data required is achieved (Morse 2000). For PhD theses sample sizes have been

found to vary between 3 and 350, with a median of 28 (Bell *et al.* 2019). For this thesis, based on the size of teams (8-10 people) and allowing for 2-3 people who interact closely with the teams who may provide relevant perspective on leadership activities and effects, it was anticipated that the pool of participants would be 50 approximately. However, the final number of participants exceeded this, which I attribute to widening the criteria for inclusion in the pool of participants and adopting a snowballing approach to recruitment.

Interviews were conducted with 60 participants as detailed in Appendix B. In the findings chapters, extracts from interviews are identified by job title and a participant number, for example '[Consultant Surgeon: P7]'.

### **3.7.6. Interviews**

Interviews are an established qualitative method, whose purpose is to understand the meaning of the research topic as it is held and described by the interviewee. Whilst this method can be the source of rich data, there are weaknesses that need to be guarded against. Alvesson (2019) cautions that interviewees can be 'unreliable suppliers of information, in particular on personally sensitive issues', prone to exaggeration, ingratiation and 'self-serving bias'. Although these problems may not be fully overcome, they may be managed through conducting observations and carrying out multiple interviews involving a participant's work colleagues (2019, p.36). The original research plan envisaged interviews being collected in person on the hospital premises, and the first three were conducted on this basis. One in a room used partly as an office, partly as a room for carrying out minor surgical procedures. The other two in a canteen used by staff. However, when the COVID-19 pandemic started, restrictions were put in place which prevented access to the hospital sites. All interviews from that time were conducted virtually, using Microsoft Teams or Zoom applications.

Sixty semi-structured interviews were conducted, a method suitable for exploring relational experiences related to leadership, and 'real-world impact' in healthcare (McDermott *et al.* 2011; O'Connor *et al.* 2019; Butler *et al.* 2021). The interviews usually lasted 50 to 75 minutes. I rarely exceeded this length, to avoid 'Zoom fatigue', by which I mean people losing concentration after some time when

communicating via virtual video calls generally, not necessarily only resulting from use of the Zoom application.

The interviews aimed to prompt reflections on the participants' perception of leadership within their immediate team, and from other influences outside of the immediate team. Participants were invited to consider how, if at all, contemporary day-to-day activities may differ from experiences in previous years, and how activities contribute to, or inhibit, leadership occurring. Participants were encouraged to include consideration of how these experiences varied within the different contexts in which they worked, for example with a team they knew well or were not familiar with. In terms of contemporary practices, they were asked to reflect on differences during 'normal' times pre-COVID-19 and working during the pandemic.

Accordingly, a schedule of questions (Appendix F) was prepared based on four main principles: (1) to gain as much information as possible about their experiences of contemporary leadership; (2) to understand whether, during their NHS career, they had experienced change in how leadership happens; (3) to understand how they perceived and rationalised their experiences; and (4) how these experiences differed, depending on the context in which leadership does, or does not, take place.

As the research is qualitative the interviewing and use of questions were treated flexibly. This semi-structured approach allows for adjusting the emphasis of the interview, for example if the participant mentions issues that are of emerging interest in line with the research focus, drawn to my attention by the interviewee. The less structured approach means as a researcher I may reduce the risk of approaching the interviews with preconceptions. Instead, it encourages me to form a view that engages with the participants' perceptions or worldview:

Also, the emphasis is on how the interviewee frames and understands issues and events-that is, what the interviewee views as important in explaining and understanding events, patterns, and forms of behaviour (Bell *et al.* 2019, pp.435–438).

Qualitative interviewing can reveal information about what is not observable. One of the issues underlying this research is whether, and if so what, differences are now apparent in leadership of surgical teams contrasted to the Firm model of leadership. Asking participants about this may be the only or best way of finding out about how work and leadership activities have changed, and what different individuals'

perceptions and opinions of this are. It can allow for a reconstruction of how events have unfolded. Conversely, self-reporting, and participants' taken for granted aspects of their work activities and perceptions, can limit insight into features of work and social interactions. It was intended to counter this effect, at least to some extent, by using observations (Bell *et al.* 2019, pp.457–459). However, in light of the adaptations that were necessary due to the pandemic, consideration of (non-) corroborating recollections took on greater importance. Data were gathered from some participants who had worked in the NHS throughout during the 1980s onwards, whilst others joined the NHS in the 1990s and 2000s. Staff with a shorter employment history reflected on comments made by more longstanding colleagues as well as their own experiences.

The aim of the interviews is to produce rich, detailed data for analysis. To achieve this, it may be necessary for some participants to be interviewed more than once, rather than in one long sitting. This may also occur for practical reasons, particularly if the demands of the surgical working day require the participant to leave part way through an interview, possibly unexpectedly. Shorter interviews occurred when I sought to corroborate data. As Yin recommends that when I asked questions for this purpose, I posed them in a 'naïve' way, rather than a leading question style, to invite a fresh perspective on it. This serves to obtain genuinely corroborative, or contradictory, evidence, free of influence from me which would pose a methodological threat (Yin 2014, pp.111–112).

Interviews were digitally recorded, all the participants having consented to this. Any comments made after the recording came to an end were written up, as 'unsolicited accounts' can often be the source of revealing information or views (Bell *et al.* 2019, p.448). The interviews were transcribed initially using Trint™ artificial intelligence-based software to convert the audio files to script. Initially, I checked the transcripts produced for accuracy and anonymized them. Subsequently I uploaded the transcripts and observation notes, to NVivo 12 software (QSR International Pty Ltd. (2018)).

During the interviews, participants were shown a description of autocratic leadership based on De Hoogh *et al.*'s (2015) and Harms *et al.*'s (2018a) definitions (Table 3-1). This was chosen to initiate reflections on what could be considered a spectrum of hierarchical leadership, as possibly the type of leadership furthest away from

collective leadership practices. Aspects explored included what has been experienced, and to what extent this type of leadership is considered acceptable in the contemporary workplace. Participants were asked to consider in what circumstances this happened, and what effect it had had on them, or what effect it had on other people that they had witnessed.

Table 3-1. Autocratic leadership indicators

<p>Autocratic (De Hoogh <i>et al.</i> 2015; Harms <i>et al.</i> 2018b)</p>	<ul style="list-style-type: none"> <li>• Engages in dominant, unilateral, hierarchical decision-making</li> <li>• Uses directive manner</li> <li>• Controls of every aspect of subordinates' activity</li> <li>• Shows lack of consideration of subordinates' input</li> <li>• Demands unquestioning obedience</li> <li>• May evoke negative emotions e.g. fear, anger, cynicism</li> </ul>
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### 3.7.7. Observations

To counter the effect of self-reported activities and perceptions that may have been taken for granted by staff, and not expressed during interviews, field notes from observations recorded additional insights into features of work and social interactions. Field observations took place in person at a leadership training session, and virtual observations of clinical team meetings (Appendix C). These totalled 30 hours 04 minutes.

My interpretations of the data were tested during follow-up interviews with a subsample of participants and initial interviews scheduled later in the study. There is not an established expectation as to the length and frequency of observations. Generally though, observations are often over a shorter period of time than observation for ethnographic studies (Bourgeault *et al.* 2010).

Observation can be used as a standalone qualitative method. However, for this study, it was used not only to gather original data but also to triangulate data gathered from the interviews. The purpose is to try to see events from the participants' perspective. The value of observation is to counter the concern that interviewing does not necessarily enable the researcher to learn about leadership, but rather how the participants 'account for' leadership. However, it may produce a pattern in how the participants account for leadership. Observation then allows the researcher to add value, by the addition of a novel account from someone who is 'not socialized into the same system of meaning, but is familiar enough with it to recognize its object' (Czarniawska 2007, p.81). It can be anticipated that observation provides an opportunity to witness the drawing together of the different leadership components:

Micro-phenomena need to be understood in their wider social context: actors are not acting in isolation but are drawing upon the regular, socially defined modes of acting that arise from the plural social institutions to which they belong. Much of the social infrastructure, such as tools, technologies and discourses, through which micro-actions are constructed has macro, institutionalized properties that enable its transmission within and between contexts, whilst being adopted and adapted differently within micro-contexts (Jarzabkowski *et al.* 2007).

What is seen by those in a role may not be the same as what an observer sees.

Teachers, students and parents are like fishes regarding the school [of fishes]: it is taken for granted and therefore poorly understood. An outsider is needed to remedy this lack of understanding (Czarniawska 2007, p.32).

It is crucial, then, that the researcher tries consciously to maintain an objective view, by not imposing preconceptions on what is observed. The capacity to be cognitively located outside what is being observed, Kelly (1993) describes as 'immensely important', in order to really understand the entirety of what it is that is being observed:

For one cannot ever really see one's own exterior and comprehend it as a whole, and no mirrors or photographs can help; our real exterior can be seen and understood only by other people, because they are located outside us in space, and because they are *others* (1993, p.61).

However, even whilst trying to maintain an objective view, observation requires the researcher's involvement in the environment being observed:

One has to step back in order to observe and, paradoxically, this step backwards means stepping forward – into the field (Czarniawska 2007, p.9)

It is a recognised risk that this can affect the credibility and dependability of the findings, as the researcher's presence can impact on the environment and activities being observed. Thus, by stepping into the field that is being observed, it is possible that the data may be affected. This is not wholly avoidable generally:

Regarding interaction of the researcher with the participant, e.g. to help with a falling shelf, '...all 'direct observation is indeed participatory – one's mere physical presence and human decency requires participation' (Czarniawska 2007, p.55).

### **3.7.8. Saturation points**

There is a concern that if the data are not sufficiently complete that the findings may not present an accurate representation of contemporary leadership in the context in which it is being studied. However, of necessity, a view must be taken on when it is the right time to draw data collection to a close. The general view is that the time is when the researcher has reached saturation point, that being when no new data arise (Bryman *et al.* 2004). Another perspective on when it is appropriate to stop data collection is when the researcher has gained as full an understanding as

possible of what is being studied. To pursue data collection past that point carries a risk to the researcher's objectivity:

The day when everything said at a meeting is fully understandable is the day to return to one's office –not only for reasons of efficient resource management, but also because complete understanding means “going native”, at which point the attention drops and outsidedness is at peril. When one understands everything, there is nothing left to explain (Czarniawska 2007, p.27).

How do we know if we have properly understood everything? As Donald Rumsfeld, United States Secretary of Defence stated,

“there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tend to be the difficult ones (Federal News Service Inc. 2002).

How do we overcome the potential problem that there may be “unknown unknowns” remaining, whether to stop or to continue gathering data? This is particularly so as there are implicit as well as explicit practices that underpin leadership, which may prove to be one of the unknowns. As my guide to this dilemma, I heeded Yin's recommendation: if it is not clear whether sufficient data have been collected, as a guide there should be sufficient data to have evidence from two or more different sources for most of the main topics, and that the evidence incorporates an investigation of major rival explanations for the main topics (Yin 2014, p.104).

### **3.7.9. Field notes**

To summarise observations and my reflections of virtual meetings, I used a notepad and pen, to make contemporaneous fieldnotes. I did not use a digital recorder as the meetings I attended discussed patient and treatment details which were confidential. Details included the location, date and time, people involved, and what initiated the event or conversation. Bell *et al.* (2019, p.416) advise that field notes should be ‘copious’, ‘vivid and clear’. Due to the nature of virtual meetings my presence was not such an obvious activity as to make participants self-conscious. Having clear research questions at the outset, where the broad qualitative approach has been focused by interview material, helps to prevent being ‘swamped’ with data from observations.



The original intention was that I would observe the day-to-day work of teams in and around the operating theatre. This was not possible due to the restrictions on research put in place due to the COVID-19 pandemic. I explored with the hospital management team the possibility of having access to other meetings, such as meetings between Consultants and senior leaders. However, attendees were not willing to grant consent during the pandemic. Consequently, my field notes are constrained to virtual/hybrid clinical meetings.

### **3.7.10. Documentation review**

The possibility of the use of document review with the aim of triangulating staff's perceptions was explored. Like observation, the value of documentation review is to counter the concern that interviewing does not necessarily enable the researcher to learn about leadership, but rather how the participants 'account for' leadership. It may contribute to a potential pattern in how the participants account for leadership (Czarniawska 2007, p.81).

However, only a small amount of relevant documentation was available.

Consequently, it is more accurate to say that in this study the use of documents supplemented the data, rather than enabling the triangulation of staff perceptions.

Likely documentary candidates were the official records of 'never events'<sup>23</sup>, 'near misses'<sup>24</sup>, and patient safety reports. However, there were very few incidents that had been recorded in a 3-year sample period. On examining records for this period, the text related the patient and equipment details almost exclusively, and did not provide any (rich) data relating to leadership activities or observations regarding relational aspects. This avenue was not pursued any further, therefore. However, the NHS' Emergency Framework document (2016) provided insights into the procedures used during the COVID-19 pandemic at the hospital sites selected for the study. As I was unable to observe the day-to-day work of teams in and around the operating theatre, I considered whether there were other meeting notes that I could review that would reflect the social interaction between surgical team-members. As I observed at the clinical meeting, and from never events and similar notes, these focus on patient

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<sup>23</sup> Serious incident or error, e.g. of patient harm, that could have been prevented before harm occurred.

<sup>24</sup> Surgical incidents that could have resulted in very serious adverse damage to the patient or their confidence e.g. surgery carried out on the wrong part of the body but were prevented.

and clinical matters, rather than recording observations related to atmosphere. Whilst notes from meetings between Consultants and senior leaders may have proved to have been a source of data, as explained above, I was unable to gain consent to access these types of meetings and their notes.

### **3.8. Database**

To ensure the reliability of the research, a database was developed. This protects the data in an orderly, retrievable form. It contains password protected field notes, documents, and copies of interview transcripts. Transcripts are cross-referenced to memos contained in NVivo files. The database was stored on the Cardiff University's secure network drive.

### **3.9. Ethical considerations**

The design and methods used served to promote the trustworthiness, credibility, transferability, dependability, and confirmability of this research, by using a fixed, replicable process (Yin 2003; Heilmann, P. and Aaltio 2010; Mallett *et al.* 2012). Ethical requirements have been observed and I have avoided plagiarism when citing other authors' work (Wager and Wiffen 2011). The research has been conducted according to Cardiff Business School's Ethics Code of Practice. All data have been handled and stored according to the University's Research Integrity and Governance Code of Practice; a copy of the data will be retained as specified in University Records Management and Data Protection Policies.

Obtaining ethical approval and clearance to conduct research in the NHS (Appendix A) required several steps which took almost 15 months to achieve as detailed in Appendix D. On 18 March 2020, the NHS Trust sent out notification that my research, along with all other non-COVID-19 related research, was suspended until further notice. There was no indication of how long this suspension may last. To try to mitigate the substantial adverse impact that this had on my data collection, I applied to the Cardiff Business School Research Ethics Committee for approval to expand my pool of participants to individuals not currently working in the NHS, for example, individuals who have retired from roles in the NHS, and individuals who are/were in a non-NHS role. Academic researchers, regulators and members of professional bodies are examples of the wider pool of participants, who I believed could have an informed view about the subject of my research.

### 3.10. Data analysis

There is not a single method that has been specified as appropriate for analysing qualitative data, although inductive methods have been used predominantly (Klenke 2014b). However, in keeping with the emergent case study approach I engaged, I used an abductive approach, with movement backwards and forward between reviewing the literature, collecting data, and analysing the data.

This abductive approach has become popular in organisational research (Bell *et al.* 2019). As in the case of the research on which this thesis is based, abduction is appropriate where there are ambiguities within the context being studied that current theory does not explain. This method enables the researcher to accept that there may be unexpected data, or novel themes, not yet identified in the existing literature, rather than confirm a theoretical or conceptual start point (Bell *et al.* 2019).

The analysis using an abductive approach leads to theory that has resulted from the analysis, rather than being the antecedent. The thematic analysis allowed for the identification of repetitive topics, patterns, similarities and differences in transcripts and other materials. I also reflected on what did not appear in the data, although it may have been expected to appear, based on the literature review. In order to do so, whilst following this abductive strategy, I kept in mind the antecedent concepts in previous studies. This was to help me identify examples of the leadership occurring, what its precursors were, and to make connections with the data (Yin 2014, p.138).

#### 3.10.1. The nine stages of analysis

The analysis conducted during this study comprised of nine stages, adopting a 'methodological bricolage': this allowed me to select tailored analytic moves to address my research objectives and to facilitate trustworthiness (Pratt *et al.* 2020, p.211).

Using established conventions to analyse data, **stage 1** of the process was to initially code data line-by-line, using the 'in vivo' coding method. This method comprises creating codes directly from the data, in order to keep concepts as near as possible to the participants' terminology (Gioia *et al.* 2012; Given 2012). This includes using terms used by participants. For example, one participant considered the organisation wanted surgical team-members to be like 'Lego pieces'. Others talked about using a 'template' to help them to create an atmosphere in the operating theatre. The term

'old school' was used to describe senior members of the team who continued to act in ways that might have been acceptable in the past but were now falling out of fashion or what was acceptable in wider society. To safeguard reliability and validity, the codes were used only when they were words or terms that were used by several participants and/or whose meaning and use was confirmed by other participants.

**Stage 2** required the data to be synthesised into themes, which are 'patterns of shared meaning underpinned or united by a core concept' (Braun and Clarke 2019, p.593). Initially, the synthesis was based on themes apparent in the existing leadership literature (Endrissat and von Arx 2013; Raelin 2016b; Kempster and Parry 2018). However, I suspended my judgement about the conclusions drawn from this body of literature to enable me to discover new insights (Gioia *et al.* 2012). Based on previous research, the data were mapped on to four themes: how leadership is carried out (leadership activities), what implicit and explicit rules or guides are used for leadership, what is the process for leadership (inputs, outputs, and context for example), and less visible, socio-emotional aspects of leadership. This provided a structure to systematically enquire about visible and less visible aspects and experiences of leadership, and how changes had occurred over the years in the process of how different people exercised, contributed to, or were excluded from leadership activities.

The individual items mapped onto the four main themes were then organised into sub-codes to reflect the full variety and meaning of participants' experiences (Glaser, B. Strauss 1973; Charmaz 2014). These emerged as 'bundles of activities' which contributed to each of the four different aspects of leadership. These were named and reviewed for their fit with the data.

For **stage 3** of the analysis, I produced working definitions of the activities, and experiences that the participants described. In previous leadership and psychology studies, certain activities and practices have been identified. Examples of these<sup>25</sup>, and descriptions of what they entail are shown in Table 3-2.

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<sup>25</sup> Adapted from Raelin (2016a) and Edmondson (1999).

Table 3-2. Definitions of leadership activities identified in previous studies

<b>Activity</b>	<b>Description</b>
Designing	This is an envisioning and directing activity. Team-members discuss possible approaches to what is going to be done. They decide on respective responsibilities, including for tasks.
Scanning	An organising activity or process to identify human and non-human resources. This may be, but is not restricted to, information, tools, or technology.
Signalling	Redirecting people's attention to work on a project. May include meaning making, by drawing on the organisation's memory to achieve cognitive consensus and facilitate the sharing of knowledge.
Weaving	By motivating, inspiring and/or empathising, webs of interaction are created to focus on the activities to be undertaken. Trust amongst team-members may be built through this process.
Stabilising	Offering feedback to evaluate effectiveness. This may lead to learning, structural and behavioural.
Inviting	Encouraging team-members' participation, especially if they are reticent to do so. Encouragement is not only physical but may also be by sharing ideas and sentiments.
Unleashing	Ensuring that all team-members who want to contribute may do so, without fear of repercussion. Errors are not held against them, and their efforts are not deliberately undermined. Team-members can raise concerns, even if by doing so, it creates a discrepancy or ambiguity amongst the team-members and in their decision-making.
Reflecting	Inviting team-members to openly challenge current views or expectations. This can lead to learning to meet mutual needs and interests. This in in the course of a dialogue in

Activity	Description
	which the team-members display an interest in listening to others, reflecting on perspectives that differ to their own, and being open to the possibility of changing on the basis of what they hear and learn.

Based on the analysis of a primary round of interviews, these activities were supplemented with additional examples of novel activities occurring that contribute to leadership. These were explored in the following data collection. This abductive approach continued through the subsequent interviews. An explanation of the terms used for these activities is provided in Table 3-3. These are defined according to my understanding of the participants' descriptions of them, and by reference to the Oxford English Dictionary.

Table 3-3. Description of novel descriptions arising from the data

Activity	Description
Communicating and Intercommunicating	<p>Communicating is understood to be the conveying of information, ideas, or emotions. It may be employed as a one-way process, informing people of facts or directions.</p> <p>Alternatively, it may be though <i>intercommunicating</i>. This includes heeding communication from others, for example inviting a dialogue, listening, and observing body language. Intercommunicating stretches beyond 'communicating' and is not restricted to written or verbal communication, for example listening and observing body language. It envisages two-way engagement, which invites and receives communication from others. It may require the support of other activities, for example 'welcoming'.</p>

<b>Activity</b>	<b>Description</b>
Diminishing	Preventing or hindering leadership, by communicating in a way that leads to the preventing, or diminishing, of respect for a person, or prevents, or diminishes the person's confidence to contribute to leadership.
Respecting	Respecting activities include engendering respect, possibly as a figurehead, and (not) respecting others' opinions; seeking advice, opinions, and help.
Decisioning	Decisioning activities include the act or process of accessing information from one or multiple external sources, and drawing on personal recollections, knowledge and using initiative. It may result in a decisive action, a referral for a decision by another person, or inaction.
Empowering	Empowering activities involve the giving or delegating of power, authority, or ability. They may prevent or impede individuals from taking charge and/or making decisions without having to consult a person occupying a role that is considered more senior in the organisational hierarchy.
Creating a safe atmosphere	<p>Encouraging or manipulating the working environment and activities of people to promote a safe atmosphere.</p> <p>'Safe' refers to two linked outcomes: (1) the psychological safety of individuals, so they feel able to speak out about concerns without fear of negative consequences, personal reprisals such as blame or damage to their career; and (2) patient safety, that is the prevention of harm to patients.</p>
Templating	A deliberate physical or cognitive activity to create a safe atmosphere based on prior knowledge and experiences.

One of the novel terms, decisioning, requires a more detailed explanation to relay my understanding of the activities and to represent participants' experiences. An obvious question when seeing the term 'decisioning' is, "Why not call it decision-making?" There are two main reasons why I have devised the term 'decisioning'. The first is to reflect a critical view. To use the term 'decision-making' implies a positive expectation that a decision will happen. For whatever reason, people do not always make a decision when one might be expected. The second reason reflects the philosophical nature of this study. The social constructionist ontology of considering the 'lived' experience, through the recursive interaction among people, activities, artefacts, and contexts calls for attention to the specific context in which the phenomenon takes place. This includes possible contradictions and ambiguities. It reaches beyond consideration of *the* snapshot of a moment when a decision is taken. 'Decisioning' reflects the broader process that may result in a decision being made or not made. It is adapted from the use of the term in the digital technology field: the act or process of accessing information from one or multiple external sources, and drawing on personal recollections, knowledge and using initiative. It may result in a decisive action, a referral for a decision by another person, or inaction.

In **stage 4**, based on the data, where it was possible, I labelled identifiable descriptions of leadership by participants as hierarchical, collective, or command. These are not considered as exclusive, by which I mean that more than one form of leadership may be apparent in a particular context. Leadership was considered as hierarchical if it appeared to emanate from an individual's actions/decision and displayed dyadic leader-follower, top-down characteristics. By contrast, collective leadership was considered to occur if leadership occurred through a collective endeavour, rather than arising out of the authority of an individual's role. This included people at different hierarchical positions moving between leading and following. I considered the military-style command leadership to be exercised if leadership occurred due to the exercise of authority based on a role or rank, by one person or a unit of people, giving direction in order to achieve defined objectives in accordance with NHS policy (NHS England Emergency Preparedness Resilience and Response Unit 2016). These three definitions were based on the distillation of the multitude of definitions available in the leadership literature, ranging from



handbooks on leadership, to publications focusing on specific leadership forms, for example the Sage Handbook of Leadership and the NHS Emergency Framework for the response to emergency situations (Bryman *et al.* 2011; NHS England Emergency Preparedness Resilience and Response Unit 2016).

This list of leadership forms is not presented as an exhaustive one. It does not intend to specify all leadership forms experienced throughout the existence of the NHS, or more widely in other environments. I do not include here discussions of the styles of leadership, such as transformational and servant leadership. Also, returning to forms of leadership, clinicians consider a substantial proportion of their work is 'routine' and not risky. However, for the purposes of the considering leadership in extreme contexts, I analysed only leadership relating to surgical teams' work that has a potential or realised risk, with reference to Hällgren, Rouleau, & De Rond's (2018) study of extreme context research (ECR).

Next, for **stage 5**, I started to examine whether people's experience of leadership had changed. This encompassed the changes indicated in earlier academic and anecdotal accounts, due to amendments to training practices, the law, and hours of work. I bracketed experiences across three successive periods which do not hold theoretical importance but are 'a way of structuring the description of events' (Langley 1999, p.703). As Langley observed about the temporal bracketing strategy, I found certain continuities across, and discontinuities at the border of each period. These three periods were the 1980/90s before reforms were made to surgical teams' working arrangements in or about the mid-1990s'; the mid-1990s to 2020; and from the onset of the COVID-19 pandemic. It emerged from the data that four novel aspects were implicated in changes over these periods. First, participants were spoke about atmosphere, and identified 'atmosphere' as a component of their surgical work that had become of increasing importance. This was associated with the second aspect of using a template to systematically create a 'safe atmosphere'. The issue of atmosphere was also implicated in the third aspect of change: experiences of the introduction of digital technology. Atmosphere surfaced again in the fourth aspect of change: a contestation amongst NHS staff about the extreme context of the COVID-19 pandemic.

It is important to note that that participants spoke about leadership activities that apply across a wide range of clinical work, not solely related to the four aspects

identified in the previous paragraph (*atmospheric work, 'templating' for safe atmospheres, digital technology, and contextual contestation during the COVID-19 pandemic*). Participants reported activities that have previously appeared in the leadership literature. However, novel activities related to the emerging features of atmosphere became my focal point. Accordingly, unless the activities identified in Stages 1 and 2 are implicated in the above four aspects, the established activities fell outside the scope of this thesis.

At this point, **stage 6**, I revised the organisation of the data that I had previously arranged according to themes arising from the existing literature. I arranged it into four new main themes: atmospheric work, templating, virtualizing, and contextual contestation. I drew together data which had emerged as integral to the four novel themes, to nest as sub-themes of the leadership process (Figure 3-3).

**Leadership process activities**

**Theoretical categories/**

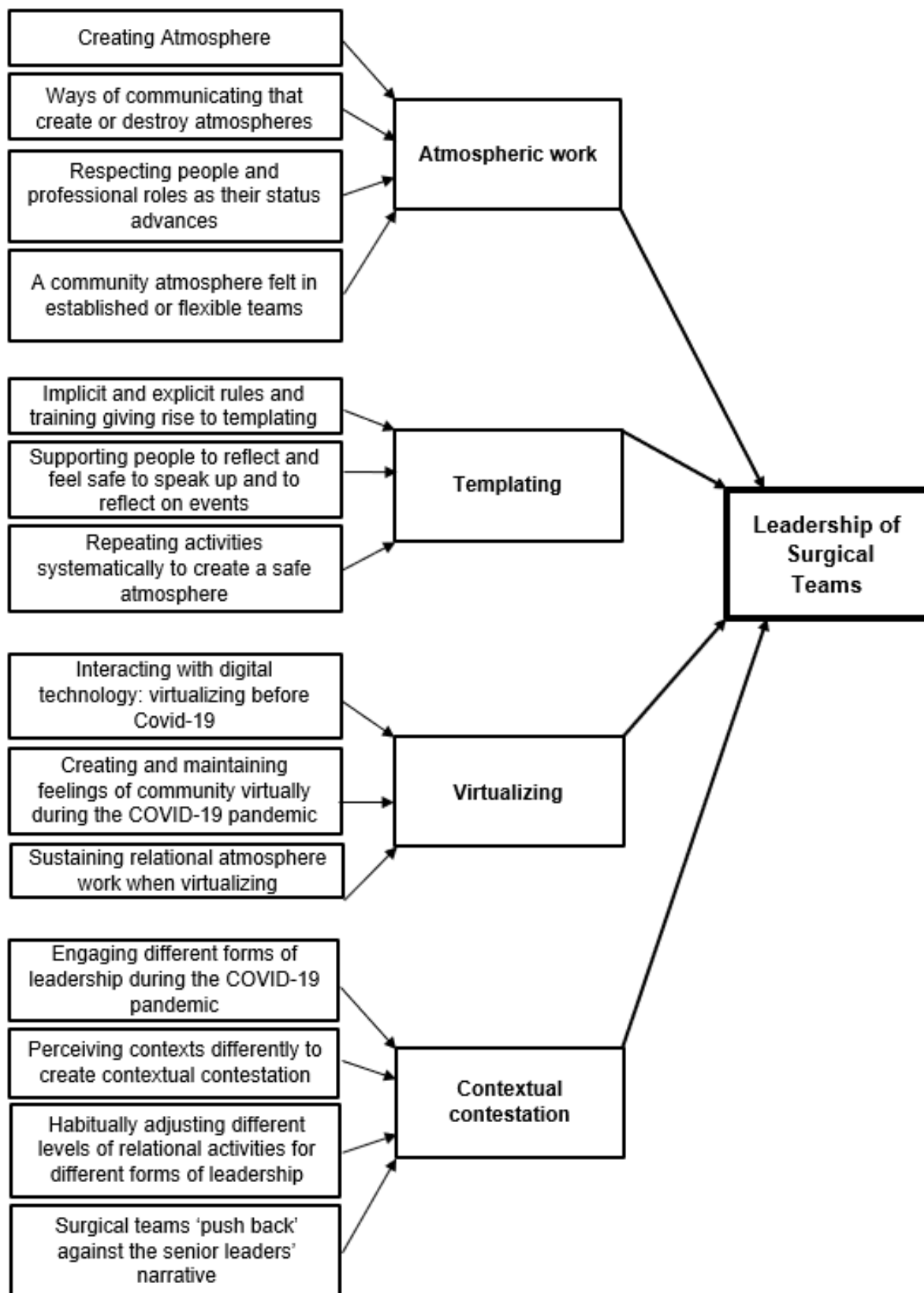


Figure 3-3. Data structure of surgical team leadership activities

Subsequently, for **stage 7**, I managed data relevant to the four themes as they related to the three time brackets.

For **stage 8** I moved between my data and previous studies concerning atmospheres in work environments, the introduction of digital technology, and the extreme contexts. My aim was to build on existing work regarding these themes, by specifically considering how previous theory may be applied to leadership, and more specifically leadership in the healthcare context (Cortellazzo *et al.* 2019; Shah *et al.* 2019; Larson and DeChurch 2020). In relation to the first theme, participants indicated that atmosphere was related to patient safety and speaking up.

Consequently, my aim was to understand whether there was any extension to the existing studies on psychological safety (Edmondson 1999; Edmondson 2003; De Hoogh *et al.* 2015; Frazier *et al.* 2017). It became apparent that we had a weak theoretical understanding of the role of atmosphere in surgical team leadership, in both face-to-face and virtual situations. Also, that theory was yet to be developed in respect of the intersection of relational aspects of leadership in extreme contexts.

Consequently, I shifted my focus to understand these phenomena. Accordingly, for **stage 9**, I enhanced my interview protocol to collect additional data to build on initial insights regarding the novel aspects, and to gain a better understanding of the connection between leadership, digital technology, atmosphere, and extreme contexts. I moved through stages 1 to 8 above in respect of the new data as new participants came forward. The overall structure of the data is shown in Figure 3-3.

It is important that in carrying out the analysis that this is done sensitively, listening to the voice of the participants in the data and the meaning that produces, by not imposing the researcher's preconceptions (Yardley 2016, p.295). Accordingly, I discussed with seven participants, who had been interviewed early in the interview stage, the insights from data gathered during interviews and virtual observations in stages 1 to 8. Their comments signalled the trustworthiness of my findings in that they confirmed my understanding of the experiences of leadership, atmosphere, and leadership changes that had occurred.

Citations were used extensively from interviews and observation notes to remain accurately close to the data. In adhering to this approach, my analysis aims to produce findings that genuinely reflect what has happened, rather than merely reporting my own impressions. In keeping with good social science research

requirements, part of this process was to identify and address rival explanations for findings that arise out of the analysis (Yin 2014, p.168). For example, is the reason for changes in experiences of leadership due to societal changes, rather than changes in work arrangements and the composition of surgical teams?

### **3.10.2. Summary**

This chapter provided details of the methodology and methods I employed to address the research question. My description of the methodology included an explanation of the social constructionist philosophy which underpins this study. The findings arising from the analysis of the data, as described above, are reported in the following four chapters. First, the next chapter provides an analysis of the activities that participants report are used for leadership of surgical teams. These underpin changes to the Firm model of leadership, and also support my analysis of additional changes related to leadership of surgical teams which are presented in the subsequent chapters.

## 4. Atmospheric work and Templating

### 4.1. Introduction

In building an understanding of how leadership was traditionally practiced in surgical teams and how it is experienced today, I found that the leadership activities could be grouped as ‘bundles’ of activities which contribute to different aspects of leadership. The overall structure of the data relating to these activities is shown in Figure 3-3 in the previous chapter, and the definitions for the bundles and individual leadership activities are provided in Appendix E.

Leadership activities that already feature in the leadership literature surfaced in the data. These include designing, signalling, scanning, stabilising, and weaving (Raelin 2016; Crevani 2018). For the purposes of this thesis, I delineate these as a bundle of activities which focus on ‘organising’ during leadership. I do not report on these, however, I do report below on the novel bundles of activities I discovered, which I have identified under the categories of atmospheric work, templating, virtualizing, and contextual contestation. Definitions of activities are based on existing ones in the leadership literature. However, if they are novel, activities are defined according to my understanding of the participants’ descriptions of them. In this chapter I report on the first two categories, atmospheric work and templating for safe atmospheres.

Atmosphere is ‘an affective phenomenon’ that is perceived individually or collectively by people. The affect described by participants in some cases was a basic feeling, for example perceiving the atmosphere in theatre as “nice” or “good”, meaning it was pleasant rather than unpleasant. In other cases, they used a generic description as “not nice” as a component of a more specific characterisation of an atmosphere, such as an “unsafe atmosphere”. A “*safe atmosphere*” enables people to feel safe to speak up about matters that cause them concern, whereas unsafe ones deter people from speaking up. Certain participants described it as possible to intentionally create or re-create an atmosphere using what I understood as *atmospheric work*. To establish an understanding of what is meant by atmospheric work, I first set out in section 4.2, what surgical team-members understand atmosphere refers to. Based on this, I conceive atmospheric work as work undertaken more, or less, purposefully to create and/or maintain a particular kind of emotional atmosphere in a team or organisation.

In section 4.3 I present atmospheric work in relation to leadership activities generally. It is important to note that in addition to the specific atmospheric work activities described below, surgical team-members also draw on more general leadership activities, such as communicating and welcoming to create and maintain atmospheres.

Secondly, in section 4.4 I relate how people experience 'safe atmospheres' in operating theatres, preparing for, during, and after surgery. Participants describe safe atmospheres may occur spontaneously, through relational aspects of team-working. However, it was apparent that people also use reproducible patterns of activities to create a 'safe atmosphere', a concept that I term 'templating'.

To support the situating of the findings alongside different aspects atmosphere engaged in previous research, examples in the data are set out in Table 4-1.

Table 4-1. Examples in the data of atmosphere and related terms

<b>Term</b>	<b>Definition</b>	<b>Example drawn from this study's data</b>
Atmosphere	A mood or feeling in a situation which may arise spontaneously or be deliberately created.	"So, if you walk into a room and everyone's calm and chatting and laughing, and joking, the whole atmosphere feels like a pleasant atmosphere" [Surgical Registrar: P33].
Affective atmospheres	An atmosphere that causes affect, including the expression of feelings, or emotions.	"An atmosphere of hostility or lack of support in a theatre can, I'm sure, have enormous effects on the safety, the efficacy of the surgeon's decision making, and it can, of course, actually make their hands shake" [Consultant Surgeon: P6].
Atmospheric conditioning	The invocation of a mood or emotional quality by the atmosphere that results in people accepting the situation or becoming accustomed to it.	"So, if you're having a nice, straightforward operation, everyone's fine. It's a really lovely atmosphere. But if something starts going wrong, a tension, you can feel it change. And then the way everybody speaks and interacts changes with it, and people are less sort of jovial and having chat, and more like, I'm going to sit and be quiet until I'm spoken to" [Surgical Registrar: P28].
Atmospheric	A descriptor of the atmosphere.	"We've all experienced [that] and is not nice, and I think I would call that an unsafe atmosphere" [Surgical Registrar: P2].
Atmospherics	Insights into the nature of an atmosphere from miscellaneous sensed data	"You will sense that in theatre, if I walk into theatre, with all these years of experience, I can tell immediately where the patient, what's going on. I mean, and who's happy, who is not happy. It will take me less than a minute to look at their faces. And the anaesthetist, to hear the tones of the monitors, to look at the surgeon's focus. To look at the blood loss, and the speed of aspirating. So many different things tell you about the situation. But yes, there will be all kinds of, there's definitely atmospheres" [Nurse: P13].
Atmospheric work	Work undertaken more, or less, purposefully to create and/or maintain a particular kind of emotional atmosphere in a team or organisation.	"Try and create a good atmosphere? Yeah, I try to. So, I bring speakers with me. I ask everyone in there is there any particular type of music they like putting on. I always make sure it's on, you know. So that's what I like. And I try and create that by, you know, have a bit of chat with the Anaesthetist beforehand. Have a little banter with the scrub team, as the patient's getting ready. Just so everyone knows that it's not, you know, we can talk while this is going on" [Surgical Registrar: P41].



## **4.2. Atmosphere**

Participants considered atmosphere to be a feeling that 'hangs in the air': intangible but affecting their mood, how they interact with people, and how they carry out their work. However, when they first start working in theatres, and become aware of the atmosphere, it may not be as they expected:

"it's a nice atmosphere. I was quite surprised because I remember thinking, gosh, is it going to be really tense because they've got a human being on the table that's open. I was surprised" [Specialist Nurse: P11].

This was true, even if they have worked in healthcare before. This was because the surgical environment is considered to have its own atmosphere.

"I think theatre's is a bit like ITU, it's very enclosed. They're not generally, apart from the surgeons, and I suppose the anaesthetists, the core team are not going anywhere else. They, they're in that kind of enclosed atmosphere. You don't find them on the wards or anything like that." [Nurse: P15].

The atmosphere in the surgical environment generally is reported by some participants to have become a more relaxed one. This is happening as more "old school" staff retire, or are required to undergo leadership, equality and diversity, or similar training. However, it is not always the case that staff who create poor or unsafe atmospheres are required to receive training or other interventions. Despite talking about how to hold people to account and escalate the problem, there are,

"medical directors who do a lot of talking about dealing with problem members of staff. But that doesn't happen" [Consultant Anaesthetist: P57].

## **4.3. Atmospheric work**

### **4.3.1. Creating atmosphere**

People are usually prepared for the atmosphere in surgery through training and experience, and how people carry out their work. Consequently, how atmosphere is created has changed; for example, over time a more "laid back" approach has developed in the way people carry out their work. This is due to the use of first names for surgical staff, including the Consultant, and a reduction in restrictions on

who enters theatre during a surgical procedure. Other examples are the playing of music, and less quizzing of younger surgeons to test their knowledge.

It was evident from participants that established relationships amongst the team support creating the atmosphere. In these cases they work very closely together, respect each other professionally and clinically. So that, “as friends, we had good open working relationships with the scrub team and the junior staff.” [Consultant Surgeon: P4]. As one nurse expressed it, creating a pleasant atmosphere can be simple: “just be nice to people. You know, it's not rocket science” [Nurse: P29]. Thus, atmospheres may arise spontaneously from the relational informal aspects of working with a familiar team when they are “having a bit of a chat”, and “have a little banter”.

“If I didn't know that person, I wouldn't have said it, I wouldn't have said anything because, you know, you don't quite know what's going on. So, yeah, I think, again, it depends on how your relationship with that individual is or within that team is” [Consultant Anaesthetist: P24].

Even if people do not know one another, a pleasant atmosphere can be created by deliberately drawing newcomers in, so they feel part of the community. This can be as simple as asking people who they are, how the existing team-member can help the new arrival to the operating theatre and, in respect of the operation they are about to take part in, “what do you hope to get out of it?” [Surgical Registrar: P36]. Similarly, creating the atmosphere may need an explanation of what to expect. Pre-empting anticipated issues, that may result in a pleasant atmosphere becoming tainted by team-members feeling stressed or impatience, can maintain a pleasant atmosphere throughout. This is exemplified by a Consultant identifying the opportunity for a junior surgeon to gain experience and announcing to the team that surgery will be carried out by the junior. The team can understand from what is implied by the Consultant's statement that the trainee may struggle or take longer and prepare for that.

““This is the case that, you know, [name of Registrar] is going to be doing”, so everyone prepares themselves, you know, and everyone's not clock watching them. They know that case might take a little bit longer” [Surgical Registrar: P2].

This was observed in surgical team meetings during which team-members discuss patients' treatment.

Senior Consultant (participant B) supports more junior, newly appointed Consultant (Participant C) trying to present patient information at the meeting of a type not normally discussed in that meeting. Participant C says, “I know we don’t discuss other [specialist case-type] but he’s a new Consultant and it’s a new procedure but I think we need to discuss them. Please discuss them and not leave them out because they’re not [usual specialism type]. Participant D: “Do them at the end, but to discuss them is fair enough [Observation note 12].

#### 4.3.2. Ways of communicating that create or destroy atmospheres

This informal atmosphere, based on established relationships is perceived by many participants as dependent on leadership that is supported by clear communicating. It is about sending a message to the rest of the team, establishing how to act in theatre. Communicating is understood generally to be imparting information, directions, and an expression of ideas or feelings. It may be a one-way process, solely to inform people. Alternatively, communication may involve a relational element, so that more than one person is engaged in an exchange of information or opinions. The latter relational version I term *intercommunicating*. This and other activities falling within the bundle of communicating activities described by participants is shown in figure 4-1, defined in Appendix E and described below.

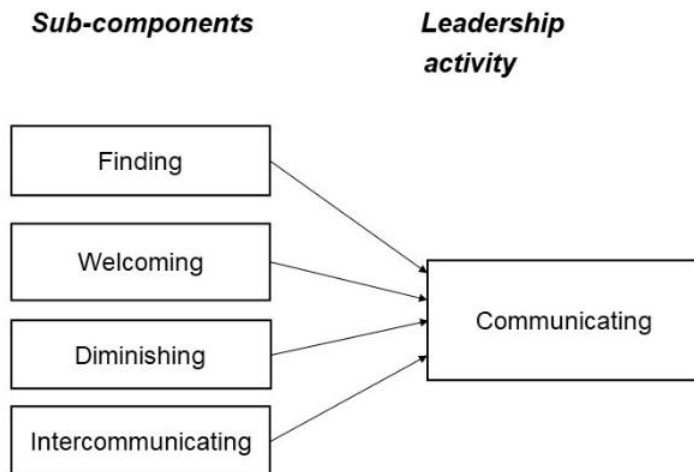


Figure 4-1. Individual activities within the bundle of Communication activities

It was emphasised by most participants when sharing their experiences in interviews how important communicating is for leadership. It is not necessarily an activity that

happens spontaneously: their accounts of it make clear that it can require some effort to communicate effectively.

#### *4.3.2.1. Finding the best time and way to communicate*

This effort includes finding an appropriate time, form of, and place for communication. Finding the best time for communicating may result in a better response than by speaking to someone immediately. The atmosphere in which that conversation takes place is fashioned by taking advantage of identifying and harnessing influences on atmospheres,

“because I think if you find the right moment, the right place, and the right person to do that, then automatically the person involved will be, will acknowledge that better rather than approach them directly when the fact happened” [Clinical Manager: P17].

When communicating, finding out what an appropriate way to speak someone is entails a number of considerations. This involves circumventing constraints on the conversation, such as not having knowledge of other people’s role (Table 4-1) and knowledge of the language as “lots of different people that you talk to day to day, half of them can't even speak English” [Specialist Nurse: P42]. Consequently, the communicator needs to consider how the atmosphere may be experienced by people whose prior experiences and training may differ. A subsequent change in, or development of, communication skills may then be required in order to create an atmosphere in which they can communicate effectively:

“I just try to develop those kind of communication skills, slow everything down, but it's much easier said than done, actually, it's something I found very challenging to develop as part of my leadership role” [Surgical Registrar: P02].

#### *4.3.2.2. Welcoming people and creating welcoming atmospheres*

Certain participants spoke of the need for people to be welcoming, as “when you go to theatre, it's very much the domain of the theatre staff” [Surgical Registrar: P27]. Surgical team-members describe welcoming as being approachable and making “sure that [people] feel like their concerns have been listened to” [Surgical Registrar: P05]. Although the existing team-members may already be experiencing a ‘listening’ atmosphere, the activity of welcoming recreates the atmosphere for the newcomer too.

Senior surgical team-members draw on their own experience as a junior to create a welcoming atmosphere, because they “know how it feels to enter an operating theatre. Being the junior. Being someone unknown. So, there is a bit of apprehension on their part.” [Anaesthetic Registrar: P54]. In doing so, the newcomer’s emotional experience of the atmosphere is changed from one of apprehension or fear. Despite, or possibly because of, the reduced time to build relationships in contemporary surgical work, an active approach is often taken to supporting newcomers. This is by ensuring the atmosphere in theatre is conducive to newcomers learning about it, because,

“it's a completely alien environment. But what you want to do when you walk into theatres, you don't know nothing about it completely, is feel that staff there are willing to engage with you and are willing to make you feel comfortable. [...] So, what we used to do in theatres, like we would say to them at the start is, "Don't be worried" [Nurse: P60].

By welcoming people, they enable new colleagues to step into a pleasant atmosphere despite not yet feeling part of the community:

“Well, they know each other far better, you know, and you know, so from that inter-personal relationship as the trainee coming into that environment, you are the outsider to start with. Most theatres I've worked in, have always been very welcoming and get to know you very quickly ... as long as you're friendly and approachable and, I guess, you show some level of competence, people will respond to you, and it will be a friendly, happy place to work” [Surgical Registrar: P39].

Although described as “paternalistic”, the practice of welcoming is seen as part of the growth in collective leadership and moving away from hierarchical leadership. Some staff relate being “in theatres and they're kind of warm and welcoming, and they discuss with you what we need to do, how we're we going to do it and ask your opinion, advice and guidance, I'm often surprised by that... because I trained a long time ago and I came from an era where Consultants were gods and you bowed and scraped” [Nurse: P43].

#### 4.3.2.3. *Diminishing respect for a person or their confidence to contribute*

However, it was also evident that this approach is not homogeneous. Learning about leadership and surgical work is sometimes hindered by an activity that I have termed

'diminishing'. That is preventing, or the diminishing of, respect for a person, or diminishing the person's confidence generally to contribute to leadership. In the context of atmospheres, it may prevent someone being included in a particular atmosphere. It may be an isolated event or the culmination of ongoing practices, because "if you continually treated people like that, their ability to, to respond to you is going to diminish over time" [Surgical Registrar: P36]. The activity includes indirect and direct verbal and physical activities, if someone "starts shouting or they start giving orders without any right or they make it. Or sometimes they make people feel very degraded" [Anaesthetist Registrar: P54], and demean their role:

"What happens usually is you'll have bolshie anaesthetist come in and be like, "*Argh. WHO checklist<sup>26</sup>*"... You know that you have an arrogant surgeon come in and be like, "*Ah. No blood loss. Don't need anything. Anyway, can we just get on with it?*" And that I think is terrible because it kind of just, it effectively undermines someone's entire role. And if someone you know, if it was my role, like my job today is to read this, and somebody just said, "*Oh, your job's not important, I'm gonna speak over it and not listen*" [Surgical Registrar: P41].

Someone may feel diminished because the Consultant "didn't look at me, didn't acknowledge me, just walked straight past me like I didn't exist... I wouldn't know if you'd heard me, ignored me or I wouldn't get any feedback from that" [Surgical Registrar: P28]. It can result in feeling of being set aside from the rest of the team, not being part of the inclusive atmosphere. Instead, they are thrown into an atmosphere in which they feel patronised and less important, because someone does not "let other people speak and sort of engage in a conversation, rather than be patronising and looking at everybody from, from the top of the hill and just moving them like pawns on a chessboard" [Consultant Anaesthetist: P19]. The more extreme examples of this can result in illness and loss of staff,

"because the boss person didn't listen, and wouldn't allow the Registrar to air their concerns... But that Consultant shouldn't have made that Registrar feel that they couldn't have that conversation. That Registrar went off sick for some time because of that conversation had. They got reprimanded. They were undermined. They were professionally dis-, dis-, they were professionally discourteous towards the Registrar. That's an example of bad leadership." [Nurse: P11].

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<sup>26</sup> This has been a mandatory process in the NHS since 2009. Its aim is to safeguard patients during surgical procedures by preventing errors, such as the wrong part of the body being operated on. The surgical team is required to carry out checks before, during, and after an operation.

However, diminishing, and consequently experiencing atmospheres in which they feel uncomfortable, is not restricted to junior staff. This is illustrated by a senior experienced Anaesthetist raising concerns at an Executive level meeting, who was left feeling “significantly patronised” when she received a “pat on the head, “*the big boys have discussed this*”” [Consultant Anaesthetist: P57]. When communication lacks a relational element and an exchange of information or views, as illustrated in the quotation above, leadership resulting from that activity is negatively perceived: “the biggest failure I think you can do as a leader, is not, not to listen to people” [Nurse: P29]. This is because,

“you can't do leadership without engaging with people. So, the examples of poor leadership that strike me are the people who don't talk with people who don't communicate, who don't engage, who don't have dialogue and this debate, and two-way communication around it. And that's undoubtedly poor leadership. Even if you're making decisions that people don't like, then the need to explain the basis of that decision, that's an important part of it” [Ex-Executive Board Member: P09].

#### 4.3.2.4. *Intercommunicating: two-way communication based on relational aspects*

Thus, people perceive the need for intercommunicating, that is relational communicating: the relational aspect generates, or contributes to, people's sense of the atmosphere. One participant described it as “two-way traffic” [Consultant Surgeon: P12], where team-members communicate ideas and invite feedback from others, during surgery and also observed in team-meetings (Table 4-1). Failure to do so can produce “examples of poor leadership... where the leader isn't communicating their concerns... But then equally not being able to invite that feedback from the team of, “*We've got a problem. Has anyone got an idea of how to solve it?*” And yeah, lack of two-way communication” [Consultant Surgeon: P07]. Communicating can be affected by something that has happened earlier which in turn can affect the atmosphere.

“One of the surgeons who was involved with some debrief of the death of a patient. And I wasn't there. But it was clearly, I suspect there had been some criticism of how it had been handled, I suspect. And they came in and you could tell that they weren't in a good mood following that conversation. And that, you know, that completely affected the whole atmosphere within, you know, for that day. And, you know, you could feel the atmosphere almost, kind of thing. I've had other times when I've worked with, you know, kind of, one of, you know, the assistants who work with us and, you know, she, she was obviously

having problems with the management about where she works and how she worked all this kind of stuff. And you can tell, you know, she was, she brought that atmosphere into the, into the day and made things more difficult for people” [Consultant Anaesthetist: P27].

#### **4.3.3. Respecting people and professional roles as their status advances**

Whilst the importance of the surgeon’s role in communicating and atmospheric work is acknowledged, the part other actors may play in these activities is said to have changed over the years. One factor is the shift in the relationship of the surgical team ‘triumvirate’<sup>27</sup>: that is the lead surgeon, lead nurse, and lead anaesthetist:

“The way that I've always conceived it is that the theatre team is effectively tripartite, and there are three leaders in theatre, by and large, who on the whole should get on one way or other together. The lead surgeon, the lead nurse is usually the scrubbed nurse, and the lead anaesthetist. And it's irrespective of grade... they act as the, the leader for their own mini team, whether it's the other nurses and the theatre runners, the lead surgeon and their assistants and the anaesthetist and their team. And usually that dynamic works quite well... On the whole, it works, and there's a whole range of factors that can affect that interaction” [Surgical Registrar: P25].

The balance of influence within the team, and consequently the balance in the creation and maintenance of atmospheres, has changed over the last three decades. Anaesthetists have come to command greater respect and to take a more equal part in decision making. Similarly, some members of the nursing profession see themselves as being in a stronger position. This is as a result of becoming independent from Consultants, by virtue of the advancement in their clinical training, and consequently their professional status within the multi-disciplinary environment. This rise has been perceived by some participants as being at the cost of a decrease in the power of doctors and their ability to engage in leadership. However, this triumvirate arrangement does not necessarily result in an equal distribution of power between the lead individuals and/or the sub-teams (surgeons, anaesthetists, and nurses) they belong to. Although now on a more balanced footing, being equals is not anticipated “because at the end of the day they are surgeons” [Advanced Nurse Practitioner: P22].

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<sup>27</sup> Triumvirates, extend throughout history, being the sharing of power and responsibility for tasks by three individuals or groups of individuals (Latin: triumviri) (Oxford University Press 2005) .



The triumvirate arrangement fluctuates too due to contextual factors. Seniority within a role can impact on leadership in some situations. If an inexperienced surgeon is operating, another non-surgeon member of the team may suggest decisions the junior surgeon could take, or even make the decision to call in someone else to assist or take over the operation. This may be without the junior surgeon knowing that someone has been called. Thus, there is not necessarily someone who is in overall charge of the atmosphere throughout surgery, although the surgeon may have a titular role as leader of the surgical procedure, because the patient is legally their responsibility. There can be a change in balance in who is maintaining or changing the atmosphere, say from one where people feel stressed because the surgeon is struggling, to a comfortable one because the team-members feel someone is in control of the situation.

Factors that can affect the Triumvirate leadership may depend on the type of work being carried out. This is illustrated by the anaesthetist assuming leadership and the surgeon stepping back because a patient's blood pressure changes to an unacceptable level; or there is a surgical complication, so the surgeon needs to focus on the problem, and consequently another person steps up to provide leadership whilst the surgeon focuses solely on the surgery. In an emergency, when "the manure hits the fan" during surgery, hierarchical leadership helps to make rapid decisions. There is not the time for a collective debate, so at those moments,

"you can't have too flat a hierarchy, so I think, you know, taking ownership of that leadership role and saying, "I am the leader" is important" [Consultant Surgeon: P7].

This multi-disciplinary arrangement can be viewed as a "marriage of convenience and collaboration" [Consultant Anaesthetist: P20], as illustrated by the influence on atmosphere by a senior theatre Charge Nurse.

"He does very clever things to bring about good atmosphere. He'll pop in and chat to people, including the junior people, ask them how it's going. Ask them what's, you know, what they think of things and that sort of engagement from someone in those teams, quite senior to someone quite junior" [Consultant Anaesthetist: P14].

#### **4.3.4. A community atmosphere felt in established or flexible teams**

The actions of the theatre Charge Nurse are indicative too of the community atmosphere felt by surgical team-members. A community atmosphere in the surgical

environment instils a sense of belonging amongst the community of people the person is working in, or with: surgical teams in this setting. They are likely to share a goal or common interest, usually the safety and wellbeing of patients. Generally, these feelings are built over time and experienced in teams that have team-members continuity:

“it can be more like a family atmosphere. And they kind of recognise when people are upset or off colour and more easily, I think, because it's, it's enclosed as well” [Nurse: P15].

There are boundaries to the inclusion of people within the community atmosphere, which can manifest physically when different communities come together physically (Table 4-2).

However, there has been a decline of the naturally occurring community atmosphere. The decline is due to the newer flexible work arrangements meaning that “it's very difficult to get that sort of togetherness when you don't see the same members of the team all the time. You're just constantly seeing different doctors turning up at different times ... It's very difficult to get that camaraderie” [Consultant Surgeon: P30]. This is because managers scheduling work are perceived by some surgical team-members to “want [surgical team-members] to be like Lego pieces that you can just slot in everywhere and anywhere. And that means you can't build a relationship with the surgeon [Consultant Anaesthetist: P20]. The impact of this loss of the relational element and its effect on a community atmosphere, or ‘camaraderie’, threatens to reduce the ability of surgical teams to deal with challenging work:

“you're breaking down relationships which are not easily quantified in terms of looking after a patient, but absolutely critical to that patient. Yes, you'll have a baseline, a little thin layer of jam. But the really big, nice, juicy blobs in there which represent that extra skill, that extra layer of camaraderie, that can just get you through a bad situation, just won't be there” [Consultant Anaesthetist: P20].

Table 4-2. Examples of atmosphere activities and effects from observation notes

Atmosphere activity or effect	Atmosphere setting	Example observation data
Intercommunicating	Surgical team-meeting to discuss patients' treatment	Participant E asking why this patient is being discussed at the MDT. Participant E asks, "Is any objection to taking this patient to clinic?" Discussion between surgeons and nurses at the meeting who mutually agree to the proposal [Observation note 11].
Finding the best time to communicate	During a training event managers illustrated the constraints on their ability to communicate with surgical team-members due to their lack of knowledge of surgical roles and work.	The managers said they did not know what the Registrars may face on a busy day or what was involved in their role more generally in terms of deciding on patients' prioritization and allocation of staff. It was also discussed how there is not a standard discussion of how to organize the day across hospitals or teams within a hospital. Managers say they are not aware of what level of work are normal levels or what is a too high-risk level of work. [Observation note 02].
Separate community atmospheres in one physical location	Training meeting attended by managers and surgical team-members. During breaks from presentations the two types of attendees sat apart.	Clinicians were talking together, sometimes laughing. The managers sat apart, individually using their laptops and mobile phones. They did not appear to group together although clinicians did. [Observation note 02].

The loss of a community atmosphere also impacts on other intangible aspects, such as wellbeing:

"I guess if you think about what might help you with well-being... stress is a bit of a tricky one because actually we're all stressed all the time and most of us are OK reasonably as long as other factors are in play.

So other factors are things like, you know, do you feel like you belong to a community” [Senior Manager: P50]

However, building an atmosphere in which team-members can reclaim this important “extra layer” in the newer flexible, as well as established teams appears to be possible though. It is achieved through another method that supports the development and use of atmospheric work: templating.

#### **4.4. Templating: repeatable atmospheric work**

Several surgical team-members describe using atmospheric work to prepare, or coach, people to participate in activities that promote a safe atmosphere. Additionally, some surgeons use a particular type of atmospheric work in more or less systematic ways to create a safe atmosphere. I have termed this latter activity *templating*.

Surgical team-members perceive safe atmospheres as arising when the environment they are in is conducive to them feeling safe to speak up about matters that cause them concern.

“So, it was a very open atmosphere where people were free to ask questions and challenge if necessary” [Consultant Surgeon: P4].

The concerns are usually related directly, or indirectly, to the promotion, or safeguarding, of patient safety.

##### **4.4.1. Implicit and explicit rules and training giving rise to templating**

The importance of patient safety and early examples of templating have common origins: the introduction of the World Health Organisation (WHO) checklist and Human Factors training for surgical teams in the early 2000s. It was common for participants to talk in interviews about both of these in relation to safe atmospheres.

###### *4.4.1.1. The World Health Organisation (WHO) surgical safety checklist*

What started out historically as the informal practice of individual surgeons, is now a process mandated to be used by surgical teams throughout the NHS due to the introduction the World Health Organisation (WHO) surgical safety checklist (‘WHO checklist’):

“It was it was a sort of a template in my head initially then it became a template on paper and then that got superseded by the WHO list.

And then you, the NHS, and [Hospital B Trust] in particular sort of produced their own direct checklists, which we now use" [Consultant Surgeon: P56].

The reason for introducing the checklist was to directly protect patients from errors during the surgical process. However, participants perceived it as serving an additional purpose, that is to support the creation of a safe atmosphere.

The WHO checklist is intended to be used to ensure everyone is introduced, and that new Trainees are aware of the usual conventions in surgical procedures. An example given was that certain surgeons prefer everyone to call each other by their first names, unless they think something is going wrong. In that case they revert to using the traditional formal style of address, for example Mr Smith or Mrs Jones<sup>28</sup>. This is so everyone then "knows that this is a serious issue that we need to discuss and feel free to do that" [Consultant Anaesthetist: P26].

Many participants describe how the collective participation in, and flexibility in who takes charge of the WHO checklist process, moves leadership from the traditional hierarchical leadership to a more contemporary collective leadership model:

"The WHO checklist empowers, less doctors, but it definitely breeds a team environment because ideally the WHO check list should be read by someone who's, you know, like one of the operating department practitioners, you know, someone who's not a, is not, they're not a surgeon. They're not an anaesthetist. They're not they're not seen as a leader within that theatre environment. They could be a runner from outside, or health care assistants coming to help move the patients over or take the trolley out. And what that does, it just let everyone know that honestly, it's a level playing field here. So, the most important person speaking may not be seen as your, as your traditional leader role in theatre" [Surgical Registrar: P41].

Although some staff "continue to flout" using the checklist, the participants portray safe atmospheres as having become felt more widespread in the contemporary surgical environment. This is considered "a relatively new thing [in] the last 20 years or so. But prior to that, you know, theatre staff didn't speak up as much" [Consultant Surgeon: P30]. There was reported to be a toxic atmosphere in the 1970s and 1980s which created unsafe working conditions.

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<sup>28</sup> Surgeons who have achieved Consultant status are addressed as Mr, Mrs, or Ms. They no longer use the title Doctor.

“The poisonous atmosphere that, again, I could think back to in the late, yes, late 70s and early 80s, where there's actual undermining and destruction of confidence going on. I mean, I've seen that with particularly nasty teaching hospital consultants... setting aside for a moment the effect on the on the junior surgeon, the danger to the patient. So, he can make a colossal difference” [Consultant Surgeon: P6].

This participant recalled that the “atmosphere of hostility or lack of support” had enormous effects on patient safety, and the efficacy of the surgeon's decision making: “it can, of course, actually make their hands shake”. However, participants perceived there has been a gradual move towards people feeling they can and do speak up. Some participants considered that they have not perceived the hostile type of atmosphere since “the beginning of the noughties” [Consultant Surgeon: P6]. Others say it seems to be disappearing, but a unpleasant atmosphere still occurs occasionally. This is detrimental, producing “this sort of atmosphere of fear amongst their ward rounds and in their theatres” [Consultant Surgeon: P30]. This can result in an unsafe situation for patients: the impact of destroying the safe atmosphere can be so evident that it creates a physical response:

“The Consultant went absolutely nuts and started screaming and shouting at everyone, the whole team. I can remember watching the physical reactions of the team and you could almost see them just ducking their head slightly like, you know, that comment 'water off a duck's back'. It was just ducking. It was almost a physical thing, ducking that, letting it just wash all over them” [Consultant Surgeon: P13].

#### *4.4.1.2. Formal training's influence on people participating in safe atmospheres*

The second key factor of the shift away from unsafe situations may be attributed to the introduction of Human Factors<sup>29</sup> teaching in the NHS (NHS Institute for Innovation and Improvement 2010). This is seen as a key step in educating medical students and other team-members that they should voice concerns:

“the sort of Human Factors teaching around the medical student, or the HCA<sup>30</sup> in the corner should be able to speak up and say, you know, Mr. Bloggs surgeon, I think you're chopping off the wrong leg,

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<sup>29</sup> "Human factors refer to environmental, organisational and job factors, and human and individual characteristics, which influence behaviour at work in a way which can affect health and safety" (HSE [no date]).

<sup>30</sup> Health Care Assistant.

you know, because they've happened to notice that, that they've set up the wrong side" [Consultant Anaesthetist: P14].

When Human Factors training started, in the early 2000s, reliance on its concepts would have marked a member of staff as an outlier. However, now training in this concept is required throughout the NHS:

"My local deanery runs a scheme of what's called leadership fellows. So, there's quite a lot of registrars, myself included, who've had a year out and actually had to focus on kind of leadership, teamwork, Human Factors, and patient safety skills just it's definitely become something people are more conscious and more aware of, I think, so it's definitely changed" [Consultant Surgeon: P7].

The introduction of Human Factors training is not a standalone factor though. It is described by several participants as being supported by the move away from the habitual use of hierarchical leadership as "a level of parity that has gone on over the years... to ensure that the whole team within a theatre department has a voice and has a voice on a level playing field" [ODP Manager: P37].

"Human Factors being built into the education of junior doctors, and particularly junior surgeons, about how you need to respect each other's opinions, how you need to be aware of what's happening around you and what are people to say... that seems to be an ingrained education amongst us young surgeons, whereas I don't think that was taught to the older guys. They're very much of the feeling that I have to go in there, this is my patient. Everyone has to do what I say. Otherwise, the patients are going to come to harm. Whereas I think the newer guys go into theatre thinking this is my patient, I have to do the best by them, and everybody else might have something equally as valuable as me to say about the care of this patient. That's the best outcome for the patient" [Consultant Surgeon: P58].

This is still perceived by some surgical team-members as "something quite new, actually, a new kind of generation of doctors coming through, Consultants. It's definitely being ingrained into us that, you know, everyone has got a fair say, especially in a theatre environment, which can be really intense. Everyone has a, you know, someone's not happy about something, that they have an equal voice" [Surgical Registrar: P2]. Acting on Human Factors theory and training has not been adopted universally as yet though, and there are still people described as having a "kind of old-fashioned attitude, that we've all experienced and is not nice, and I think I would call that an unsafe atmosphere" [Surgical Registrar: P2].

#### **4.4.2. Supporting people to feel safe to speak and to reflect on events**

Commonly, participants consider safe atmospheres are important, because if “you create that atmosphere within a theatre or in a working environment, so that people will work well and efficiently and enjoy their jobs and stuff, [it] has, probably does have a bigger impact than, than you realise” [Consultant Anaesthetist: P24]. A safe atmosphere is a short-lived construct which can differ each time it comes into existence, depending on the circumstances and staff present. Once present, events can occur which affect the feel of the safe atmosphere:

“So, if you're having a nice, straightforward operation, everyone's fine. It's a really lovely atmosphere. But if something starts going wrong, a tension, you can feel it change. And then the way everybody speaks and interacts changes with it, and people are less sort of jovial and having chat, and more like, I'm going to sit and be quiet until I'm spoken to” [Surgical Registrar: P28].

In this way, a safe atmosphere can be destroyed, and that is thought to result in an unsafe situation for patients.

##### *4.4.2.1. Speaking up*

Two activities are associated with safe atmospheres in particular: speaking up and reflecting. The speaking up element of safe atmospheres is intended to be supported by reflecting on mistakes and learning from them. This includes being open to listening to others' perspectives, even if those ideas differ from their own. The participants' view generally was that most people will be reasonable and engage in this practice, although “you obviously get a few characters who are not, and they think, you know, a god complex thing. But I think to be honest, that's like as rare as hens' teeth. Most people are willing to listen” [Surgical Registrar: P02].

In a demonstration of assuming leadership and speaking up to counter an unsafe atmosphere, one nurse explained how she had to get an anaesthetist replaced for bad behaviour in theatre. By not accepting the culprit's behaviour, and taking action, “it does repair [the atmosphere]” [Nurse: P13]. Experience like this, of working with someone whose behaviour is not conducive to, or has destroyed a safe atmosphere, may be perpetuated. The recollection of it can act to destroy a future safe atmosphere, even before the person repeats the previous damaging behaviour:



“I think a safe atmosphere, if I walk into a room and everyone suddenly shuts up and looks at me, there's obviously something, I've done something to that atmosphere that's changed... I think, yeah, you can have a safe atmosphere, but I think that, I think that mirrors previous experience of that person coming into the room” [Consultant Surgeon: P56].

Lack of action in response to someone speaking up deters people from speaking up again in future. Persistent, recurrent inaction by those responsible elsewhere in the organisation, not in surgical teams, discourages surgical team members from speaking up, because it seems futile to do so.

“Everybody has now got to a point of going well, there's no point saying then because nothing ever happens. So, issues being raised on a regular basis and going onto sort of things like risk registers, and they stay on risk registers for months or years and they never get addressed. And I'm presuming because it's just a difficult thing to try and fix, or it would take time and resources and people say we've got other things to do. But that doesn't really excuse not addressing something that you know is a is a there's a potential risk or patient safety problem” [Consultant Surgeon: P56].

#### 4.4.2.2. *Reflecting*

In terms of when to reflect, it was thought best to reflect promptly, to avoid “fester” of a problem and to avoid the problems identified with failure to engage in the practice, “people panicking and trying to cover their problem, their mistakes up, by trying to patch something up or ignoring the problem” [Surgical Registrar: P02]. Before, during or after surgery, some senior surgeons “ask a medical student, “Have you got any issues?”, “Or what did you think about that?” during the WHO checklist, that sort of thing, and encourages people to speak up then” [ODP: P23].

“I'm a big believer in psychological safety<sup>31</sup>... I can tell them in no uncertain terms, if you're not happy, if you're not sure, if there's any doubt in your head, tell me... never feel bad about it” [Surgical Registrar: P33].

The descriptions of experiences of reflecting indicate that it is supported by other aspects of communicating (figure 4-1): inviting and intercommunicating, “being able to share with your team what your concerns or what your goals are, but also equally

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<sup>31</sup> Defined in Appendix E.

being able to step outside ego and let people, you know, give that feedback and communication to yourself" [Consultant Surgeon: P07].

This may also lead to reflecting on what has happened or been omitted during surgery or in team meetings, as I observed during a team meeting to discuss patients' future surgical treatment.

Participant E has been unable to do all the work necessary for the meeting. He explains, "Problem when list is so long, people who are relisted are not separated out. Buried in long list. Should we prioritise those relisted, even if detrimental to others who are more recent?" He says it's not his decision due to the current system as scans get outsourced. He also talks about staffing problems, that they have lost 7 or 8 [of their specialism (note: anonymised speciality)]. He comments that they get so bogged down in work that can't get to look at all reports; the delay is not fair but "just having a stab in the dark is not fair to the patient" [Observation note 09].

Reflecting leaves open the possibility of learning and change. By reflecting about something that went wrong during surgery, asking colleagues, "'*Could we have detected that? Or could we have predicted it, earlier?*'" I think, does change you" [Consultant Surgeon: P01]. Admitting your "own fallibility, which I do very openly as much as I can" and ensuring "that any discussion is non-judgmental" [Consultant Anaesthetist: P57] are perceived to regular parts of the reflective process to encourage people to speak up. This can confirm the atmosphere as having been safe and provide the person with a sense of what a future atmosphere in the operating theatre will feel like.

#### 4.4.2.3. *Setting the expectations and scene in preparation for an atmosphere*

Before new team-members go into theatre, possibly for the first time, surgical team-members often use atmospheric work to prepare, or coach, people. More senior staff describe preparing junior staff for these steps, as "there's no point being scared to approach the leader, because that's when mistakes happen, isn't it? And things get missed. And then you'll be kicking yourself later because you didn't speak up and ask" [ODP: P23].

As time progresses, and people develop their own knowledge, confidence, and experiential understanding<sup>32</sup> of the work and atmospheres, and their confidence to participate in the safe atmosphere appears to grow:

“I still think that there's an atmosphere where you can say, *“What's that, I don't like that. What about this?”* ...but I think it's a learning curve as well, because the more experience and knowledge that you have in theatre, the more you're going to feel confident saying, *“Wait a minute, I've seen something there that I'm not happy with”*. [Surgical Registrar: P28].

However, atmospheric work appears to have limitations associated with national culture. Whilst within surgical teams “hierarchy has become sort of flatter and flatter and flatter” [ODP: P37] it is acknowledged some junior members of the team, or staff who originate in a different national culture, still may not be confident enough to speak up despite atmospheric work and templating:

“[someone] who is at the bottom of the ladder. Do they feel confident about the same things? I mean, you get some, we get quite a few of nurses from overseas. Women who obviously come from a different background. Whether they would feel confident about saying something, I don't know. But I suspect they might still, they might not” [Consultant Anaesthetist: P24].

As well as the people aspect of a safe atmosphere and templating, during the preparation for the operation the physical environment plays its part in scene-setting for a ‘staged’ safe atmosphere:

“It was like a little a theatre, like an acting theatre. I mean, the doors open. You do all the work beforehand to prepare the theatre for the patient. He's in with the anaesthetist. The doors open. So, they're sets, that's the stage. And that's when the acting starts. It's a funny kind of little atmosphere, really” [Nurse Specialist: P15].

#### **4.4.3. Repeating activities systematically to create a safe atmosphere**

Various participants considered there are ways to more or less systematically create a safe atmosphere, that someone will have “in my mind a rough template by which I work by” [Consultant Surgeon: P30]. Surgical team-members described this aspect

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<sup>32</sup> Understanding learned through existing knowledge and previous experiences (Kolb and Kolb 2005).

of atmospheric work as reproducible, “a template that [they] re-used to make sure that on each occasion you have that atmosphere” [Surgical Registrar: P28].

Team-members considered that “the surgeon tends to set the tone because if they're, if they make a poor atmosphere it will impact on a lot more people than if you're at the bottom of the, a less important person, if they're grumpy it doesn't really matter” [Consultant Anaesthetist: P24]. Thus, templating differs “from surgeon to surgeon, in terms of what they do and what, what the atmosphere is like. But I think that attitude of safety comes from the surgeon first” [Consultant Surgeon: P10]. Creating a safe atmosphere, and being well-known, well-respected, as someone who in the event of anything happening would be there to support them is considered important for the process.

“I like to think that generally people enjoy operating with me because I will try and make it a pleasant atmosphere, I'll respect them. Actually, I will try and help them. I'll try and teach, but if you teach in a horrible way, everybody gets really uncomfortable. Like, if you're just slagging off your assistant, or slagging off your colleagues, or slagging off the scrub staff, then everybody gets really uncomfortable. Or you bark at people, or if you make people feel small” [Consultant Surgeon: P18].

However, it is not the surgeon alone using templating that creates the atmosphere. During templating other members of the team contribute to the creating and maintaining the safe atmosphere. This was considered a common requirement.

“There's people who are the runners, or there's the ODPs, and the nurses. I think they were alert to everything that's going on outside that, off the table. And I think, if there is something that's going to happen, or is about to happen, it could be a possible risk, I think that's quickly picked up by the peripheral people in theatre and that contributes. And surgeons know that. And I think that contributes to the safe atmosphere. They can also say, well, stop, stop doing what you're doing because this is going to happen” [Specialist Nurse: P15].

Engaging with other members of the team can be achieved through using ‘tools’, such as playing music during surgery to,

“try and create a good atmosphere. Yeah, I try to. So, I bring speakers with me. I ask everyone in there is there any particular type of music they like putting on. I always make sure it's on... And I try and create that by, you know, have a bit of chat with the Anaesthetist beforehand. Have a little banter with the scrub team, as the patient's getting ready. Just so everyone knows that we can talk while this is going on. So, I

like people knowing that they can be a bit relaxed and a bit informal, with me” [Surgical Registrar: P41].

Music appears to be a noteworthy component of atmosphere. Just as playing music helps to form the atmosphere, turning off the music can also contribute to a change in atmosphere:

“I would know that something was wrong because the surgeons say have stopped talking so much or, you know, they're, they've asked for the radio to be turned off and they need to concentrate on something. So immediately the atmosphere changes then” [ODP: P23].

Several participants' explanations of templating suggested that there has been an expansion of who feels included in the atmosphere and creating a safe atmosphere. Throughout the experiences they relate there are examples of individual and collective leadership for the creation of safe atmospheres. This is believed to be because “if [people] are thoughtful enough about how to get the best out of their teams, they will go about creating that atmosphere.” [Consultant Anaesthetist: P14].

Overall, participants appreciate the importance and various degrees of benefits of a safe atmosphere. However, some consider that they “still don't think we're where we need to be” [Directorate Manager: P51]. As yet, templating has not been identified as a reproducible process, a ‘formula’, for all surgical teams to use to create a safe atmosphere. However, its formulation as such was expressed as a desirable goal:

“I think it's really important, that level of atmosphere actually is key. It's very hard to know how people get it right. But you just know some people that you work with or teams that you work with, the atmosphere is generally right, because they've just got the right personalities to make it work. And they'll get the best out of the more junior people in the team, or they'll get the information they need, and, and then, it's funny, those, those teams, you just, you just know the day will run more smoothly, that they'll, less chance of there being problems and things will be right. And it's difficult to measure. But that's quite an interesting thing if we can measure it to work out how that becomes effectiveness essentially” [Consultant Anaesthetist: P14].

#### **4.5. Summary**

In this chapter, I have set out the findings regarding the nature of atmospheric work and shown that it has changed in nature and is an increasingly prominent component of contemporary collective leadership practice in surgical teams. I have demonstrated how atmosphere is deliberately created using templating. This was

supported by the example of the use of templating by surgeons to create a particular type of atmosphere, a safe atmosphere, amongst members of the surgical teams.

In the following chapter, I continue in the theme of atmospheres and atmospheric work. This is in relation to, first, the transition of leadership from face-to-face arrangements to fully virtual arrangements: virtualizing; and second, atmospheric work during the COVID-19 crisis.

## 5. Virtualizing and Contextual Contestation

### 5.1. Introduction

The previous chapter reported how atmospheric work is undertaken by surgical teams generally and, in particular, to enable safe atmospheres in face-to-face situations. In this chapter, I turn to the third and fourth bundles of activities I discovered, which I have identified under the categories of virtualizing, and contextual contestation. I report the part these activities play in the leadership of surgical teams. How these issues fit within the overall structure of the data is shown in Figure 3-3 in chapter 3, and the definitions for the bundles and individual leadership activities referred to in this chapter are defined in Appendix E

The first section of this chapter presents the experiences surgical team-members said they had, as they moved from face-to-face leadership activities to virtual leadership activities. Their descriptions, given in interviews, are supplemented by my observations of surgical team-members' interactions during virtual meetings. Their accounts explain how this transition, that I term 'virtualizing', has caused 'disruption' and 'distancing' in leadership activities.

I detail atmospheric work during virtualizing which results in the construction and maintenance of a 'community atmosphere', that is an atmosphere that conveys a sense of belonging amongst the community of people the person is working in, or with, who are likely to share a goal or common interest, usually the safety and wellbeing of patients. Next, I present people's reflections about how senior leaders, who were not part of surgical teams, engaged in atmospheric work online during the COVID-19 pandemic. Also, I report surgical team-members perception that the senior leaders did not carry out face-to-face work to complement leadership delivered via virtual means, which culminated in devastating effects on surgical team morale.

In the second section of this chapter, I start by providing details of the experiences of three types of leadership used in surgical teams before and during the COVID-19 pandemic: collective, hierarchical, and command. I provide evidence of the different types of relational experiences that surgical team-members associate with each type of leadership, and in what context. Finally, I reveal evidence of contextual contestation, that is the tension which arises when a person's perception of the

context is misaligned with other people's contextual perception. This includes illustrations of why and how some surgical teams pushed back against the senior leaders. This was in response to the senior leaders' crisis narrative and prolonged centralised regimes of power and control.

## **5.2. Virtualizing: transitioning from face-to-face to virtual leadership**

It may not be immediately evident that leadership of surgical teams can be carried out through a virtual medium. Whilst robotic surgical procedures have been introduced, surgery in most cases requires the surgical team to be physically present in the operating theatre. However, a substantial part of surgical teams' work is not in the operating theatre and does not need to be carried out whilst in the same location as colleagues. Discussions about patients' treatment, and conversations about training, personnel, or administrative matters, can take place in a virtual, rather than physical, setting. Leadership in a virtual setting has been gradually augmenting face-to-face leadership, a change that accelerated during the COVID-19 pandemic. This transition towards greater use of a virtual setting I term '*virtualizing*' leadership. In this section are the findings about atmosphere emerging from virtual environments, how they are sensed via virtual media, and how relational atmospheric work is sustained in virtual settings. As the foundations for understanding the findings related to atmospheric work in virtualizing, first I describe how surgical teams' leadership activities and a community atmosphere started to be experienced virtually.

### **5.2.1. Interacting with digital technology: virtualizing before COVID-19**

In the earlier chapter, I related how surgical team-members lost much of the relational closeness which had existed in surgical teams before their work and training arrangements were reformed. This is because there are reduced opportunities to spend time together, to get to know one another, and develop relationships with colleagues in their team. Now I recount an additional change: the differences participants have noticed in the way digital technology ('technology') affects their interactions with other people and leadership. This includes changes to leadership activities and surgical team-members' perception of leadership. Technology has increased the opportunity for interaction with colleagues and participating in atmospheres virtually, although there are exceptions.



### 5.2.1.1. *The move from face-to-face to virtual leadership activities*

From the late 1990s, at policy level, there was a desire to introduce large scale technological innovations. Technology began to supplement objects, such as whiteboards and paper records, to guide staff (in)formally in leadership activities. However, one of the main innovations, the electronic patient record (EPR), did not start to be introduced until 2006 to 2008. Following its introduction, rather than teams coming together to share paper patient records, they could individually access an electronic version from multiple computer terminals in the hospital. This was not without problems though.

“Certainly, that's changed over the years because we're now, we use an electronic patient record, so it's a little bit trickier. So previously I would have said, yes, I lived or died by the white board because that's what gave me the view even at a medical house officer you said, you know, every job I've had is about clearing the board, because you've got your, your acute cases on that board. I think it's changed now with the electronic patient record, and we don't have that focus, that brings us together as whiteboards did. Which brings its own challenges, actually, because then it's, you know, find a computer” [Consultant Surgeon: P7].

The use of a variety of mobile technology has become the norm in hospital settings too (Shah *et al.* 2019). Technology, in particular instant messaging applications (IMAs) technology, such as WhatsApp, provides another means for people to ‘come together’. By accessing the resources remotely, then they can participate in, or provide, leadership without needing to be face-to-face with colleagues.

“They were sending me X-rays by our WhatsApp, they, they were sending me the recorded video, sort of hard ultrasound and then we were discussing. Because it's difficult to explain, you know, over the phone if you don't see the picture, very often. So, so one time they sent me a sort of a problem to solve. They were sending me photographs and I told them what to do” [Consultant Anaesthetist: P19].

This use of IMAs appears to be growing organically, without clear organisational guidance as to the expectations for its use. Within the same department, some Consultants insist on inclusion in WhatsApp teams, but others do not. The lack of clarity of how IMAs are to be adopted is exacerbated due to the mobile nature of employment in healthcare, particularly for junior surgical team-members. They have

to learn a new set of expectations each time they rotate to a new post, often at a different NHS Trust.

The effects of the adoption of IMAs illustrates the *disruption* (Table 5-1) in leadership activities that are experienced by surgical teams due to virtualizing, as “we are moving from an era of talking to each other to an era of typing to each other” [Consultant Anaesthetist: P22]. Virtualizing is not seen as automatically replacing the community atmosphere that the face-to-face approach of surgical team leadership of in the decades prior to the reforms of the early 2000s<sup>33</sup> engendered: a community atmosphere in which junior team-members felt they were part of a family, and they were 'brought up' and cared for by their surgical team. Contemporary leadership needs to facilitate the community atmosphere, according to participants. It is needed to guide people to open the door and step into the new virtual working world.

“What is crucial is that this virtual way of doing things is very new to everybody. So, you would look for the leadership to provide guidance, to provide opinion, to provide support. And also having people within each area that is able to ensure that this virtual way of doing things is embraced by everybody. Because many people are really very, very, very worried and going forward, because it is completely new door to many, many, many people. So, you need the leadership to, to take the lead and be able to ensure that everybody embraces it” [Consultant Surgeon: P15].

However, once guided into the virtual setting, there is a concern that trainees as members of WhatsApps groups are ‘lost in the crowd’. Although the technology facilitates a community atmosphere, they lose a feeling that they are appreciated individually.

“You don't have the coffee time with the Consultant, to sort of say, how are you doing? I mean, we are all, we'll all, vast majority are making a point to sit there and say, "*How you doing? You know, do you need any help with anything?*" I've given up my mobile number left, right and centre. We've got a gazillion WhatsApp groups to say, you know, "*Just call us straight away. If you can't find a Reg, you can't find a Consultant, just call us*". But it just feels like they aren't identified individually. So, they have value as a group. But I think some of them feel that they have value as an individual” [Consultant Surgeon: P18].

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<sup>33</sup> These reforms are detailed in chapter 2.

Nonetheless, participants report benefits of virtualizing. Finding the right person to speak to can be problematic when there is “no central sort of place where you can refer to often to find out, you know, where people are and who is, who you're directly reportable to” [Surgical Registrar: P25]. With the introduction of digital technology, identifying the right people and resources is shifting from being a face-to-face activity to a virtual one: a leadership activity identified in leadership studies as *scanning* (Appendix E). Establishing who is the right person to speak to can be achieved more easily through digital technology though, particularly if the person is not someone within the immediate team.

The introduction of IMAs “certainly changed communication between those of us at the top versus what happened before I was there...We had a lot more quickfire back and forth situational stuff going. So, we had an ICU chat from the point of view of bed availability, so I didn't have to run up there to see if there was a bed” [Nurse: P13]. Even if people say “I don't know who she is. I don't know what she looks like” [Surgical Registrar: P28], many participants said virtualizing enabled them to get in touch with people they previously had not physically met. In doing so, they could find out who may enable them to carry out an activity, they could obtain information, and felt more confident about communicating with people. There was no longer the requirement that they had to have been given, or could access, individual mobile phone numbers. Now they can contact a person through mutual membership of a WhatsApp group or by arranging contact with someone else in the group. It provides a ‘shortcut’ in communicating with people. However, some people were thought to use digital technology to avoid communicating either in person or at all, although this was less evident in the data.

“I suspect some people might send a message rather than like we all do, you know, if you don't want to speak to someone, you might send them a message, yeah, because it's less personal isn't it. Or, you know, you don't have to respond to what might be a negative reply in the face-to-face” [Consultant Anaesthetist: P27].

Despite this, the overall impression from the data was an expansion of the perceived community surgical team-members had been part of before. Additionally, communicating virtually appears to provide a safe atmosphere for some people, “probably used as a way to avoid having to go and find that person, and ask them face-to-face, which is what we would previously do” [Surgical Registrar: P28].

### 5.2.1.2. *Exceptions to greater inclusivity in community and safe atmospheres*

Having found out who the right person to speak to is, choosing the appropriate medium for communication needs careful consideration. There may be a number of different types of digital spaces which are not equally accessible to all. This may be due to the requirement for certain hardware to participate or lack of time due to work constraints.

“It can be a lot easier to communicate within a clinical setting via WhatsApp platform or a messaging platform, because not everybody has the privilege to have a Vocera<sup>34</sup>, ... you can get a much wider group with a single message using a platform like WhatsApp... Because the only real formal or the only real work-based communication that we will have with the teams will be emails. But not everybody has the time to access their emails” [Clinical Manager: P37].

Whilst technology can be used to facilitate collective activities, it can create greater physical or virtual distance (Table 5-1 and Table 5-2) between senior and junior staff too.

Virtual communication can be used in a way that hampers people, or excludes people, from giving or receiving leadership (Table 5-2). In some cases, this is may occur unintentionally. However, there are instances of a deliberate choice by the junior members of the team not to take advantage of the ‘shortcut’ technology provides to contact people. Although junior team-members have direct contact details for Consultants which they use in normal circumstances, surgical team-members’ reported that they keep or revert to the traditional hierarchical structure, via the Registrar, if there is a serious problem.

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<sup>34</sup> A communication device with voice, text, and alarm functions.

Table 5-1. Concepts and Dimensions of Relational Change and Virtualizing Leadership

Concept	Dimensions	Description	Example interview data
Changes in relational aspects	Pre-virtualizing	A shift from the Firm model of familial relationships: opportunities to forge relationships are reduced.	‘we felt very much, particularly that cohort, very much part of a family, that we were looked after by our bosses’.  ‘It’s just lose, lose that family team bonding thing’.
	During virtualizing	Use of digital technology to participate in leadership space without being physically present	‘it’s changed now with the electronic patient record, and we don’t have that focus, that brings us together as whiteboards did...’  ‘they’re all linked together as a team, with a WhatsApp, so they’re very good with contacting each other’.
Virtualizing	Distancing	(Un)intentional activities creating, increasing/decreasing barriers to willingness to communicate with team-members of different seniority and/or role	‘the thought of inconveniencing the Consultant is unthinkable’  ‘Within their little team, [digital technology] helps. It’s a way of helping and collaborating with each other’.
	Disruption	Change in how leadership is performed, and leadership exhibited due to digital technology	‘A lot of the juniors are on a WhatsApp group. I’m not part of that’  ‘[Using Teams, Zoom, WhatsApp], it’s increased and is made leadership much more difficult. It’s far easier to influence and manage someone face-to-face than it is over Teams’.

For the mid-range members of the team, the Registrars, virtualizing appears to provide them with options as to whether or not to adopt aspects of leadership.

Registrars are seen to restrict some of their opportunities for leadership with the use of IMAs. So, rather than make their own decisions, sometimes Registrars use instant messaging to ask Consultants to make decisions, that Registrars would have been expected to have made themselves prior to the reforms in the early 2000s.

“It’s so easy for a Registrar to text a Consultant just to double check what they would want as opposed to maybe a few years ago you would only, you know, speak to the Consultant once every day, or every two days or whatever, and things would have to wait, or you'd make your own decisions” [Surgical Registrar: P27].

Conversely, in other cases the adoption of technology enables ‘the Registrars to take on more of a leadership role’ [Specialist Nurse: P14], and to take on aspects of the leadership role previously exercised by Consultants. Digital technology alters the asymmetries that existed between the different roles and exercise of leadership and power attributable to those roles IMAs allow people more control in selecting what aspects of leadership they do, or do not, want to participate in. This can be achieved by WhatsApp groups membership being confined to staff who are below Consultant level (‘junior WhatsApp communities’). More junior, non-Consultant members of the team assume control of the activities related to leadership, by excluding the other more senior team-members, thereby *distancing* themselves from these more senior colleagues (Collinson 2005, p.241).

A lot of the juniors are on a WhatsApp group. I'm not part of that [...] they're all linked together as a team, with a WhatsApp, so they're very good with contacting each other, the juniors [Consultant Surgeon: P1].

There is a middle ground too, where the same form of leadership is maintained as before virtualizing. Team-members discuss the same types of issues via virtual media as they would have done face-to-face, with people holding the same seniority of roles as before. In other words, using digital technology has not caused a change. The same level of distance exists, albeit they are using a different form of communication, and the leadership activity has speeded up. One example is to use messaging, rather than a phone call, to communicate with more senior members of the surgical team at home.

“Quite often we use [WhatsApp] as an SOS. We'll say help, *"I've got a 30 something year old in dire straits. What can I do? Is there anything else?"* And certainly, you should answer it. If you answer, it might take a little bit of time. But I've had conversations online at 3

o'clock in the morning. You quite often will get, "*Do you want me to come in? Can I help in any way, shape or form?*" [Consultant Anaesthetist: P23].

Whether or not Consultants belong to a WhatsApp group, can produce, or affect the extent of, both pleasant and unpleasant atmospheres. Consultants' membership of the group can create an atmosphere which is different to a junior WhatsApp community: an unsafe atmosphere in which they feel unable to raise questions and talk openly. The Consultants' limited sensibility to the juniors' feelings damages, or prevents, the community pursuing its common goal of supporting one another. This consequently prevents a safe atmosphere existing within that digital space.

"[The two female Consultants] are part of the WhatsApp group, which is interesting, because then the junior doctors won't say boo-hoo to a goose. So, bless them. You know, perhaps one wants to talk about whether or not they did, you know, with a Registrar or another colleague about maybe putting in a medical referral for a scope. Or just things that they want to banter with. But unfortunately, those junior doctors who happen to have, are part of these two particular teams and aren't able to do that" [Nurse: P14].

Conversely, more experienced team-members amongst those who belong to 'junior' WhatsApp communities provide the leadership necessary to encourage a safe atmosphere in which people feel able to voice their opinions.

"Maybe it's brought it more into the open, that there's people who you can see who are natural, more natural leaders, and others. So, it's more openly seen rather than discussions that are happening behind closed doors, potentially. But I don't, I don't think I've been encouraged, or maybe I have, maybe because that communication is more open and free, you are encouraged to speak up a bit more and encourage behaviour that you want to see. Changes that you want to see" [Surgical Registrar: P28].

### **5.2.2. Creating and maintaining a community atmosphere virtually during the COVID-19 pandemic**

After this early stage of virtualizing, in which the use of digital technology predominantly centred around communicating by messaging, the COVID-19 pandemic generated a new stage of virtualizing. In this latter stage video conferencing technology started to become an important part of leadership activities.

With the onset of the global COVID-19 pandemic, the NHS was placed on what was effectively a war footing by NHS England<sup>35</sup>. In an extremely short space of time, it underwent a massive reconfiguration. With the aim of protecting patients, ostensibly also protecting staff, and creating capacity to care for large numbers of people suffering from a single, very deadly disease, the organisation went through the biggest change in its history (Harries 2020; NHS England 2020b). As part of this change, the virtualizing of work and leadership was accelerated.

Previous resistance to switching to virtual versions of activities were overcome, driven by the need to urgently respond to COVID-19. This was exemplified by people bypassing long-established barriers to allow surgical team meetings<sup>36</sup> to take place using virtual conferencing technology. One manager recounted how the combination of the 'chaos' and technology enabled them to introduce the change.

“The moment COVID hit there was suddenly a window of opportunity to implement change that people had wanted to make for a very long time but was incredibly difficult under usual operational pressures... because we had the chaos to just sneak in the back door and embed it. [Clinicians] were open to change and they were open to trying new things. If we'd said two or three years ago, right, multidisciplinary team meetings are all going to be done remotely. No one's going to be sat in the same room. And we're going to do it, you know, entirely through a screen. It would never have happened. COVID struck and it happened with a single email sent out, say, this is how we're going to do things now. And I think that mentality was really, really helpful” [Clinical Services Manager: P48].

This implementation of virtual conferencing overcame communication problems due to people working from home, across different sites, and reduced time spent travelling. However, absences in physical attendance resulted in “scrabbling around trying to find somebody that's going to attend the meeting” at the start of the session [Specialist Nurse Practitioner: P46].

Online video calls were not an ideal forum for everyone as they were highly dependent on the (quality of) technology available. Internet connectivity could be

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<sup>35</sup> NHS England is an executive public body sponsored by the Department of Health and Social Care under the purview of the Secretary of State (GOV.UK [no date]).

<sup>36</sup> These are clinical discussions amongst several different professions who are involved in the treatment of patients. The meetings tend to result in decisions through collective leadership.



problematic. This resulted in an inability to join the meeting, or engage in conversations, due to sound and visual issues.

More than one person speaking at once. Main screen cuts out or is disconnected. Seems main room is disconnected for everyone. Messaging to try to get back in. Leaving and re-joining doesn't fix their problem [Observation note:04].

Interviewees' accounts of this were supported during my observations of virtual team meetings. Sound may be poor, so what is said, or the tone in which it is said, is not clear. This leads to repetitive calls of "can you resay because we didn't hear that" [Observation note:04]. People lose the chance to be heard with people in the room speaking over someone else speaking, who has joined virtually, and vice versa.

Physical aspects were not the only hurdle in the transition to virtual meetings. Relational aspects differ depending on whether people attend virtually or in person. I observed examples of such barriers at hybrid surgical team meetings, that is some team-members are physically present in a meeting room whilst other members join virtually. Team-members attending virtually did not seem to participate or be included in the atmosphere in the room: the distancing effect of technology sets them apart and creates barriers in communication. 'Three people in room dressed in scrubs when I was admitted were having a jovial conversation' [Observation note:07] which the people joining by virtual means had missed. Often those attending virtually were observed to not join in conversations about non-work issues at the beginning of meetings. They seemed to miss out on the opportunities for relational interaction occurring between those physically together in the meeting room (Table 5-2).

Table 5-2. Examples from observations of leadership activities in virtual meetings

Effects of virtualizing	Definition	Example drawn from this study's observational data
Greater inclusivity	Enables people's greater inclusivity in leadership activities	<p>Intercommunicating – including person sitting in background checking if someone had received information provided previously. Asking for information; people reacting to information given. Opinions given as to what steps to take. Appeared a collaborative engagement, even though predominantly led by one person. [Observation note:01].</p> <p>Participant 2 says he is on the phone but asking if he could do something to help with the meeting and locating people. Time is taken to find people who are expected to be attending by telephoning them and asking colleagues [Observation note 03]</p>
Exclusion from leadership activities	Excludes people from leadership activities that they may have participated in in face-to-face settings.	<p>Participants 5 and 10 discuss a point then participant E states next steps to be taken. There is a pause again; participant E is looking for the next paperwork and there are inaudible comments between participant E participant A. [Observation note 03].</p> <p>Participant B asks participant 5 a question whilst participant C continues to read, overtalking here and asks participant C another question. More than one person speaking at once. <i>[The main screen cuts out and the call was disconnected for about 7 minutes for everyone calling in]</i> [Observation note 04].</p>
Missing out on relational interaction	People who participate in a meeting virtually miss out on opportunities for relational interactions that are experienced in face-to-face settings.	<p>There is soft laughter in the room. I don't see/hear that this moment's levity is shared by those phoning in. The one person who has their camera on does not show amusement [Observation note:07].</p> <p>Some missed out on a community aspect of the team: attendees-in-person staying to talk about work, family and personal issues: 'Chat re personal things, buying a washing machine and fact he has a toddler' [Observation note: 06].</p>

Effects of virtualizing	Definition	Example drawn from this study's observational data
Sustaining relational atmospheric work when virtualizing	Maintaining the relational leadership experiences for surgical team-members' in virtual settings that they are habituated to in face-to-face settings.	<p>Patient six is presented by participant 1. Participant E asks a question. Information is provided by participant A. There are comments in the chat box from participant 6 about the type of treatment. Participant 7 contributes and signals their agreement to the verbal suggestion by participant 7. Participants 6 puts in the chat box "keep up the good work gang! xx" [Observation note 03].</p> <p>Participant 10 asks "if the jury is still out"; participants 10 and five both look amused as if they have a mutual understanding; participant 5 refers to the fact a colleague has looked at the information and he agrees with that other colleague's observation [Observation note 03].</p>
Prevents habituated way of knowing or sensing what people are thinking or feeling	In a virtual setting people no longer know or sense what people are thinking or feeling, as they are habituated to in face-to-face settings. This divorces virtual attendees from atmosphere felt by people attending in person.	Participant A: keeps mask on throughout the meeting. Participant A types on the laptop in from of them, as does participant C. Participant A throughout appears to be on a laptop inputting information as people say things. Participant D only has paperwork in front of them. Participant F, has a laptop on the desk: they are assumed to be there as a voice is heard through the virtual system and the light flashes when they speak, though a person is not visible in the field of the camera [Observation note 03].

There is soft laughter in the room. I don't see/hear that this moment's levity is shared by those phoning in. The one person who has their camera on does not show amusement [Observation note:07].

They no longer had their habituated way of knowing or sensing what people are thinking or feeling. Those attending virtually were physically divorced from the community atmosphere in the room. It can be difficult for attendees joining the meeting virtually to see who is sitting in the physical meeting room, due to camera angles and poor lighting. Whilst questions and responses can be repeated, participants considered it to be of greater importance to "find a way" to ensure not only that what is said is heard, but also is understood. This can be difficult to gauge when visual clues from human and non-human influences on atmosphere are absent, such as when people do not or cannot turn on cameras during virtual meetings or wear PPE<sup>37</sup> masks.

"So, for example, if a question is not clear or the tone of a question is not clear, you might just ask to repeat that question. So, there are some ways to, kind of making sure that you got the message at the end, but I think we have just to go for it. I think that there's nothing we can do about it. If it has to be virtual meeting, then we just need to find a way to make sure that is mostly OK with, we are mostly OK with that" [Clinical manager: P17].

Similarly, by remaining online at the end of meetings, I observed virtual attendees disconnecting as soon as the discussions about patients were completed.

Consequently, they missed out on a community aspect of the team: attendees-in-person staying to talk about work, family and personal issues: 'Chat re personal things, buying a washing machine and fact he has a toddler' [Observation note: 06].

For everyone though, it felt they were time-constrained as a 'bunch of individuals squeezing something in at lunchtime' [Observation note: 04], having to deal with 'Attendee C: "A ridiculous number of people<sup>38</sup> on" the list to discuss [Observation note: 08]. This pressure can curtail the development, or maintenance, of the web of interaction, with one team-member pushing colleagues to stop the banter and start the clinical discussion: 'Attendee R: "Are you going to start or just keep nattering for

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<sup>37</sup> Personal protective equipment.

<sup>38</sup> Patients.

half-an-hour” [Observation note:07]. One participant explained that a balance needs to be struck between the perceived value of attending meetings, the creation and maintenance of camaraderie, and time constraints.

“However, there is an understanding that there is some strategy to the creation of webs, that making that connection draws on the resource of time, so it needs to add value to the leadership process. So, if it is of no value to me, then I decline the rest of them. So, I don't attend them as well... your time is so precious. The biggest thing you can give to the staff is your time” [Manager: P44].

Arranging a meeting was not as simple as setting a time and providing a link to the virtual conference to attendees. To draw together people for the first time, managers were initiating a new meeting space, that was not the familiar meeting room, physical tools, and opportunity to interact with colleagues in the same formal and informal ways. For some surgical team-members, video conferencing provided a safe atmosphere. Hiding in the wall of black space of video calls with cameras turned off “you'll find a lot more people will talk” [Clinical Manager: P37]. Not being visible is reported to allow people to raise issues, although they do not usually feel comfortable talking in meetings that have very senior people attending.

“You do have the ability to talk, which I think you, some people wouldn't necessarily do if you were all in a room together” [Clinical Manager: P37].

In other cases, someone needed to encourage and coach their colleague who were (not) participating. An example of this experience was described by a member of the senior management team during my interview with her. An impasse had been reached in trying to persuade the Executive Board (‘the Executive’) to pursue a path suggested by Consultants. The Consultants considered the Executive were not listening to the information provided by them. The Manager took the initiative to obtain the Executive’s agreement to invite several lead clinicians to the next Executive virtual meeting. During face-to-face meetings with Executive members, prior to COVID-19, she had observed that Consultants did not engage in conversations but would “sit in the background chuntering”. Whilst in a face-to-face meeting that may provide visual cues to Executive Board-members of the disagreement of Consultants with proposals, this indicator would not be evident in a virtual meeting space. Particularly if attendees do not turn on their cameras. Ahead

of the meeting, the Manager discussed with the Consultants her proposed strategy to present their perspectives. She agreed with the Consultants the narrative she would present. She also coached them about how to put forward their opinions most effectively. This required a more interactive approach than previous engagement in face-to-face meetings. The Manager also emphasised the importance of expressing openly how they felt about the situation, telling them to,

““Say your piece. Be constructive. Don't do, not all your chuntery bits, but actually say how it feels. Tell them from your heart, you know you're living it and breathing it”. And two of them in particular said their piece on it. Well, there wasn't a dry eye in the house” [Directorate Manager: P51].

By ensuring that atmosphere was one of raw emotion, despite the virtual nature of the meeting, the Manager's leadership enabled the Consultants to consider they had been supported, that their voice had been heard, and they were part of a decision-taking community.

The 'chuntery' episode provides an illustration of the exercise and importance of *weaving*, and how, until the manager's intervention there was a lack of a feeling of common ground and community atmosphere amongst the surgical teams and senior leaders. Weaving plays an important part in facilitating leadership (Figure 5-1). In line with the studies that report on this activity, participants described weaving activities as providing experiences of motivating, inspiring and, or empathising, and webs of interaction creating focus on other activities to be undertaken.

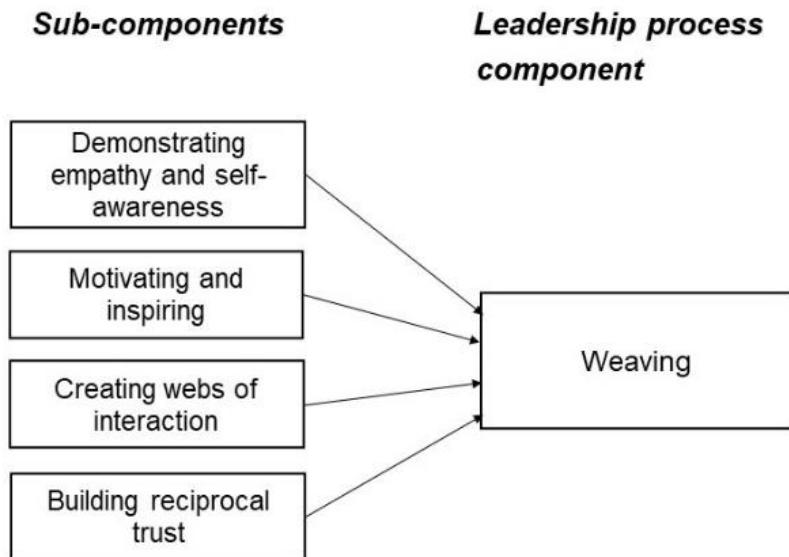


Figure 5-1. Individual activities within the bundle of Weaving activities

The empathising aspect of weaving seems to have risen in importance since the 1980s, and this was accentuated during the COVID-19 pandemic. The need for empathy to be demonstrated by those exercising command leadership was emphasised by many participants.

Empathy is a key part of surgical team leadership “because it’s indoctrinated into us really about looking after the juniors” [Consultant Surgeon: P01]. Surgical team-members draw on recollections of their own experiences to guide their empathetic activities, because “I didn’t find training that easy myself, so I mean, I’ve got, I think I’ve got good insight, good empathy to how difficult it can be” [Consultant Surgeon: P30].

Within surgical teams “good leadership is about being able to motivate a team to achieve something, whether they want to do it or not” [Surgical Registrar: P34]. Motivating and inspiring activities are not perceived as being confined to grand gestures, “realising that actually even the sort of simple things in in life, such as taking the team for a cup of coffee after you’ve had a long ward round or a difficult case in theatres ... And I guess it’s just the recognition that all of these things can form part of being a leader... being a leader is not just kind of on the front line in the middle of an emergency, it’s kind of just general day-to-day stuff” [Surgical Registrar: P36]. However, misjudged efforts to inspire team-members “don’t inspire, they tend

to be bullying and not inspirational because of their own inability to see how other people think and feel. [Consultant Surgeon: P04].

Motivation is seen as driven not only by those offering inspiration from senior roles, but also people stepping up, being “usually the first person to say, *“I'm willing to give that a go”*, because that allows people to follow that” [Surgical Registrar: P25]. This encourages a collective approach, which also derives energy from creating webs of interaction. These webs stretch beyond the immediate team in theatre, and also to the Wards, the Accident and Emergency department: “there's lots of people. Secretary. My junior doctors, the nurses on the ward, specialist nurses, the patient, all these different patients that we see every day. So, we interact with lots of different people. The porters in the lifts, the orderly, the theatre, so many different patients, so many different people that we interact with and all, they all fit in the jigsaw of what we do. Help us do our roles” [Consultant Surgeon: P01].

The crucial importance of empathy being not only offered, but also perceived, was compelling in some participants' judgement of leadership. The need for self-awareness was tied to this.

“I think from a personal point of view, the key to good leadership is inside awareness of what you're doing yourself, and of the needs of the people around you... ineffectual leadership, has very often to do with the lack of people's insights into what they're doing and the effect it's having on other people” [Surgical Registrar].

When the accelerated virtualizing took place, relying on existing, pre-COVID-19 webs of interaction, as described above, was not always possible without face-to-face interaction. However, although teams were split up and reallocated to other departments, people found a way to maintain, and in some cases expand a community beyond their original team.

“So that, I think is probably the best thing that's come out of COVID, is that everyone then developed a Department al WhatsApp group. So, it happened in Hospital AQ, where I was before, and then now here in Hospital AG, there's all the Consultants down to the F1s, including then the directorate manager and the administrative support manager are on that group. So, any question you have, should be answered by somebody on that group, or they will put you in the right direction [...] that has been a really positive thing to come out of COVID, I think, it's, it's just easier to find people” [Surgical Registrar: P28].



Despite efforts such as these, building, or maintaining, a community atmosphere through virtual conferencing was not always successful. New ways of delivering leadership were needed to maintain the community as it converted to being an online one.

“Having access to the surgeons and the surgeons have access to us even in COVID. We've all worked as a small community and we're really a larger bubble. From my straight-to-test role, which is part of that service, it's been difficult communication because if there's been issues and you send out emails, they don't always understand, or, and that's been difficult. We can't get hold of them. That's been difficult” [Nurse Practitioner: P22].

The new ways were engaged to counter those instances where surgical team-members, who had been reallocated to other departments, considered their previous community camaraderie was damaged.

“Our teams are split. We don't meet as a department anymore. We do it over Teams. So, you know, the camaraderie has definitely suffered” [Consultant Surgeon: P01].

In some cases, maintaining a community atmosphere was achieved by creating a *tailored* community atmosphere. Leaders in a team or department set up separate online spaces for different groups of people. This converted existing groups to virtual ones and maintained webs of interaction.

“So, we created, we had a closed Facebook group. So, anything that was going on, anything I was aware of, I was putting it on there and I knew most of it, I think it was only two members of staff weren't on Facebook, so I would have texted them the same information. And we then from a band 7, 6, a senior nurse point of view, we created a WhatsApp group, to say, “*Listen, this changed. Alright, OK, this is where we're going. By the way, as of tomorrow, this is where you get your PPE*”. Things like that. So that was our way of sharing it” [Surgical Registrar: P38].

### **5.2.3. Sustaining relational atmospheric work when virtualizing**

The crucial nature of empathy is demonstrated by examples of the effect of the failure by senior leaders to deliver it during the COVID-19 pandemic: “that really, really, really almost broke certain members of staff” [Nurse: P38]. This was perceived as “poor” leadership and was attributed to an “inability to see the world through other people’s eyes...imposing their will, their own view of the world, on a system they don’t really understand” [Consultant Surgeon: P04]. Even those senior

leaders who had previously been members of surgical teams were open to criticism. Accounts describe how after people move from surgical team to managerial roles, they “change into something harder, less considerate and they lose awareness of what it’s like...lose that empathy with their colleagues” [Nurse: P43].

With a few exceptions, senior leaders were seen to have failed to communicate in a way that fostered a community atmosphere with a combined purpose, and of making people feel they were still valued as individuals too. Communication was needed to be of a type where “staff would have felt less like pawns in a game, and more valued as to be an actual member, actual human beings” [Surgical Registrar: P38]. There was a perception that virtual communication from senior leaders was being used as a one-way conduit.

“So, in terms of that, the communication is easier, and I think that’s what made it so frustrating, that the end of last year, is that we had this group that everybody was on, and yet still we weren’t getting any of the feedback that we wanted to know how to do our job, sort of thing” [Surgical Registrar: P28].

The failure to intercommunicate caused dissatisfaction and the feeling that they were now a divided community, with the Executive team on one side and the collective workforce on the other.

“It made it a huge, big hierarchy as to “we’re in charge you’re doing the work. We’re in charge, but we’re not actually going to interact with you at all, we’ll interact with you by email or a weekly video. And thanks for your hard work”. Which was very impersonal, and I think which, which, didn’t engender the Exec team to the workforce” [Consultant surgeon: P56].

The impersonal nature of the top-down communication led to surgical team-members reinforcing the divide.

“I think even when people did look at their emails, they probably, probably didn’t read it. But I don’t mean that, I’m not, you know, I think because there’s so much going on and I think they lost confidence in it, to them it’s just a load of, it’s a lot of, like, ‘Exec speak’, you know, about numbers and whatever. Whereas, I think at the time the staff would have appreciated something a bit more personal” [Surgical Registrar: P38].

People’s experiences were that there should have been a continued relational aspect to interactions. To surgical team-members this means the need to have “a

really good relationship”, “being visible”, a “bit of banter” [Nurse: P38] within and beyond their immediate team. Surgical team-members view was they needed to get involved with different levels of seniority and roles by “wandering around” [Surgical Registrar: P33]. For managers this was envisaged by surgical team-members as managers getting away from their desk and going to build relationships. The greater use of technology during the pandemic was perceived as hampering such informal opportunities.

“If we were face-to-face, I would have grabbed him at the end of the meeting and had a bit of a chat about that to provide reassurance not only to myself, but to try to cascade that down” [Consultant Anaesthetist: P57].

Despite the growing importance and use of virtual conferencing, emailing, and other IMAs during the pandemic, this face-to-face interaction was felt to be important still. Despite the breakdown in the community atmosphere between senior leaders and surgical teams, a community atmosphere, coming together to tackle COVID-19, was being developed with surgical teams by people who were outside the organization. This was with the public, who were showing their support for NHS workers. Clinicians “got loads of free stuff and it was amazing, you know, the community and everything, and how they all pulled together” [Directorate Manager: P51]. This served to create a stark contrast with the absence of relational activities perceived to have been demonstrated by senior leaders. Internally, senior team-members were saying, ““Guys, you OK? Is there anything we can do?” But, you know, from, from a higher level, from a level that mattered in terms of decisions and what was happening, nobody, nobody listened” [Surgical Registrar: P38] to what surgical team-members were saying, in many instances.

The participants’ main perception was that the senior leaders were not getting the virtual/face-to-face balance right. The need for, and perceived lack of, face-to-face empathy from senior leaders was a key feature in participants’ experiences of the COVID-19 pandemic. “Every once in a while, [team-members]’d get some water and they’d get some free food and things, but that it felt too little, too late to them”. They did not perceive that there was a community atmosphere “coming from inside. That was coming from outside and which wasn’t necessarily true. And I think that was a little harsh on our Exec team. But that’s the perception of leadership for the organisation.” [Directorate Manager: P51].

This perceived absence of empathy was exacerbated when team-members witnessed high levels of relational activities occurring in another hospital via social media. The damaging effect on morale was spread to their colleagues, by sharing what they had seen on digital posts.

“Did you see so-and-so on the TV? Did you see such and such on Facebook, so-and-so, and comments about other Exec members at other hospitals doing stuff and being visible?” [Consultant Surgeon: P56].

It contributed to declining morale, “panic responses in hospitals” [Observation note:01] and people feeling “scared”, in turn leading to staff absence, “a massive deficit” through sick leave, resignations and early retirement. Team leaders were “dealing with people having breakdowns, people having panic attacks” day-to-day [Non-clinical manager: P55].

Surgical team-members express a need to reclaim face-to-face interaction, and not continue to rely solely on virtual communication. This is to create a feeling of belonging, and a safe atmosphere in which people can ask questions. This feeling appears to be growing as they see the end of the pandemic in sight.

“I think before it used to be that you'd have more meetings face-to-face, and I think we lost that during the pandemic, and we're very conscious that we need to be face-to-face with people or be visible to them. So, we just wander around and just have a chat about nothing. And so, we all trying to re-instigate that now. So that people belong. And then if people say you just stood in the corridor chatting to somebody, they'll come up asking more questions as well, which is great for me” [Directorate Manager: P51].

Another view surfacing as surgical teams move into the ‘new normal’ is the view that what has been learnt during the pandemic and the adoption of virtual ways of working, will prove beneficial. Despite the relational vacuum and devastating effect on morale, in terms of technology there are positive reactions.

“It's as sure as eggs is eggs, we'll get over it. And maybe, like I said in the past about the I.T., new ways of working will actually benefit us, and that's a positive for the future” [Nurse: P15].

### **5.3. Contextual contestation: misaligned perceptions of context**

The perceived lack of empathy was a markedly prominent reason for the reaction of surgical team-members to the way in which command leadership was used by senior leaders. It became apparent that this reaction was connected to the surgical team-members' association of the type of leadership with the context in which leadership is used.

#### **5.3.1. Engaging different forms of leadership during the COVID-19 pandemic**

The participants' experiences of leadership, spanning their careers, and including the first two years of the COVID-19 pandemic, included engagement with three forms of leadership: collective, hierarchical and command leadership. These are detailed in the following three sub-sections. The first two forms of leadership, hierarchical and collective, are longstanding. The third, command leadership, is another established form in the NHS, but the process for its use is particularised in the NHS Emergency Framework (2016). It is used by the NHS to respond to major 'incidents and emergencies' related to health or patient care, for example, terrorist attacks, and infectious diseases.

The extent to which leadership activities are engaged with vary according to participants. For example, depending on whether the context is familiar or novel, and whether all, some, or none of the team-members work together habitually. Also relevant are material objects, emotions, motivations, understanding drawn from individual and collective knowledge and experience, and the type of work. Surgical team-members consider a substantial proportion of their work is 'routine'. However, for the purposes of this chapter, I focus on data relating to leadership for surgical work that is, or has the potential to be, within an 'extreme context' category<sup>39</sup>. From participants' rich description of activities, I drew out the principal ones they associate with the three forms of leadership that are relevant to their opinion of senior leaders' use of command leadership. These are illustrated in the findings in the following sub-sections and definitions of the activities are provided in Appendix E.

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<sup>39</sup> These are the categories set out Hällgren *et al.*'s (2018) differentiation between three contexts described in the extreme context research literature: risky, emergency and disrupted contexts (see chapter 2).

The final sub-section presents my findings regarding leadership experiences during the COVID-19 pandemic which led to *contextual contestation* between surgical teams and senior leaders. The participants' accounts indicate that this related to senior leaders' atmospheric work which supported and perpetuated a state of fear and urgency. This was in conjunction with surgical team-members experiencing a prolonged imposition of military-style command leadership. This ran counter to the habituated organisational practice of command leadership and their experiences of relational leadership activities. Finally, I relate the examples participants provided of how surgical team-members 'pushed back' against the managers' narrative.

#### 5.3.1.1. *Collective leadership experiences*

The COVID-19 pandemic began against the backdrop of a move away in previous decades from hierarchical leadership to a more collegial, collective form of leadership. However, participants' accounts also confirm that hierarchical structures within the surgical environment have not disappeared and been replaced by wholly collective activities. Rather, it is the interaction between the different professions of teams which has moved towards greater collective leadership activities. With hierarchical leadership during surgical emergencies, decision-making is predominantly viewed as undertaken usually by one person. By contrast, team-members relate how they collectively contribute to leadership by the activity of 'weaving'. This creates a web of interaction across professional roles, within the immediate team, and more widely with colleagues outside the team, so "you understand the ebbs and flows of the day and, and who takes a bit of a lead at point A, point B, point C" [Surgical Registrar: P36]. This applies whether their roles were traditionally considered equivalent, lower, or higher hierarchically. During routine work decisions are no longer taken by the Consultant Surgeon alone.

"There's no boss in theatre anymore, there's not a God in the cockpit now" [Surgical Registrar: P33].

Empowering team-members plays a part in enabling contributions to leadership, particularly by balancing autonomy and support. Deciding how much autonomy team-members may have, or how much support they need, is informed by established processes and relationships. Intertwined with this, respecting is highlighted as a key activity. Respecting others' opinions facilitates those "ebbs and

flows” of leadership amongst different people. Three main sub-themes arose from the data regarding the processes and relationships that facilitate respecting. These included engendering respect for professional expertise, and respecting others’ opinions (Figure 5-2).

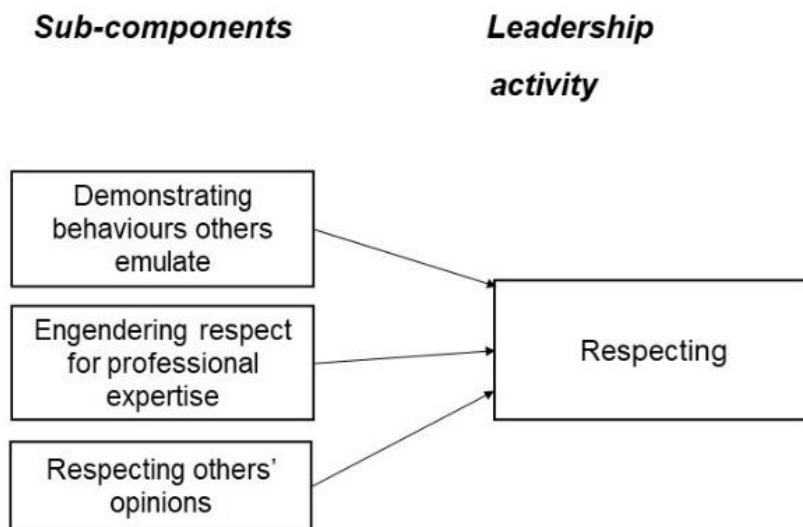


Figure 5-2. Individual activities within the bundle of Respecting activities

By engendering respect for their own professional expertise, staff gain some autonomy at work. This may be being given latitude by colleagues if the person is taking a long time to do something or chooses alternative methods to those that their colleagues might select. The engendered respect paves the way to avoiding a conflict of opinion as to the course of action to take.

“They’ll moan and maybe they might say that so and so takes a bit longer. But actually, if they respect that the surgeon is taking longer because actually, they just really want to make sure that, some people are more anal, meticulous as in they’ll be a bit slower, but they get the job done, and if the outcomes are good, and they are nice most of the time, and respectful, then they will put up with it” [Consultant Surgeon: P18].

Respecting others’ opinions is considered important for surgical team leadership, particularly when collective leadership is exercised. Understanding your role and the colleague’s role is needed for mutual respect: to be “a person who can understand other people’s points of view and is willing to discuss, who is not pushing for his decision to be the only decision” [Consultant Anaesthetist: P19]. Intercommunicating

is seen as an important activity to support people feeling that their opinion is listened to and respected.

“If I rang any of them and said, “*Listen, I am really concerned about X, Y, Z*”, that I said, that they would, they would react to that, and there was that mutual respect there” [Senior Nurse: P38].

How individual members know what is expected of them, when demonstrating collective leadership activities, is described as guided by experiential understanding, rather than explicit guidelines or rules. In established surgical teams this may be drawn from what is expected, based on the team’s collective experiences. Participants identify that there are occasions when it is necessary to quickly manage to collaborate with people who are not habitual work colleagues. However, established working relationships display a more prominent role in collective leadership: they are perceived as producing effective collective leadership, drawing on previous relational experiences.

Whilst staff consider that leadership had become more collaborative before the pandemic, there are some restrictions to this trend. Since the 1990s, due to the changes in surgical team structures and training, there have been less opportunities to delegate. Consequently, the extent of autonomy being granted to junior staff is said to have reduced. Also, the promotion of collaboration and inclusivity is not necessarily sustainable. An example was that the theatre scrub team need to be “kept on side” to sustain the empowerment they grant to non-scrub team staff. How to do this includes how people talk to one another, as, whilst “there’s a way of speaking to people, which is arguably the human way of speaking” [Consultant Surgeon: P10], not all staff do so.

#### 5.3.1.2. *Hierarchical leadership experiences*

Although there has been this shift to collective leadership, hierarchical leadership is said to persist. However, its use is considered acceptable to a much lesser extent than in the traditional Firm model of leadership. Participants say that in moments of emergency, such as a ‘never event’<sup>40</sup> occurring, there is a need to switch to hierarchical leadership. The surgical team-members’ view is that using hierarchical

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<sup>40</sup> A serious incident or error, e.g. of patient harm, that could have been prevented before harm occurred.



leadership is not sustainable as an acceptable form of leadership, outside of the emergency context. At the conclusion of the emergency, a prompt reversion to a more collective form of leadership is expected.

“I think there are, there are ways you can be dictatorial in leadership, but I don't think it is a sustainable thing. I don't think it's something that you can use to, to lead people long term. I think it's just some situations call for immediate action” [Consultant Surgeon: P30].

Hierarchical leadership in surgical teams can emerge from the explicit, or tacit, acknowledgement by team-members of the expertise of an individual, as well as being used by virtue of seniority or role. This is usually the most senior surgeon or anaesthetist in theatre, on whom the team focuses, and who directs activities. This happens within the context of the operating theatre and surgical procedures that staff are familiar with, even if a surgical ‘complication’ (a problem or something going wrong) is unexpected.

Consequently, positive impressions of the exercise of hierarchical leadership include a surgical team-member engendering the respect of colleagues for their individual expertise. Subsequently, when that person initiates hierarchical control, the other team-members may be pre-disposed to them doing so. This expertise is preferably known to, rather than assumed by other surgical team-members. Typically, this knowledge is based on relational experiences acquired through working together habitually. Thus, the leadership process is not purely linear, but loops back to refer to previous events and recollections of when hierarchical leadership was perceived as appropriate by the surgical team-members.

“It's an emergency situation, and you see there's a solution that you can you, can do something about, you know. I think being dominant and using seniority, or experience, or whatever it is that, you know, you bring to the table in a, you know, a forceful or dominant way, I don't see a problem with that if it's needed. You know, sometimes people just need direction” [Surgical Registrar: P41].

However, there is a growth in using flexible surgical teams, that is ones whose members do not work together habitually. This trend escalated during the pandemic. Increasingly, teams work together for a single episode, such as one operation or operating list. In this situation respect is more likely to be accorded based on

professional roles, status, or reputation, rather than stemming from team-members' knowledge of the person gained from habitually working together.

### 5.3.1.3. *Command leadership in the NHS*

In response to the COVID-19 crisis, at the organisational level the use of command leadership was implemented, in accordance with national level policy. This policy describes command leadership as 'the exercise of vested authority that is associated with a role or rank within an organisation (the NHS), to give direction in order to achieve defined objectives' (NHS England Emergency Preparedness Resilience and Response Unit 2016, p.31).

Command leadership is rooted in the traditional military principles of Mission Command. The expectation for the latter is that command leadership emerges from a central point from which it is coordinated and may be controlled when required. However, principally the military form of command leadership is decentralised and delegated in a structured way, cascading information and controlled amounts of delegated accountability, responsibility, and authority to act, appropriate to their expertise. However, it is required to be adaptable, allowing a more informal networked structure to emerge if the situation requires it (Ministry of Defence 2017).

There was the impression that surgical teams witnessed "some good examples of really good leadership, and some examples of awful leadership" [Consultant Surgeon: P21] under command leadership. Where people felt it was 'awful', the findings indicated that this occurred when there were difficulties in the implementation and operation of this form of leadership. Leadership delivered in the NHS through the NHS' 'command framework', was described as facing problems due to the NHS' organisational management structure.

Working together in the operating theatre are teams headed up by three disciplines: surgical, nursing and anaesthetics. Each has their own, separate chain of command. For example, the surgical chain of command is comprised of Senior House Officers, Registrars, Consultant Surgeons, a Clinical Lead, a Clinical Director, a Directorate Manager, and the Medical Director of the hospital. The three chains do not have a mutual point in their reporting lines until they reach the Medical Director. This appeared to create some weaknesses in coordination, and command leadership being executed in a way that did not match the expectation of staff. The

organisational structure does not always support the networked, decentralised operational aims of command leadership, as it is seen in its original military setting. There will be issues that require mutual decisions or changes across all three chains, some of which are of an operational level far below something surgical team-members said they consider a Medical Director needs to be involved in. It may also require a decision that calls on clinical knowledge which managers further along the chain of command may not have.

“So, this decentralisation chain I'm talking about, that in the Army works fine, because you've got command chains working all the way down, in the NHS it just doesn't work, because leadership command and control, again, whatever you want to call it, it just isn't factored into any of the design of how the structures work clinically” [Surgical Registrar: P36].

Despite the challenges of this ‘mismatch’ of organisational structure against a command framework usually, there were a few positive recollections of command leadership where an escalation up and filtering down of information appeared to be engaged. Where there were initial problems, a solution was achieved by individuals purposefully taking action to overcome issues. This was by using weaving, aspects of which include motivating, inspiring, and empathising with other people. At the mid-level of the chain of command individuals were interceding on behalf of colleagues. This allowed the clinicians’ voice to be heard, thereby (re)creating two-way communication opportunities, *intercommunicating*. In this way information could be fed up the chain of command to the Executive during a virtual conference call. An example of this is described above, when a Manager interceded for Consultants, to enable them to present information to the Executive. The motivational, empathetic support from the Manager in that case produced the outcome sought by the Consultants.

Whether interceding takes place is, in surgical team-members’ view, limited by the potential intervener’s perception of their own vulnerability to a negative reaction by the person they are approaching: the surgical team-members does not perceive there is a safe atmosphere. The concern is that they don’t want to “make it an argument between him and me and the staff” [Consultant Surgeon: P21]. Interceding is an activity that it has become more possible to use over the last twenty years or so. This appears to stem from greater empowerment of the rest of the non-

Consultant surgeon members of surgical teams, and the more collective approach of the different professions to what existed ten to fifteen years ago. It acts to surmount the traditional hierarchies within the professions: the “old way of I am the Consultant. You are the Senior House Officer. You don’t talk to me directly” [Consultant Surgeon: P12]. The activity of interceding was described by surgical team-members as taking place usually on behalf of someone more junior and/or who lacks the autonomy to act on their own. This contrasts with what Consultants were experiencing during the COVID-19 pandemic period of command leadership: they, as senior members of the team, required someone to intercede on their behalf with senior leaders as the Consultants had lost their autonomy to speak up themselves.

### **5.3.2. Perceiving contexts differently to create contextual contestation**

So, whilst effective use of command leadership was shown to enable senior leaders to demonstrate empathy and maintain morale, these positive impressions were not felt uniformly across the NHS, indeed they appeared to be in the minority amongst participants. As the managerial narrative became increasingly incongruous with organizational reality, surgical team-members perceived the context differently to senior leaders: *contextual contestation* occurred. There appeared to be three main interlinked elements that provided an explanation for negative perceptions which caused the contextual contestation.

First, participants said that during the COVID-19 pandemic they experienced a sudden switch away from the usual organisational practice of command leadership. In the NHS, command leadership usually exists for a short duration. This is to respond to normally brief disruptive ‘major incidents’, such as terrorist attacks, and winter peaks in demand for hospital stays, as work tended to be cyclical, “feast or famine” [Consultant Anaesthetist: P20]. So, whilst command leadership is not alien to them, the prolonged imposition of the organisational top-down leadership contradicted habitual patterns of leadership activities.

The second element evident from the participants’ accounts was that surgical team-members have an expectation of different types of leadership to be used in certain contexts. Thirdly, surgical team-members expect leadership activities, in particular relational activities, to be engaged to a different extent depending on the type of leadership used. When the expectations of the surgical team-members were not met

based on their assessment of these three elements, contextual contestation between surgical and senior leaders occurred. Consequently, some surgical team-members 'pushed back' against the senior leaders' narrative of an ongoing period of crisis.

#### *5.3.2.1. How surgical team-members experience different types of leadership*

The way surgical team-members' experience command leadership contrasts with the hierarchical model of leadership they use. When hierarchical leadership is used in day-to-day surgical situations, control of the event is claimed usually by one person, based on their expertise. Consequently, the cascading information and autonomy, that is a feature of correctly instigated command leadership, is not required for hierarchical leadership.

Command leadership differs too from collective models. According to participants, collective leadership tends to be fluid and emergent, rather than through the pre-determined structure typical of the model of command leadership used by the NHS. Despite a move to greater collaboration and inclusivity over the years, people working in the surgical environment seem to agree that in moments of emergency, such as a complication during an operation, the surgeon or anaesthetist may adopt a hierarchical style. However, team-members express that this is a short-lived approach and is not sustainable as an acceptable approach outside the emergency context. Similarly, command leadership usually is expected to be in place for a short period of time, then a reversion to the usual patterns of collective and hierarchical leadership is expected to occur.

#### *5.3.2.2. Contextual contestation between senior leaders and surgical teams*

The start of the use of command leadership to respond to COVID-19 was accompanied by a naturally occurring omnipresent sense of urgency, panic, and fear (Horton 2020; NHS England 2020; Arora et al. 2022). This was evident from reports in the national press (Nicholson 2020; Okri 2020), and reflected in the participants' accounts of how they felt at the outset of the pandemic.

"At the beginning of the pandemic everyone was really scared and understandably so" [Surgical Registrar: P28].

Atmospheric work by senior leaders contributed to the formation of a war zone atmosphere. This was through their adoption of terms such as "on the frontline" and

a “War Room” for meetings; also, actions such as NHS England advertising that it was “rallying the troops” for the war on coronavirus’ as it sought volunteers (NHS England 2020a). This initial atmospheric work was reinforced by bringing the military into hospitals, which generated an apocalyptic, war zone atmosphere.

“I went in for some training in the hospital, that had all kind of closed down. And the army were in there trying to set up there. And I think it was quite apocalyptic feel. It was a palpable, apocalyptic feeling [Nurse: P15].

The organisational use of leadership that has military roots was reflected in how people expressed their experiences during the first COVID-19 wave, being “like fighting a losing battle” [Nurse: P16]. The atmosphere was one of “asymmetric warfare. You have a huge monolithic hospital with rigid structures, protocols, a bit like a traditional army” [Surgical Registrar: P25]. The continuing use of military terms by senior leaders built on and developed the atmosphere of fear in the early stages of the COVID-19 pandemic in digital and online communications.

The continued urgency of the senior leaders’ communication, when “the War then went to emergency surgery” [Nurse: P29] did not correspond with what the surgical teams were seeing in their own work. The reality was that whilst the wards and intensive care were exceptionally busy, this was not necessarily so for surgical areas. Why this contrasted with other non-surgical colleagues, is explained at least in part by the unique nature of the surgical environment.

“Theatres and ITU are very different, you know, although they're in the same same space in the hospital, not same space. They're all very clinical, but they're different worlds entirely” [Senior Manager: P50].

With the initial wave of COVID-19, “everyone was a bit more het up and a bit more stressed out because they didn't know what was going on. Whereas this time around, people got used to certain things, you know? So, yeah, I would say definitely better the second time round” [ODP: P23]. After that first stage then, “I think with COVID, it was just, Oh my god. And nothing really happened” [Consultant Surgeon: P56], “Everything was pretty much the same as it was, I mean, from a surgical point of view” [Surgical Trainee: P3]. Surgical team-members say, “the management side of things has been really quite non-existent”, but surgical teams knew what to do clinically, and “just got on with it” [Nurse: P42].

### 5.3.2.3. *The ways senior leaders delivered leadership did not meet expectations*

When for many in surgical teams' the view of the context reverted to 'just getting on with it', surgical team-members' reaction to the leadership of senior leaders appeared to be based on their pre-pandemic experiences of leadership. During the pandemic many participants felt that their opinion was not being sought by the senior leaders as they had pre-COVID-19. It "was a case of, people not coming and speaking to people on the floor, speaking to my senior nurses. Because they were, they were saying, "This is unsafe, we can't do this"" [Senior Nurse: P38]. The view was that senior leaders needed to provide, "greater communication, greater coordination. Much greater presence on the shop floor, from the management." [Consultant Anaesthetist: P20]. This led to a negative perception of the Executive's leadership.

"From a like an Exec, like operational point of view, I think during the first wave of COVID, showed really poor leadership" [Senior Nurse: P38].

Candour and not having any hidden agendas was described as "the biggest thing" senior leaders can demonstrate when engaging with staff. However, participants perceived that the senior leaders may not have been candid, but were creating a false impression of the situation.

"Be honest with us about how things are. That would go a long way. That would be a huge thing. There seems to be quite a lot of cloak and dagger within what we do. You sort of get fed certain bits of information which aren't necessarily true. And a picture is created, an illusion is created then, shall we say. And it's not necessarily right. So, I think good leadership for me is transparency and honesty" [Non-clinical Manager: P52].

Senior leaders appeared to often become paralysed by the uncertainty of an ever-changing situation during the COVID-19 pandemic. With hindsight, senior leaders considered that they "lost hearts and minds very early on...that was soon lost because then command and control came in and it was, it felt on the floor like a little bit of a whirlwind, in the fact that command and control didn't know what they were doing" [Directorate Manager: P51]. A less critical view voiced was that decision-making may have happened but that those decisions were not always communicated to clinicians.

“I think that probably did happen within the executive level of management, but it just sort of circulated around the executive management level and intermittently bits of information would be drip fed down to everybody else, is how it seemed” [Consultant surgeon: P56].

Where decision-making was apparent, this appeared as unilateral, controlling many aspects of clinicians’ activity, lacking consideration of subordinates’ input, and evoking negative emotions (De Hoogh *et al.* 2015). The communication relaying decisions was perceived often as one-way, and deficient in respect for people’s professionalism and expertise. “They didn't actually take into account other views, that were relevant” [Consultant Surgeon: P18], from front line staff, and did not explain why certain decisions were necessary. Command leadership was felt to have “wrecked” the pre-COVID collective practices between surgical teams and senior leaders: it disrupted the usual lines of reporting.

“You definitely feel that commands are given on high, that the Board kind of decide things separately to the general day to day managers. And I think often the general day to day managers are feeling as bewildered by some of the changes as us” [Consultant Surgeon: P18].

It was not the surgical team-members’ expectation that there would be “decisions by committee” during the pandemic. However, there was the expectation that the command leadership process should allow frontline staff to escalate concerns, to seek advice, and provide information. Also, participants saw the need for “autonomy and trusting these people [clinicians] to make the right, correct decisions” [Surgical Registrar: P27]. Surgical team-members felt “they were not in the decision-making process” [Nurse: P29]. Morale was “decimated”, and “it made us all feel rubbish. No one felt cared about” [Surgical Registrar: P33]. In describing the perceived lack of relational activities, some thought “it was like a dictatorship” [Nurse: P38], rather than leadership. Consultants were used to being given directions but then having autonomy to communicate and arrange what needed to be done in their own way. This element of the empowering bundle of activities (Figure 5-3), autonomy, was removed and left people feeling powerless.

“I get told by the medical director and the Exec team what what's going to happen, you can influence it a little bit and then I have to package a message of that downwards, but. It's a bit like a Rubik's Cube, isn't it? You're given the puzzle, there are several different ways of solving it. The problem with the command and control bit is that you were also



given the way to solve it as well. I think that made people, at all levels, feel quite powerless. But you weren't in control. At a time when you were already very much feeling like you weren't in control" [Consultant surgeon: P49].

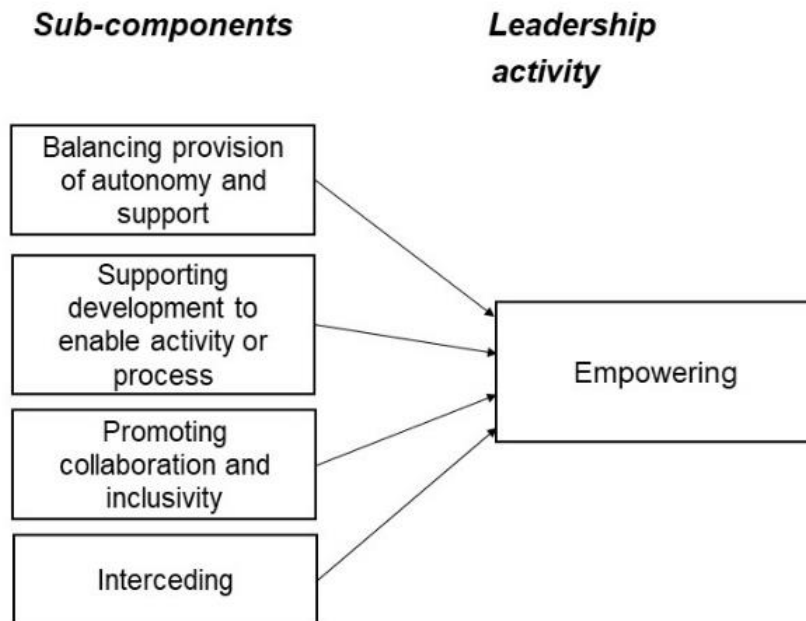


Figure 5-3. Individual activities within the bundle of Empowering activities

Participants considered providing autonomy to them is to “give them space” [Executive Board-member: P09], so surgical team-members could carry out work and take decisions independently. This needs to be balanced though in surgical team-members’ view, with providing appropriate levels of support. Rather than considering autonomy to be controlling, participants viewed it as parental leadership<sup>41</sup>. In surgical work this is engaged to protect individuals who may act outside of the surgical team’s collective interests when exercising their autonomy. To afford this protection the senior team-member needs to understand what the surgical team-members are trying to do, and whether there needs to be a change in the team’s or individual’s activities.

“We're very good at creating a huge pack of lone wolves within theatres and people, sometimes you give total autonomy and people will go off and do something really radical which will cause multiple issues. But that control freak aspect purely relates to the I need to know because at some point there might need to be a sense check

<sup>41</sup> The use of parental leadership is to provide a gender-neutral alternative to paternalistic and maternalistic.

about slowing down. Stop. That it's going in the wrong direction. It's not that I want you to do everything that I want. I just want to know what you, what you're getting up to really, if I'm honest" [Clinical Manager: P37].

However, the dominant narrative of participants was that command leadership stripped away their autonomy. Initially, surgical team-members accepted that, but this changed as time progressed and surgical team-members no longer considered they were in the initial extreme context.

"I think the first wave, particularly we were on emergency footing, and I don't think I didn't hear anybody that was complaining about not being not being consulted, the first wave. I think those voices got louder in the second wave and now third wave, because it got more complicated, particularly as services have reopened" [Senior Manager: P50].

The other recurring issue detailed above in the virtualizing section was that, in the eyes of participants, the senior leaders had also stopped providing support, by failing to empathise with the mental health and well-being issues being experienced by surgical team-members. This was accentuated by the absence of senior leaders at the frontline. They were not there in person to ask, "How are you?" Surgical team-members wanted senior leaders to,

"be seen, be doing, and in those moments when you're role-modelling, that's your time to build relationships with those staff. I think the senior staff's absence was very negative in terms of their relationships with their colleagues" [Nurse: P43].

As well as a lack of face-to-face demonstrations of empathy, participants did not understand why, despite the vastly increased use of digital technology, it was not harnessed. It was not being used to involve them, to gather information about what was happening in the patient facing roles, and to enquire after the well-being of staff. Instead, "it's a big generic email that's put out to everybody in the Trust. That's all we get" [Nurse: P42]. The situation was 'relation-less' in comparison to what they expected.

### **5.3.3. Habitually adjusting different levels of relational activities for different forms of leadership**

The above accounts of ways that leadership delivered by senior leaders did not meet the expectations of surgical team-members, illustrate too the relational activities

participants expect from leadership. The participants' descriptions indicated that relational activities happen to a different extent depending on the type of leadership used.

Drawing together the above findings, there are three key elements that affect their opinion of what relational activities they expect which are set out in Figure 5-4.

These are context, type of leadership and the level of relational activities expected for the combination of the type of leadership and the context.

The contexts shown are the categories identified by Hällgren *et al.*'s (2018) in their review of extreme context research literature. The COVID-19 pandemic stemmed from a purportedly natural phenomenon, rather something arising from the NHS' core activities, and it caught the organisation unprepared. Consequently, I found that it fell within the 'disrupted' context described by Hällgren *et al.* (2018). Whereas the findings indicate that hierarchical leadership is usually used by surgical teams in a context that falls under Hällgren *et al.*'s (2018) definition of 'emergency' contexts<sup>42</sup>: it arises when an event has occurred, and is directly related to the core activities of the organisation. Other surgical work that carries a risk of an extreme event occurring and are directly related to the core activities of the hospital, falls within Hällgren *et al.*'s 'risky' context definition. This does not encompass the routine work of surgical teams.

The combination of the relational experiences described in the data form the vertical axis. This denotes the elements varying between:

- relational autonomy (high) and expertise-based autonomy (low)
- relational trust (high) and swift trust<sup>43</sup> (low)
- relational communication (high) and non-relational communication (low)

'High' and 'low' reflects the researcher's perception of the habitual use of activities based on the participants' explanations. These fall along a spectrum of the high to low level types of relational activities listed above. This is rather than an evaluation of, for example, their efficacy in patient outcomes. It is a qualitative interpretation

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<sup>42</sup> Hällgren *et al.*'s 2018 definition of 'emergency' contexts is detailed in chapter 1.

<sup>43</sup> A 'depersonalised' form of trust which 'less emphasis on feeling, commitment, and exchange' (Meyerson *et al.* 2012, p.191) than trust developed through relationship built over time.

based on the participants' reports of their use or observations of activities, rather than a quantifiable assessment of the quality or frequency of activities.

Collective leadership experiences are described as emerging from weaving activities, supported by intercommunicating, atmospheric work, and respecting colleagues. These activities rely on a high level of relational elements: a 'high level' indicates participants' perception of the use of that activity frequently and habitually. Whilst the activities engaged during the hierarchical leadership process differ in some respects to collective leadership, there is still evident a high relational element to some activities. One example is that respect can be achieved more easily when a person takes charge of the situation if the team has worked together habitually. Another is that intercommunicating is important, particularly before and after emergency events.

In contrast, as illustrated in Figure 5-4, lower levels of relational activities were described by participants for command leadership. The levels of relational activities are plotted vertically, according to the Extreme Context Research (ECR) category they fall in, the latter being shown on the horizontal axis.

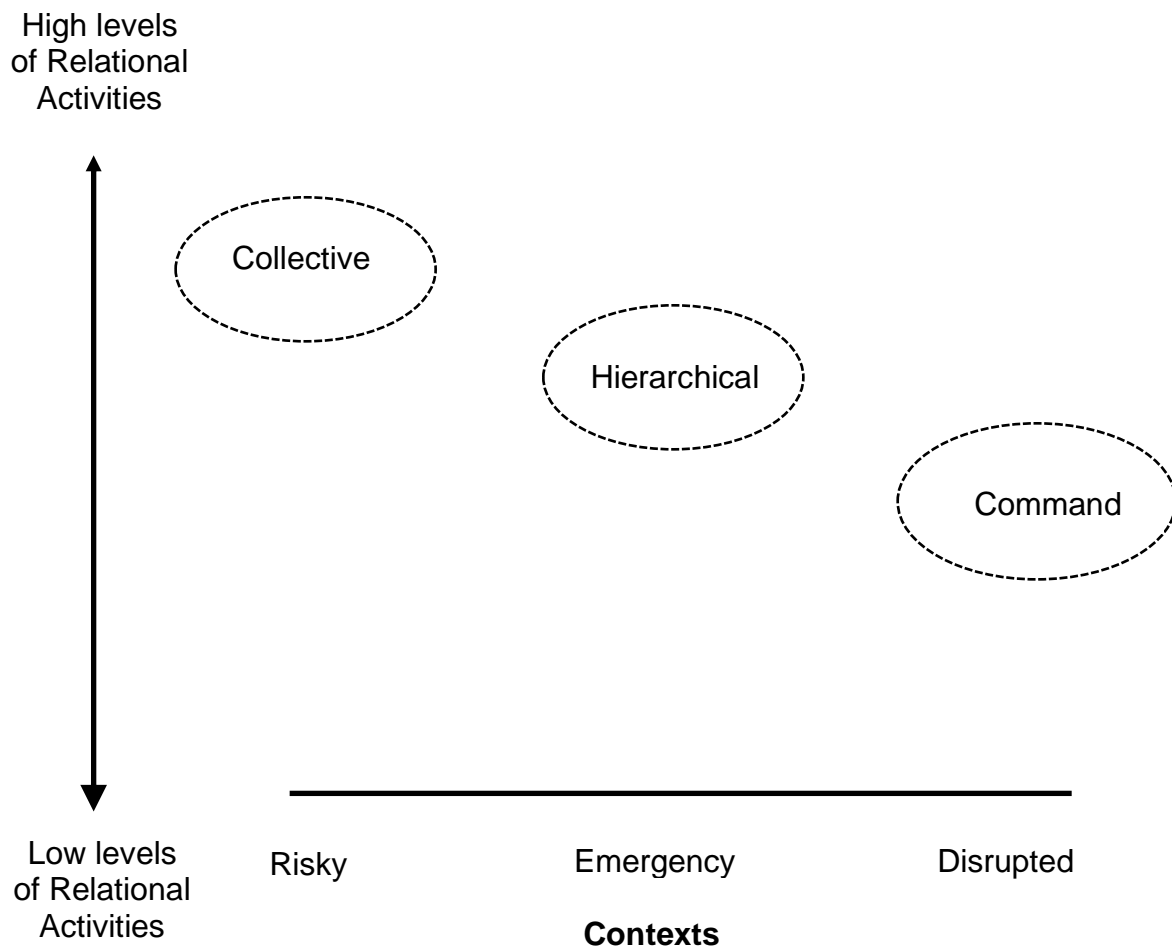


Figure 5-4. Levels of relational activities within surgical team leadership on a contextual spectrum. Source: author, with reference to Hällgren, Rouleau, & De Rond, 2018

The use of activities that were traditionally perceived as producing positive relational responses, such as building reciprocal trust, do not appear to be (as) applicable with command leadership. People had “belonged to a Consultant [...] to a particular community of practice. Over time then had been “drifting away from that, in most hospitals” but “the pandemic's made that n-times worse” [Surgical Registrar: P25].

The analysis of experiences relating to each leadership form supports my understanding of how they relate to the risky, emergency and disrupted (RED) contexts identified by Hällgren *et al.* (2018), summarised in Table 5-3. This summarises the connection between contextual contestation and the absence, or diminution, of certain relational activities in extreme contexts.

Table 5-3. Examples of predominant aspects of leadership activity in 'RED' contexts

	<b>Collective Leadership activities</b>	<b>Hierarchical Leadership activities</b>	<b>Command Leadership activities</b>
Context used in principally:	Risky	Emergency	Disrupted
Leadership emerges from:	Creating webs of interaction across roles ('weaving')	Acknowledging expertise and role hierarchy	Organisational response to disruption
Autonomy activities	Atmospheric work and respecting (balance of autonomy and support)	Engendering respect for individual expertise (autonomy: high for expert; low for other team-members)	Filtering information and scanning (selective autonomy)
Drawing on previous relational experiences	Possible	Possible	Difficult
Key activities for positive social emotional effect	Empowering, respecting, and organising	Respecting, communicating, and decisioning	Inter-communicating appropriately & relational interaction
Autonomy context	Established process	Established and reactive processes	Reactive processes

The participants' accounts indicate that after the initial wave of the COVID-19 pandemic, the relational activities, or lack of them, that were engaged by senior leaders did not align with the context surgical team-members perceived they were in. Consequently, this triggered a response which culminated in a 'push back' from surgical team-members against senior leaders, and in many instances staff absences, resignations, and early retirement.

#### **5.3.4. Surgical teams' 'push back' against the senior leaders' narrative**

After the initial period of battle against COVID-19 in hospitals, surgical team-members seemed to detach themselves from the context the senior leaders were presenting. For surgical teams the war zone atmosphere described above dissipated: whilst the wards and intensive care units were exceptionally busy, in surgical areas, in many cases, their routine, non-urgent work had been put on hold. Many surgical team-members were very concerned about patients, particularly cancer patients. Their accounts conveyed to me that they felt strongly that patients' conditions were being exacerbated, possibly leading to inoperable fatal outcomes,

due to the delay in surgery. Team-members knew what to do surgically to avoid this, and consequently they began to reclaim collective leadership.

“Didn't take any notice of them [command leaders]. Doctors mobilised themselves. So, we, we, we, we mobilised ourselves, just did a different rota. We sent six of our trainees to intensive care to help out. We stopped operating at site 1 and had to take people up to site 3 for their cancers. I've never operated up there. We. Yeah, we did really well. So, a lot of the juniors had to be off sick or help on the medical wards. So yeah, it was different, but we, it wasn't the Executive that mobilised us. It was us that mobilised ourselves... We just, we just got busy, stuck at it” [Consultant Surgeon: P01].

In some cases, surgical teams pushed back by finding a work around command leadership directives, in others they explicitly went counter to senior leaders' instructions. In respect of the first type of push back, one of the command leadership actions taken during the pandemic was to stop 'elective' work: that is planned rather than emergency operations. During this cessation, the surgical teams implemented their own process, to maximise the number of patients they could treat under the rules imposed by senior leaders. The Consultants used their own interpretation of what was best for the patients waiting for surgery. They reclassified the seriousness of the patients' illness so that they were allowed to operate on them.

“They got together. They figured out what they were going to do. They had a plan, a strategy for sorting out their patients. And what they basically did was they actually got through, they got through more work during lockdown and COVID, than any, than before when they did it before. And what they basically did was they reprioritised all the patients that were routine and made them urgent, on the basis that they had a cancer. Prostate cancer is a benign cancer, so basically elevated the urgency. So, they were then allowed to continue because their cases are short volume, they did a lot of them” [Consultant Surgeon: P21].

With respect to the second type of push-back, surgical team-members decided to 'break the rules' set by senior leaders and do what they thought the right thing to do was, based on their professional experience.

“The command and control thing just, just kind of wrecked all of that because we didn't have any autonomy to make decisions. I get why we had it, but we didn't. We still broke some of the rules. We one of the first people to do COVID swabs in emergency surgical patients, for example. I regularly got emailed by our IP lead, which I ignored, saying you shouldn't be doing them. But, you know, we did because

there was a good reason to do it. And then within a couple of, three to four weeks later, we were told we had to start doing it” [Consultant Surgeon: P49].

Consultants organised their own surgical teams, that were different to the usual configuration, and devised their own criteria for whether patients should be operated on.

“We knew this wave was coming of COVID, and it was mid-March [2021] [...] We got it bad... So, but we saw them all in clinic, in one clinic. And I, I organised anaesthetists, all of the surgeons. So, we had a big clinic. We culled four or five elderly patients that we would have normally operated on, because we know COVID is coming, we got rid of four or five patients, said, "You're not having surgery". We just did the other eight or nine. We mobilised ourselves in groups to do the surgery. No trainees. So that went well. And I think the anaesthetists and the junior surgeons, and the nurses saw how we mobilised ourselves and how the Consultant surgeons sort led from the front, really” [Consultant Surgeon: P01].

The participants’ accounts of such pushbacks, and surgical work generally, during the pandemic were ones of working together collectively. However, as can be seen from the examples, the pushback actions appear to have been organised and led by the Consultants, displaying the use of a hybrid collective and hierarchical model of leadership by of surgical teams.

#### **5.4. Summary**

In this chapter, through the concept of *virtualizing* I have presented how leadership using virtual communication has gradually been augmenting face-to-face leadership for surgical teams. The findings illustrate how intentional, and unintentional activities, affect the perceived distance between team-members. Also, how this can create or reduce barriers in people’s willingness to communicate with others. I contend that leadership and atmospheric work perform a key part in creating and maintaining a community atmosphere in virtual environments. Virtualizing is perceived to have accelerated during the COVID-19 pandemic. However, the findings demonstrate that whilst technology has increased the opportunity for interaction with colleagues and participating in atmospheres virtually, greater use of technology during the pandemic was perceived as hampering such informal opportunities to sustain relational atmospheric work.



Based on the findings, I reported that senior leaders' atmospheric work which supported the formation of a war zone atmosphere became incongruous with the surgical team-members' perception of the context they were in. There was evidence that as a result contextual contestation occurred after the first wave of COVID-19 which led to surgical teams reclaiming collective leadership.

Additionally, I have provided an account of participants' experiences of three forms of leadership engaged with by surgical teams. I have related how experiences of those forms have changed before and during the COVID-19 pandemic. The surgical teams' leadership experiences depict how they identify the three leadership forms with categories of extreme contexts by and large, and how relational aspects of leadership are associated with that combination of those contexts and types of leadership.

These findings, and those relating to atmospheric work provided in the previous chapter, establish the basis of the discussion in the following chapter.

## **6. Changes experienced in leadership in NHS surgical teams**

### **6.1. Introduction**

The aim of this study is to investigate the nature of change in contemporary surgical teams. The starting point was to investigate surgical team leadership from the 1980s onwards: that is before and during the time that UK healthcare policy began to encourage patient-facing staff to become leaders, even if they are not in formal leadership roles (Martin and Waring 2013). Overall, the participants' accounts of leadership change indicated a move from the predominantly hierarchical, pastoral model of the traditional surgical team leadership to a more collective form of leadership, albeit with occasional use of command leadership for short periods. However, during this study the participants also experienced the NHS' protracted use of command leadership in response to the COVID-19 pandemic (Sykes and Pandit 2020).

To theorise about the changes in leadership, I drew on the concept of disruption in technologies, pioneered by Clayton Christensen in 1997 (Adner 2002). 'Disruption' is a specific form of change which produces an alternative to the established means of performing an activity or process, or part of it. As my research progressed it emerged that the changes experienced as a result of disruption are more nuanced than simply changing from one form of leadership to another. It became apparent from the findings that there are a number of less visible ways in which leadership has changed and continues to do so. An issue common to these was leadership for atmospheric work. This has become increasingly important for surgical teams: participants recognised atmospheric work as a collective activity in contemporary leadership, whereas accounts of the traditional leadership model indicate that atmospheric work tended to be a hierarchical phenomenon. Contemporary atmospheric work is work undertaken more, or less, purposefully to create and/or maintain a particular kind of emotional atmosphere (generally understood as a mood or feeling) in a team or organisation. Thus, using atmospheric work, as part of the socially constructed process of leadership, may (re)create or affect an atmosphere. My discussion of atmospheric work follows a logical path that starts with the earliest occurrence of contemporary atmospheric work the participants talked about. Whilst atmospheric work may have occurred before the 1980s, this was before the

participants had experience of working in surgical teams so was not raised by them. Furthermore, there are not accounts in previous studies about surgical teams' leadership for atmospheric work. Following the introduction of the WHO surgical checklist in the 1990s, surgeons developed a templating process fashioned around the checklist, which they use to create and re-create safe atmospheres. Additionally, there has been an increase in atmospheric work by the surgeons and other surgical team-members to expand participation in a 'safe atmosphere', in which people feel safe to speak up about matters that cause them concern, predominantly regarding patient safety.

In respect of more recent contexts, the findings indicated that a safe atmosphere can be affected by other atmospheres. In the context of this study these are community and war zone atmospheres, as reported in the next two examples of changes in leadership of surgical teams. First, in the 1990s virtualizing began, which is the transition from the execution of leadership using face-to-face arrangements to fully virtual arrangements. Virtualizing disrupted relational aspects of leadership and affected power distances between team-members and work colleagues outside the surgical teams. This included changes to the 'community atmosphere', in which they perceive having a sense of belonging amongst the community of people the person is working in, or with. Secondly, the most recent experiences of surgical team-members during the COVID-19 pandemic concerned the senior leaders' atmospheric work which contributed to a 'war zone atmosphere'. Some surgical team-members subsequently 'pushed back' against senior leaders, and their accounts provide empirical evidence that contextual contestation occurred.

This chapter builds on these findings to develop an answer to the overarching research question by situating the study's empirical findings in relation to previous studies and theoretical development about atmosphere, relational aspects of leadership, and contextual effects on leadership. Drawing these together (Table 6-1), I show how disruption of different leadership activities has affected atmospheres, and I propose future atmospheric work to advance understanding of the effects.

## **6.2. Disruption of leadership activities, atmospheres, and atmospheric work since the 1980s**

During the period studied for this thesis, since the 1980s, there has been a shift in scholars' and practitioners' focus towards relational aspects of leadership and collective types of leadership (Uhl-Bien 2006; Picard and Islam 2019). Participants' experiences describe a transition in the leadership space during these decades too. In using the term 'leadership space' I envisage this as the space between people, a space where they interact and changes occur in how leadership, and leadership activities happen or are resisted.

Participants say they witnessed the decline of the traditional surgical team structure that was customary up to the 1990s. This was accompanied by a growth in the use of collective leadership. Their accounts indicate that this has been brought about largely by a succession of events that affected surgeons' leadership. These events included amendments to the law, changed hours of work, training practices, and the introduction of the 'New Firm' resulting in a wider array of professionals than in the traditional surgical teams. Additionally, a new work pattern with flexible teams began to be used in many surgical settings. I term this 'Lego working', to reference how the teams are built, deconstructed, and rebuilt in a different form recurrently, as are the interlocking Lego® plastic toy bricks.

There has been limited evidence available about surgical teams' contemporary experiences of leadership since those changes, and how that varies in different contexts (Oborn *et al.* 2013; Malby *et al.* 2018). This has led to a call for more research into changes in leadership in healthcare (Gunzel-Jensen *et al.* 2018). Consequently, I sought to understand surgical teams' experience of the changes they had experienced. To do so I took account of the complex background of surgical teams, histories of the individual professions within them, and individuals' stories of leadership across the years.

Based on these elements, I considered how the original leadership model had been disrupted in order to theorise about the changes to leadership. 'Disruption' is a specific form of change. Its meaning is drawn from the concept of disruption in technologies pioneered by Clayton Christensen in 1997 (Adner 2002). In the technological literature, disruptive events start the process of producing an

alternative to the established means of performing an activity or process, or part of it. Initially this alternative can be inferior to the existing one, from the perspective of people involved in the activity or process, based on their previous experiences. However, even if it is inferior, over time the disruptive element can displace the traditional arrangements. Arguably, from a relational perspective, this has happened in the case of the traditional model of leadership of surgical teams.

The moment of disruption is when that displacement takes place (Adner 2002). The disruptive effect initiates a 'dynamic tension between stability and change' (Lanzara 2016, p.16). Gans' (2016) perception of disruption is that it occurs due to a trigger, the '*disruptive event*'. To develop theory about the disruption then, it is necessary to identify what the trigger is.

“Disruption begins with a particular event that, through a mechanism, can eventually lead to firm<sup>44</sup> failure. I will refer to this trigger event as the disruptive event [...D]isruption theory is only complete if we can describe the mechanism that links them. Mere association is not enough.” (Gans 2016, pp.25–26)

Although Gans advocates linking the event to ultimate success or failure, he also suggests that the disruptive event does not necessarily have to lead to a negative outcome. This points to the benefit of studying and understanding the disruption, to be able to devise a strategy for dealing with potential disruptions, and to put in place pre-emptive measures or training to avoid unwanted outcomes. Building experiential understanding of a potential disruption may prevent or reduce the effect of disruptive events, through focusing on pre-emptive action:

“it is also possible for firms to strengthen their ability to manage disruption as they gain experience in doing so...Rather than focusing on whether disruption exists or is important, this picture allows business leaders to think about their firm's orientation for dealing with disruption.” (Gans 2016, p.135)

In the following sections I consider how disruption has affected leadership activities, atmospheres, and atmospheric work, and recommend strategies to avoid unwanted outcomes, as summarised in Table 6-1.

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<sup>44</sup> Gans is referring to organisations, not clinical 'Firms'.

Table 6-1. Disruption of leadership activities, atmospheres, and atmospheric work

<b>Original Leadership Activities</b>	<b>Disruption ('Trigger')</b>	<b>(Un)wanted outcome</b>	<b>Possible future unwanted outcome</b>	<b>Atmospheric work strategy to avoid unwanted future outcome</b>
Leadership activities producing unsafe atmospheres and consequent poor patient outcomes	WHO checklist implemented	<ol style="list-style-type: none"> <li>1. Resistance to using the WHO checklist</li> <li>2. Growth in who feels included in a safe atmosphere</li> <li>3. Leveraging the use of WHO checklist for atmospheric work: using templating to create a safe atmosphere</li> </ol>	Continued resistance to using WHO checklist and/or not	Organisational adoption of templating to re(create) a safe atmosphere
Traditional hierarchical leadership	Reforms: <ol style="list-style-type: none"> <li>1. NHS policy promoting collective leadership</li> <li>2. Lego work arrangements</li> </ol>	<ol style="list-style-type: none"> <li>1. Greater use of collective leadership in surgical teams</li> <li>2. Temporal lock-in due to reversion to hierarchical leadership</li> </ol>	<ul style="list-style-type: none"> <li>• Inconsistent uptake of templating</li> <li>• Unsafe atmospheres due to reversion to hierarchical leadership</li> </ul>	Organisational adoption of templating to support safe atmospheres for the practice of both collective and hierarchical leadership
Face-to-face leadership activities	Virtualizing with introduction of IMAs	<ol style="list-style-type: none"> <li>1. (Un)safe atmosphere</li> <li>2. Greater or reduced distance, with surgical team-members, or between surgical team-members and other colleagues</li> </ol>	<ul style="list-style-type: none"> <li>• Damage to / prevention of community atmosphere</li> <li>• Unsafe atmosphere</li> </ul>	Policy development and advice to be provided on membership of virtual groups to support community and safe atmospheres

<b>Original Leadership Activities</b>	<b>Disruption ('Trigger')</b>	<b>(Un)wanted outcome</b>	<b>Possible future unwanted outcome</b>	<b>Atmospheric work strategy to avoid unwanted future outcome</b>
Early virtualized leadership: use of IMAs to supplement face-to-face leadership activities	Acceleration of virtualizing due to COVID-19 pandemic, including use of virtual meetings	<ol style="list-style-type: none"> <li>1. Greater community atmosphere and/or less distance between people</li> <li>2. More distance between people and/or reduced community atmosphere</li> <li>3. Relational vacuum due to imbalanced virtual/face-to-face leadership activities</li> </ol>	<ul style="list-style-type: none"> <li>• Reduced safe atmosphere</li> <li>• Damaged morale, depleted workforce, and staff turnover, producing a declining organisational ability to treat patients</li> </ul>	<ol style="list-style-type: none"> <li>1. Support to participate virtually in leadership and meetings</li> <li>2. Tailored virtual communities to create/improve community atmosphere</li> <li>3. Policy change(s) to adapt command leadership to support balance of face-to-face and virtual leadership activities</li> <li>4. Encourage demonstrations of collective empathy</li> </ol>
Command leadership used for short periods	Protracted use of command leadership	Contextual contestation	Contextual contestation	<ol style="list-style-type: none"> <li>1. Adapting the NHS Emergency Framework policy to: <ol style="list-style-type: none"> <li>a. safeguard the well-being of staff when command leadership is implemented for a protracted period</li> <li>b. use a tiered approach to command leadership for departments</li> </ol> </li> <li>2. Using local atmospherics to assess perceptions by different teams/departments of contexts</li> </ol>

### 6.3. The nature of ‘safe’ atmospheres

A common aspect that participants raised about their work was the effect of leadership on surgical teams’ perception that they are working in a safe atmosphere, and how this has changed since the 1980s. A safe atmosphere has become of increasing importance to the teams, accompanied by a growth in atmospheric work. To appreciate how this atmospheric work is undertaken, first I elaborate on the nature of atmosphere.

Atmospheres are capable of a push and pull dynamic. Whilst atmospheres can be created by design, or naturally with people’s existing feelings contributing to them, atmospheres can also cause affect. They are ‘affect-transmitted, as well as affect-directed’ (Leclair, 2022; Philippopoulos-Mihalopoulos, 2013, p. 40). These affective atmospheres are:

the collective products of bodies (human and nonhuman) acting together, encountering one another, affecting one another, producing a shift in the atmospheric tone of a space and so transforming what bodies might be capable of producing in concert within that space (Waters-Lynch and Duff 2021, p.390).

My study of atmospheric work in surgical teams provides an example of this dynamic and collective: atmospheres experienced by surgical teams arise because people feel the need to create a space where it is safe to speak up, but conversely an atmosphere seeded with a ‘diminishing’<sup>45</sup> affect prevents people speaking up.

The emotions associated with atmospheres in operating theatres are evident in descriptions by participants describing feeling tense, safe, calm, upset, pride, and fear. Whilst these emotions may be felt individually, once within an atmosphere they are usually shared emotions; the atmosphere usually acts as ‘a common ground’ amongst people (Trigg 2020). Thus, an atmosphere can be portrayed as a ‘felt’ space. The portrayal of atmosphere as a space is not intended to convey a sense of permanence. Whilst I contend that atmospheres can be re-created through atmospheric work, they are not static or an exact replica of one another. They depend on the ‘lived’ experiences, and the socially constructed nature of the space

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<sup>45</sup> Activities that prevent, or diminish, respect for a person, or diminish the person’s confidence generally to contribute to leadership.



(Lefebvre 1991). Accordingly, I conceptualise the space atmosphere occupies and its interaction with leadership as in constant flux.

Atmosphere of different types have been the subject of debate in organizational studies and other fields, examples being ‘seductive’, ‘festive’, and ‘emotional’ (Edensor 2015; Clausen *et al.* 2018; Watson *et al.* 2018). The concept of ‘safe atmosphere’ pertinent to surgical work draws on the concept of psychological safety<sup>46</sup>. A safe atmosphere can be conceived as coming into existence when the environment people are in is conducive to them feeling safe to speak up about matters that cause them concern. The feeling central to safe atmospheres is the mutually shared feeling of support and concern for the health and wellbeing of the patient. By its nature, a safe atmosphere evokes the feeling in the moment of not needing to say anything, but knowing that, when the time comes, it will be possible to say what concerns you.

Creating a space to speak up when there is a (potential) problem is crucial to the work of surgical leadership. This is especially so in relation to ‘the prevention of mistakes and adverse outcomes for patients’ (Nembhard and Edmondson 2011; Edmondson *et al.* 2016). The WHO checklist introduced for this purpose exemplifies Waters-Lynch & Duff’s (2021) observation above that a ‘nonhuman’ aspect is capable of affecting atmosphere.

### **6.3.1. The significance of atmospheres in the move away from traditional model of leadership**

The participants identified a flattening of the hierarchy in the operating theatre, and greater use of collective leadership following the disruption of existing practices due to the mandating of the WHO mandatory surgical checklist. The checklist process appears to be leveraged to provide the leadership necessary to create a safe atmosphere for surgery. It is an indication that surgical teams are passing from the old to new ways of working and leadership, demonstrated by a more widespread encouragement of more colleagues to become part of a safe atmosphere and an expansion of who feels included in the atmosphere. Yet, notwithstanding an

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<sup>46</sup> Psychological safety is described as the belief held by people that the work environment is safe for interpersonal risk taking, to speak up, without risk to self and fear of negative repercussions (Edmondson 1999; Nembhard and Edmondson 2006).

awareness within healthcare organisations of the need to feel safe to speak up, it has been identified that an unsafe atmosphere and hierarchical leadership continue to contribute to mistakes and failings within hospitals. This has led to patients suffering adverse outcomes, even fatalities (Berwick 2013; Francis 2013; Kennedy 2013; Ockenden 2022).

Whilst the focal point for safe atmospheres for surgical teams is how people feel during surgery in the operating theatre, a safe atmosphere does not 'belong' to that specific place (Böhme 1993). A safe atmosphere is a liminal space, drawing on previous elements and past experiences to support its creation and then to cause affect (Philippopoulos-Mihalopoulos 2013; Leclair 2022). This was an aspect team-members were aware of, that their moods or experiences, rooted in different places and times, impacted on safe atmospheres during surgery. This is not necessarily a short-term effect. Certainly, a liminal affect can arise due to recent experiences, such as changes in the atmosphere arising as team-members join or leave the team or operating theatre. People can cause a different dynamic to the team, perhaps because they caused a safe or unsafe atmosphere when the team worked together recently. However, the affect can extend across decades or longer (Thomassen 2015), during which time individuals or groups involved may 'experience ritualistic 'passages' from one 'state' to another' (Shortt 2015, p.638). This is illustrated when people speak of 'old school' colleagues or behaviour: their feelings about 'old school' behaviour and how it affects the atmosphere draw on the historical narrative of the surgical team.

Consideration of atmosphere as a liminal space enables us to appreciate points of interest over time, 'conflict, obstacles and sometimes failures' in accomplishing leadership (Ospina and Su 2009, p.139; Dy *et al.* 2017). It supports the analysis of past and present contexts faced by surgical team-members, including uncertain and complex situations (Castillo and Trinh 2019). The approach offers the potential to understand how all the components within those contexts potentially interact, what internal and external factors influence leadership over time, and to enable us to appreciate the broader span of the context in which the changes occurred (Hahn *et al.*, 2014).

Moving beyond the physical to include felt spaces, a spatial approach also allows for the investigation of changing relational and other subjective, tacit aspects of

leadership (Carroll *et al.* 2008). The approach serves to highlight the ‘tensions and ambivalences’ within leadership activities (Vickers and Fox 2010, p.912) arising as surgical teams find there is less opportunity to rely on relational aspects of working. Considering atmosphere as a felt space provides the means for a researcher ‘to take into account *evolving* responses and contestations’ (Wadhvani *et al.* 2018a, p.1675) (my emphasis) even if they are not visible or participants are not consciously aware of them. This lack of awareness can be because ‘the variability of leadership may lie in underlying influences which are not immediately recognised by individuals through their lived experience’ (Kempster 2006, p.4).

### **6.3.2. Team and organisational limitations on atmospheric work**

These unconscious responses, to evolving aspects, are illustrated by the influence of remnants of ‘old school’ leadership activities that this study has shown to persist. Even though ‘old school’ approaches are no longer acceptable more widely, some team-members, usually identified as senior Consultants, were reported to retain these activities for their leadership. ‘Old school’ activities are acknowledged by participants to prevent or destroy safe atmospheres. One example arises from the implementation of the WHO checklist which acted as a disruption to hierarchical leadership. An outcome of that disruption was resistance by some Consultants to using the checklist. They did so by exerting ‘old school’ hierarchical leadership that the WHO checklist was devised to counter (Table 6-1).

This appears to be due to a ‘repackaging of historical precedent’ (Maclean *et al.* 2018, p.1736) concerning the role of Consultant Surgeon in the early decades of the NHS. Stories of the antics of the ‘cowboy days’ provide a narrative not only of the past, but also enable people to make sense of the present (Fenton and Langley 2011). The narrative helps them to tolerate their colleagues’ behaviour, or excuse their own inaction to challenge it, even though the behaviour is perceived as undesirable in today’s context. The historical narrative serves to prevent the disruption of certain hierarchical leadership activities, and instead maintains surgeons as *de facto* leaders, albeit within more constrained circumstances than in days gone by. The narrative mythologises the Consultant as the heroic leader and lends legitimacy to leadership practices which are now out of step with organisational and societal expectations (Basque and Langley 2018; Maclean *et al.* 2018). These societal expectations reflect junior professional views that “my peers and my

generation, people just don't behave like it anymore. It's strange, it'd be weird”  
[Surgical Registrar: P39].

This is so, even though over the decades there have been substantial changes to the organisation, and the diminution of the Consultants' powerbase. The experiences related by people in, and working with, the Consultant role illustrate that the historical narrative that supports the myth of the heyday of the Consultant are co-produced (Lubinski 2018), as they are retold and adopted by junior colleagues. The retelling produces 'validated collective memories' that are used in the present (Decker *et al.* 2021, p.1143) and become experienced by the new generation of surgical team-members.

We see two distinct effects of the perpetuation through the 'use of the past' (Wadhvani *et al.* 2018b) which affect present leadership choices. One effect stems from organisational inertia, leaving leadership with a foot in the past and 'old school' leadership being allowed to continue. As yet, the balance between adverse effects on work colleagues and patients does not seem to have reached a tipping point to generate an organisational strategy to prevent future unwanted outcomes, for example continued resistance to using the WHO checklist. Such a strategic response could have the potential to bring senior staff in line with the dominant collective practices and societal norms, and promote safe atmospheres to a greater extent.

The second effect is the stalling, possible reversing, of the trajectory of increased use of collective leadership, and consequently people's reduced ability to rely on relational aspects of team-working integral to safe atmospheres. This has become more notable in the recent past, due to the protracted imposition of command leadership during the COVID-19 pandemic and the use of Lego working. The nexus between organisational changes to work arrangements, and team-members' use of past experiences, creates a tension in leadership practices. Organisational changes, in particular the use of Lego working, disrupts the previous practice of granting team-members the autonomy and collective opportunities that had been experienced by members of established teams. This results in fewer opportunities to build trust over time through the development of relational understanding. In turn, this hampers atmospheric work and the use of safe atmospheres, as trust is 'an important ingredient' of psychological safety (Edmondson 1999, p.375).

In some cases, there was evidence that junior staff were adapting to the changes in working arrangements by engaging 'swift trust'. This is created 'by importing expectations of trust from role-based settings with which they are familiar... swift trust de-emphasizes the interpersonal dimension' (Costa *et al.* 2018, p.172). However, the decline of the traditional surgical team model, and the introduction of the new Lego model of working, appear to create a tendency, or need, for hierarchical leadership. Consequently, the 'God' is being put back 'in the cockpit', despite hierarchical leadership seemingly having fallen out of favour in NHS policy and leadership training. In the absence of a consistent context in which collective leadership can thrive, the outcome of this appears to be the perpetuation of hierarchical leadership as a result of the organisational arrangements to use flexible teams. This is because trainee surgeons develop their leadership, at least in part, from observing Consultants' leadership. Potentially the absence of a consistent context in which collective leadership can thrive presents a brake on disruption, or what Blagoev and Schreyögg describe as a 'temporal lock-in': the puzzling persistence of practices despite efforts for change, with the lock-in producing an 'insidious barrier to change' because the underlying reasons may not be visible (Blagoev and Schreyögg 2019, p.1844).

#### **6.4. Templating for safe atmospheres**

How then may a 'temporal lock-in' be tackled in relation to creating safe atmospheres? Whilst the role of the psychological safety of surgical teams has been studied in relation to whether staff feel able to speak up, the interaction of leadership and the creation of a 'safe' atmosphere requires exploration. Edmondson touches briefly on the place of atmosphere combined with leadership to encourage speaking out. However, she constrains the development of her argument concerning atmosphere and leadership, by predominantly categorising the type of leadership communication used (Edmondson 2003). My theorisation builds on her intimation that atmosphere is a component of leadership. I do so by providing a more in-depth exploration of the role of leadership and atmospheric work in generating safe atmospheres through a process I call *templating*.

#### **6.4.1. Staged atmospheres achieved by leadership**

Earlier work on atmosphere in other research fields has expressed it as capable of being deliberately created, emerging spontaneously, or being the result of a combination of spontaneous and planned elements, being ‘moments of potentiality and promise’ (Michels and Steyaert 2017, p.98; De Molli *et al.* 2020). I elaborate on this, with reference to Böhme’s (2013a) work on the importance of ‘staged’ atmospheres in theatrical and musical productions, advertising, marketing, town planning, and interior design. I propose that atmosphere be understood not only as wholly ‘ephemeral’, but also as capable of intentional design, creation, and *re-creation*, and that this is achieved by systematic manipulation through leadership and the leadership activity of templating.

The planned creation of atmosphere has been described as an ‘art’, but unpredictable in the case of affective atmospheres (Böhme 2013b; Michels and Steyaert 2017). The creation of safe atmospheres has been experienced as both. In some instances, safe atmosphere appears as a fortuitous, spontaneous melding of people and feelings in the moment, emerging from relational aspects. However, creating a safe atmosphere was not always left to chance, particularly in teams that did not habitually work together. A crucial part of the surgical leadership process is the ability to *consistently* re-create safe atmospheres. As surgical teams are frequently ‘ephemeral’, ‘dynamic’ collaborations between interchangeable, highly specialised professionals, they will often only come together for the duration of a particular procedure (Hindmarsh and Pilnick 2007). As the team assembles to undertake a procedure, so the atmosphere must be re-created, akin to being ‘staged’ as Böhme proposes (2013a). Team-members identified that atmospheres occur for surgical teams not only spontaneously through the heuristics of relational team-working, but also deliberately. According to participants’ explanations, this is dependent on the surgeons’ and other team-members’ manipulation of local contexts, multi-disciplinary relations between the surgical team professions, and emotions to create a shared atmosphere of safety within a surgical team.

Surgical team-members gave examples of atmospheric work, with individual and collective leadership being instrumental in the creation of safe atmospheres. Surgical team-members describe their own and other colleagues’ use of atmospheric work to prepare, or coach, people to participate in activities that promote a safe atmosphere.

Through collective activities of inviting, intercommunicating, and reflecting, team-members not only create and maintain a safe atmosphere but lay the foundations for future safe atmospheres. The reflective element of atmospheric work feeds into the liminal nature of the atmosphere, providing a resource on which to draw when a safe atmosphere is created in future.

Consequently, I conceptualise templating as a process centred on the strategic invocation of specific memories of previous atmospheres to re-create, sustain, and perpetuate an atmosphere of safety. Atmospheric work and templating appear to have the potential to address hesitancy to speak up due to (lack of) a person's hierarchical status, 'ego', or emotions, including 'fear' and 'pride'. Templating is seen to provide consistency in preparing people for, sometimes unexpected, eventualities. Surgical team-members' accounts suggest this reduces the unpredictability Michels and Steyaert (2017) associate with creating affective atmospheres.

#### **6.4.2. Organisational limitations on templating and safe atmospheres**

The varied extent of benefits of safe atmospheres and templating are appreciated by many surgical team-members interviewed. However, an organisation-wide approach to using a reproducible leadership process, or leadership training on how to do so, has not been offered to surgical teams yet, according to participants. Whilst some surgeons described individually use templating, the lack of an organisational proactive approach to build on the potential of templating, and to promote its use more consistently across the organisation, is in contrast to the NHS' engagement with Human Factors<sup>47</sup> and psychological safety over about the last two to three decades. James Reason in his seminal publication, 'Human Error', emphasised that errors arise potentially from the combination of a number of organisational and individual errors, rather than the fault lying with one person (Reason 1990). This concept has been adopted within Human Factors training and aligned with this approach is Edmondson's research. This concerns psychological safety in healthcare which promotes a team approach to encouraging people to speak up (Edmondson 1999; Nembhard and Edmondson 2006).

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<sup>47</sup> 'Human factors refer to environmental, organisational and job factors, and human and individual characteristics, which influence behaviour at work in a way which can affect health and safety' (Health and Safety Executive 1999, p.5).

The importance of Human Factors and psychological safety are both reflected in the NHS' strategical policy. The policy acknowledges both the need for an environment in which people feel they may speak up, and leadership to promote that (NHS England and NHS Improvement 2019). Human Factors training, as promoted by the NHS, is seen to develop skills in situational awareness, decision making, and to 'optimise leadership, teamwork and the multidisciplinary approach even in extreme surgical situations' (Arul *et al.* 2015, p.262; Reedy *et al.* 2017). However, despite the top-down strategic stance, training, and WHO checklist implementation, it is apparent from reflections of the participants of this study that there remains an environment in which sometimes people do not feel willing to raise concerns. Surgical teams' safe atmospheres seem to only envelope the immediate team, and not extend to surgical team-members' interaction with members of the wider organisation. This stems, at least in part, due to the perceived lack of action by senior management in many cases to respond to concerns raised by surgical and other staff.

### **6.5. Virtualizing the leadership space**

Whilst organisational and external policy and legal requirements are sources of disruption in leadership activities, a substantially wider-ranging external disruption has been responsible for another change in leadership of surgical teams: the global adoption of digital technology. Leadership in a virtual context has gradually been augmenting face-to-face leadership for surgical teams. The greater use of digital methods of communication had started to become commonplace in surgical teams. This was particularly so with the use of email and instant messaging on hand-held devices. However, this change accelerated during the COVID-19 pandemic, and was supplemented by a second disruption, due to the implementation of the use of video conferencing by many more NHS workers. The sudden growth in the impact of digital technology and how people use it, particularly in an extreme context, presented a novel opportunity for developing leadership theory (Larson and DeChurch 2020). In particular, how the shift affects the relational aspects of leadership is underexplored (Cortellazzo *et al.* 2019).

To address this issue and go beyond traditional leadership theories, I applied a social constructionist lens on leadership and conceived the concept of 'virtualizing the leadership space'. *Virtualizing* refers to the ongoing transition along a spectrum



that ranges from using face-to-face leadership arrangements at one end, to fully virtual relations at the other. Thus, it provides a view of how leadership is affected by digital technology, not only at the time of technology's introduction, but also as leadership moves along the virtuality spectrum. My application of a spatial approach allowed for a temporal consideration of the issue, as it did in respect of safe atmospheres. This revealed that virtualizing has caused disruption and distancing in leadership activities. This includes less visible aspects of work experienced by surgical team-members, such as perceived changes to the community atmosphere. In an organizational environment, this feeling refers to 'perceptions of belonging, shared emotional connection, satisfaction of needs, and influence' (Cicognani *et al.* 2012, p.1088). Based on this study's findings I depict the 'community atmosphere' for the surgical environment as a sense of belonging amongst the community of people the person is working in, or with: that is surgical teams in this case. They are likely to share a goal or common interest, usually the safety and wellbeing of patients. When they are together there may be a sense of family, a feeling of camaraderie, and sensibility to other community members' feelings. The effect of a community atmosphere may give rise to a safe atmosphere.

#### **6.5.1. Disruption affecting relational aspects of leadership**

The concept of virtualizing the leadership space supports the development of the theory of leadership by drawing on the findings to illustrate how distancing and disruption occur, and their impact on perceptions of leadership. The stories of the NHS staff indicate how virtualizing the leadership space contributes to an increase in relational communication, as opposed to top-down, uni-directional communication. Furthermore, some people can engage with it to find greater inclusivity in management and leadership activities. I contend that whilst virtualizing does not automatically replace the face-to-face community atmosphere, in conjunction with contemporary leadership activities, virtualizing can facilitate the community atmosphere.

This was demonstrated during the sudden growth in virtualization during the COVID-19 pandemic. This change from mainly face-to-face to increased virtual communication produced the need to support colleagues in order for them to participate and feel part of the community virtually. Whereas face-to-face interaction with colleagues could prompt a community atmosphere before, during and after

meetings, hybrid and fully virtual meetings resulted in people missing out on a community aspect. Virtual attendees were 'hiding in the wall of black space of video calls' and disconnecting as soon as the work-related discussions about patients were over. This resulted in the lack of or reduced opportunities to (visibly) convey feelings through body language, and to demonstrate the relational and emotional responses participants associated with leadership. Consequently, as demonstrated by the 'chuntering' example, leadership was required to facilitate activities that replaced the face-to-face meeting experience. This required the deliberate weaving of people together, coaching to encourage demonstrations of emotions, and enabling a feeling of belonging to and influencing the decision-making community. Through changes in the leadership space to enable relational and emotional activities in a virtual setting, a positive outcome was achieved: the Consultants' needs were satisfied, by having their opinion heard and perceiving that senior leaders empathised with them.

Applying the principles, set out above, an illustration of an unwanted outcome due to disruption to the changes in leadership, was the atmospheric void (the vacuum of relational activities described by the participants), caused by the disruptive event (the acceleration of virtualizing) (Table 6-1). This outcome was caused by the disruptive trigger created by that event, a lack of experiential understanding of what is expected in virtual leadership spaces. One strategy for dealing with future potential disruptions of this type would be to review leadership activities of the Chair, organisers, and attendees for virtual meetings. There is the opportunity to create and implement policy requirements, or more informal guidance, for the organisation and management of virtual meetings. An example is to make the Chair's responsibility clear, to ensure they 'hear' the silent virtual call of "I've raised my hand. Please pay attention" [Consultant Anaesthetist: P20], and to ensure views are considered, and can influence outcomes, despite the loss of attendees' voice due to connectivity or virtual meeting etiquette problems.

### **6.5.2. The effect of disruption of leadership on community atmosphere and distancing**

Surgical team-members' experiences spoke of another outcome of these disruptions of leadership activities which I identified as 'distancing'. In this context, I define distancing as (un)intentionally creating, increasing, or decreasing barriers to willingness to communicate with team-members of different seniority and/or role.

This is related to 'power distance', referring to the asymmetries that can arise between different roles and people (Collinson 2005). Mixed findings and opinions in previous studies left it unclear whether distance has a detrimental effect on relationships for leadership and followership in virtual contexts. The variance and lack of accord in these earlier studies is reflected in my analysis of surgical teams' experiences. However, my research contributes a novel theoretical explanation for the detrimental effect.

Some leadership issues remain the same, whether using face-to-face or virtual communication. These include the quality of communication, and whether communication or intercommunication is appropriately used by leaders. The choice for Consultants of 'imposing' their membership in WhatsApp groups, exemplifies how communication may or may not be appropriate. Is their presence supportive, or does it prevent a safe atmosphere because it is perceived as a form of technological 'surveillance' of junior surgeons' performance (Exworthy *et al.* 2019)? However, due to virtualizing, it appears that the power distance was reduced in some instances. This was because people were invited to attend and participate in virtual meetings and decision-making, invitations that they had not experienced previously in a purely face-to-face context.

In contrast, the power distance was increased in other situations, because of certain properties of virtual communication. Examples of these properties include the quality of virtual connectivity, capability to connect to the call, availability of a camera, and ability to engage in relational activities in meetings. As was heard from participants, and confirmed in observations, hybrid sessions can set apart people who dial in from those attending in person, due to physical and relational barriers imposed by virtualizing. The distancing was apparent in the reduced or lack of shared emotional connection and influence in decision-making, resulting in a breakdown in the community atmosphere in existing groups of people.

However, distancing was not only due to the technological properties of virtual communication. It arose too from human (in)action affecting leadership: opting out, or the deliberate exclusion of people from leadership process. The failure or inability in leadership to address these (in)actions were apparent in the loss of community atmosphere. In contrast, new ways of delivering leadership virtually were implemented at the front-line level to maintain the community atmosphere, tailored to

the specific teams or groups of people. These efforts contrasted with the dominant perception of impersonal top-down communication from senior leaders to surgical team-members, lacking a continued relational aspect to their interactions.

The provision of the continued relational aspect does not appear to be required to exactly replicate earlier activities though: a certain amount of disruption is possible without causing unwanted outcomes. The spectrum of relational activities detailed in the previous chapter, is suggestive of the possibility of 'good enough' leadership. That is leadership that can balance providing a sufficiently high level of relational activities but not 'overprotection and cosseting' that may cause disempowerment (Gabriel 2014, p.329; Tomkins 2020). Predominantly, stories from surgical team-members indicated that senior leaders did not achieve this 'good enough' level when virtualizing accelerated during the COVID-19 pandemic.

### **6.5.3. Virtual external influences on community atmosphere**

External factors, such as virtual reports of other organisations' leadership activities, also impacted on perceptions of 'good enough' leadership. Surgical team-members shared their negative perceptions of their employer's relational activities, generated by comparisons they drew with other organisations' social media posts. They interpreted the social media posts as demonstrating that collectively surgical team-members were receiving a lower level of empathy from their employer compared to people working at other hospitals.

This affective response is consistent with previous studies which have found that 'Social media use also can evoke negative affect among followers seeking to meet their needs for relatedness when they make unfavorable social comparisons of their life events with those of others' (Avolio *et al.* 2014, p.112). For this reason, community atmosphere refers not only to the perceptions built from experiences looking inwards at the organisation a person is based in, but also assessing if leadership is 'good enough' compared to what other followers' experience in external organisations. In the same vein, Jian (2021) emphasises the importance of empathy for a collective, rather than just individuals. This is because 'organizations often rely on members to make local decisions and execute tasks that impact a collective, with whom they do not routinely interact in an immediate relational context' (2021, p.5). I would advance engagement in collective empathy as a vital strategy for an

organisation such as the NHS, whose organisational policy is purported to aspire to promote collective leadership.

## **6.6. Contextual contestation developing from disrupted habitual leadership and relational activities**

The phenomenon of disagreements between management and other staff concerning appropriate leadership and management practices is not novel. However, studies conducted during the COVID-19 pandemic indicate experiences of the crisis were unlike anything most NHS employees have known before (Pandit 2021).

Several contributing factors are reported to be fuelling increased rates of resignation or early retirement in the wake of their experiences during the pandemic. I identified novel contextual dimensions of leadership as one factor. Associated with this was a disruption in the habituated use of different types of leadership and relational leadership activities, that hampered or prevented safe and community atmospheres.

### **6.6.1. Atmospheric work during non-habitual use of command leadership**

When the global COVID-19 pandemic first impacted the UK in 2020, the NHS rapidly underwent a massive reconfiguration, placed on could be described as a war footing against a single, deadly disease. A strategy and practical instructions for responding to major 'incidents and emergencies' is set out in the NHS Emergency Framework (2016). Part of this strategy is the enactment of command leadership. However, the experience of operationalising this is usually restricted to responding to short-term issues, for example, terrorist attacks and surges in the demand for hospitalisation over the winter months. Pre-COVID-19 this 'incident and emergencies' work tended to be cyclical, "feast or famine" [Consultant Anaesthetist: P20].

Participants said that during the COVID-19 pandemic they experienced a sudden switch away from the familiar way in which leadership of surgical teams was executed. In the NHS, command leadership usually exists for a short duration. So, although not alien to them, the protracted imposition of command leadership disrupted the habitual model of command leadership. This contradicted surgical team's expectations and caused tensions in their perception of leadership by the Executive and senior managers.

In addition to the implementation of a protracted period of command leadership, from early on in the pandemic, the participants' stories revealed that senior leaders

engaged in atmospheric work. Senior leaders built on an already omnipresent sense of urgency, panic, and fear, contributing to a war zone atmosphere (Horton 2020; NHS England 2020; Arora et al. 2022). However, as time progressed, it became evident that the predicted immediate overwhelming of the system was not happening. Take for example the seven Nightingale field hospitals in England and nineteen Welsh Enfys (Rainbow) hospitals constructed and equipped with approximately 29,600 beds. These were closed after a few months having been used to treat about 1,000 patients (Oliver 2021). Surgical team-members' accounts indicate that they began to consider the 'crisis narrative' was no longer warranted: for them the war zone atmosphere dissipated. Clinicians' 'pushed back' against managers' narrative and contested it as a way of reclaiming clinical autonomy and leadership. From these narratives it is arguable that *contextual contestation* occurred.

#### **6.6.2. The source and impact of contested contexts**

The findings provided evidence of control being centralised and maintained through a 'crisis' narrative by those exercising command leadership, even though that became perceived by surgical team-members as incongruous with operational reality. Rather than participants 'switch in and out' from one context to the next when this happened (Hannah and Parry 2014), the participants' experiences indicate contextual contestation occurred. Drawing on the physicist and philosopher Bohm's observation when contemplating the theory of quantum physics, I explain contextual contestation as occurring where 'all our different ways of thinking are to be considered as different ways of looking at the one reality' (Bohm 2002, p.10). As Bohm observes, the idea that 'all these fragments are separately existent is evidently an illusion, and this illusion cannot do other than lead to endless conflict and confusion' (2002, p.2).

It would be incorrect for me to suggest that there is a way to objectively, and definitively, identify a context as risky or disrupted<sup>48</sup>. Socially constructed perceptions, such as contexts and atmospheres, may differ between groups and

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<sup>48</sup> 'Disrupted' in this subsection refers to Hällgren *et al.*'s (2018) definition of a disrupted context, not Adner's (2002) definition of disrupted from the concept of disruption in technologies.

individuals, depending on their knowledge and experiences. So, assuming a single agreed description of the context for everyone could misrepresent the context (Osborn *et al.* 2014). However, for the purposes of developing leadership theory, it is necessary to identify a situation as a type of context, even if tentatively or provisionally. I propose that in doing so any classification of the context is not absolute, but rather conditional on the extent to which it is supported by participants' accounts.

The mismatch between surgical teams' expectations and senior leaders' (in)action resulted in senior leadership losing 'its alignment with its organizational base' (Denis *et al.* 2001, p.833), by failing to demonstrate the qualities expected of it (Denis *et al.* 2001; Gabriel 2014). Based on past experiences, people, predominantly senior leaders and senior managers in command roles, believed the context to be disrupted. High-level relational activities were not appropriate, or required, for the 'correct' form of leadership for that context, command leadership. To other people, the context seemed to present an ongoing, but unrealised, threat of the overwhelming of the system. Consequently, it appears that some frontline staff no longer perceived the context as disrupted. By their assessment, it evolved into a risky context, in which higher relational activities were expected. Despite this they still lacked autonomy and it was perceived that there was no provision in the command leadership structure to support a safe atmosphere so surgical team-members could speak up about patient care issues. It was then that the situation could have benefited from a shift in leadership back to the inclusion of front-line clinical leadership (Currie *et al.* 2022). Instead, clinicians experienced the switch away from the familiar way in which leadership is usually executed, due to command leadership imposed for a long duration and a relational vacuum occurring. This pattern generated an adverse perception of the presence, or absence, of leadership.

### **6.6.3. The absence of relational activities expected for leadership**

Within studies of the varying levels of presence or absence of leadership, we find discussions of the physical presence, appearance, and traits of leadership (Ford *et al.* 2017). For surgical teams though, it is the extent of the presence, or absence, of relational activities that causes an affective reaction and frames their acceptance of different forms of leadership to be used in a particular context. Generic emails circulated by senior leaders did not meet followers' relational needs or provide them

with the opportunity to influence what was happening or to speak up about patient safety matters. Thus, by retaining centralised control substantiated by the war footing, leaders in command roles were not providing elements required to sustain inclusion in the leadership process, nor a community atmosphere or safe atmosphere. Additionally, virtual varying levels of presence or absence, framed by relational activities, impacted on followers' assessment of leadership, as highlighted in Avolio *et al.*'s review: 'Effective e-leaders are rated by their followers as "being present" within the virtual community' (Avolio *et al.* 2014, p.114).

In respect of face-to-face activities, a perceived failure by the Executive and senior management to visit the workplace illustrates why it seemed to frontline staff that there was an absence of relational activities not only in the virtual space, but also in the 'real' world. The absence is reported to have contributed to the damaged morale, depleted workforce, and staff turnover, circumstances shown to produce a declining organisational ability to treat patients (Propper *et al.* 2020). The surgical team-members' experiences depict how 'leadership is shaped by and shapes context' (Liu *et al.* 2016, p.716), as there were contrasting experiences of command leadership during the pandemic. Some perceived it as effective, with weaving and interceding activities occurring between managers, at the mid-level of the chain of command, and members of surgical teams. The 'chuntering' example illustrates this, the Senior Manager empathising with surgeons, and attempting to achieve reconciliation of surgical concerns with command and management goals (Gibeau *et al.* 2019). In doing so, the manager 'purposefully intersected[ed] to initiate conversation between hierarchical levels' (Lloyd and Carroll 2019, p.834). However, where such activities were perceived as minimal or absent, there were negative reflections from surgical teams on their experience of leadership. Despite their professional technical expertise, which would normally afford them agency to participate in leadership, there was a 'repression' of their professional autonomy (Kitchener 2002).

Senior leaders were not physically present, which was perceived by surgical team members as indicating an absence of empathy (Tomkins 2020) for the surgical team as a collective, as well as on an individual basis. Previous studies have started to identify operational leadership functions traditionally undertaken by people that can be substituted by technology (Larson and DeChurch 2020). However, whilst the participants suggested that the proliferating adoption of digital technology could have



been harnessed to demonstrate empathy, or demonstrate it more effectively, it was apparent that surgical team-members did not perceive these relational interactions could be satisfied wholly by the use of digital technology. The disruption to relational activities could only go so far, as surgical team-members still expected complementary face-to-face demonstrations of relational activities.

The consequent confusion and detrimental outcomes are evident in the reflections I heard. There was a disconnect between people's perception that the context was risky, warranting high relational activities, but relation-less leadership was used. The result of such asymmetrical and dysfunctional dynamics is that people 'appear to act in ways that others find incomprehensible', and there is a 'competition between different accounts (Grint 2005, pp.1475 & 1492; Einola and Alvesson 2019). People may be unaware there is a 'competition', and the lack of comprehension of why they are being treated as they are, added to their distress.

I return to the question of whether a strategy can be adopted to deal with the disruption caused by the increased use of digital technology and command leadership during an extreme context. In times of reorganisation, as experienced in the NHS from the implementation of technology and during the pandemic, there is a greater need for collective practices of leadership, as opposed to heroic leaders (Waring *et al.* 2022). I propose that the use of atmospherics holds promise to address this issue by engaging the command leaders within the wider community. Whilst surgical team-members demonstrated awareness and use of atmospherics, what was not apparent was senior leaders harnessing atmospherics by virtue of face-to-face interaction with frontline staff during the COVID-19 pandemic. This may have prevented or reduced contextual contestation. This would be by gaining a sense first-hand about what was happening, by gauging the atmosphere, clinicians' mood, and a sense of their opinions: the 'vibe of a situation'. Even if physical encounters were not (frequently) possible, a greater awareness of the problematic mismatch of command leadership with the NHS organisational structure may have resulted in more NHS hospitals adopting the informal weaving activities. In the rare cases when surgical team-members reported positive experiences of command leadership weaving had been adopted by senior leaders. Weaving allowed sharing upwards of information and this could include the filtering up of atmospherics sensed

by other staff, to supplement senior leaders' personal efforts to engage with atmospherics.

This local gathering of atmospherics is advocated, rather than reliance on an organisation-wide assessment of the situation. Despite the 'myth and magic' portraying the NHS being one animate organisation (Murray *et al.* 2021, p.5), represented in calls to "Save the NHS", it is 'not a single entity. The NHS is an interconnected system of many institutions' (Anandaciva and Murray 2020). Within those institutions differences occur on different hospital sites, between surgical teams and managers, and surgical team-members. These differences relate to leadership forms, leadership activities, contexts, atmospheres, and expectations of leadership.

Despite this organisational diversity, a common theme is evident about seemingly invisible and ephemeral atmospheres in the NHS. Harnessed purposefully atmospheres are capable of supporting people to speak up to address patient safety concerns. However, the experiences of surgical teams show that if damaging effects of unsafe atmospheres are left undetected or unattended by leaders, the damage can be perpetuated across generations of surgical team-members.

## 7. Conclusion

### 7.1. Introduction

The aim of this study was to explore what changes in leadership members of NHS surgical teams have experienced since the 1980s. This concluding chapter provides a brief summary of the thesis and the material presented, an overarching discussion of the significance of the contributions of the study, and its implications for leadership theory and practice.

This research explored experiences of contemporary leadership of surgical teams and how they differ from the traditional surgical team model. Overall, previous studies have described the 'demise' of the traditional hierarchical Firm model (Olsen and Neale 2005; Timm 2013; Iliffe 2017), but little is known about surgeons' leadership status and the use of collective leadership since that change (West *et al.* 2015; Malby *et al.* 2018). It was also noted that the recent use of command leadership during the COVID-19 pandemic, requires empirical study and theorisation. Adopting a social constructionist view and a qualitative interpretative approach enabled the exploration of the lived experience of leadership in surgical teams. This served to elucidate disruption that has occurred to different leadership activities leading to changes in the way leadership is produced and used. The approach also provided a description of how participants perceive leadership within their work environment (Yukl 1989; Rosenhead *et al.* 2019). Together these elements served to answer the central research question, and the additional research question that emerged from the data collected in the first few interviews:

Since the 1980s, what changes in leadership have members of NHS surgical teams experienced?

What are surgical teams' experiences of the use of leadership for atmospheric work, and has this changed since the 1980s?

The study's empirical findings were situated by first developing a broad awareness of previous studies and theoretical development about leadership, atmosphere, relational aspects of leadership, and contextual effects on leadership. These were drawn on to consider four themes: atmospheric work, templating to deliberately and systematically create a safe atmosphere, the building of atmospheres online during

virtualizing of leadership, and atmospheric work in relation to contextual contestation. The overarching contributions of my research are summarised below.

## **7.2. Contributions and implications**

### **7.2.1. Theoretical**

This thesis adopted a wide interpretative lens and flat ontology. Through this I captured an array of leadership activities and gained new insights into visible and less visible aspects and experiences of leadership. I developed a better understanding of changes in how leadership occurs. This includes how different people exercise, contribute to, or are excluded from leadership activities, and how context influences leadership and perceptions of leadership. The main theoretical contributions of this thesis relate to atmosphere as this emerged as important in the context of surgical leadership. It is implicated in each of the three main theoretical contributions. Definitions of theoretical concepts and for empirical findings, or elements of them, are set out in Table 7-1.

Table 7-1. Summary of definitions of theoretical contributions and empirical findings or elements within them

Term for contribution	Definition
Atmospheric work	Work undertaken more, or less, purposefully to create and/or maintain a particular kind of emotional atmosphere in a team or organisation.
Contextual contestation	The tension which arises when a person's perception of the context is misaligned with other people's contextual perception.
Disruption	The process of producing an alternative to the established means of performing an activity or process, or part of it. Over time the disruptive element can displace the traditional arrangements, even if inferior to the original ones.
Distancing	(Un)intentionally creating, increasing, or decreasing barriers to willingness to communicate with team-members of different seniority and/or role.
Leadership space	The space between people, a space where they interact and changes occur in how leadership, and leadership activities happen or are resisted.

<b>Term for contribution</b>	<b>Definition</b>
Lego working	This refers to how teams are built, deconstructed, and rebuilt in a different form recurrently, as are the interlocking Lego® plastic toy bricks.
Templating	A process centred on the strategic invocation of specific memories of previous atmospheres to re-create, sustain, and perpetuate an atmosphere of safety.
Virtualizing	The ongoing transition along a spectrum that ranges from using face-to-face leadership arrangements at one end, to fully virtual relations at the other.

#### 7.2.1.1. *Contributions 1: atmosphere and atmospheric work*

My first contribution added clarity to various related aspects involved in the study of atmosphere and I introduced the notion of *atmospheric work*. With today's working arrangements relying increasingly on Lego working there is less opportunity to rely on relationships built over time. This results in fewer opportunities on which to establish less visible aspects of team working such as trust. Atmospheric work offers an alternative solution to the absence or reduction of the relational aspects of a stable team. It does so by enabling surgical team-members to communicate and create atmospheres despite relation-less environments.

In developing the concepts of atmosphere and atmospheric work, I support taking a spatial approach to study the intersection of leadership and atmosphere. In doing so, I cautioned against viewing atmosphere as occupying a permanent space. Rather I presented it as a phenomenon in flux, because an atmosphere is socially constructed and contingent on the lived experiences of those participating in it (Lefebvre 1991).

#### 7.2.1.2. *Contribution 2: templating to create safe atmospheres*

The second contribution was to theorise how surgical team-members can create 'safe' atmospheres. I explained how inclusion in the safe atmosphere in surgery, has changed over time. I demonstrated that this is due to the introduction of the mandated WHO checklist, relational changes, and atmospheric work. Next, I theorised how surgical team-members can create 'safe' atmospheres in a more or less systematic, reproducible way. They do so through a *templating* process and can do so even in dynamic and extreme contexts. Through atmospheric work they attend to the atmosphere for surgery and are supported by their and other surgical team-members' atmospheric work. This prepares people to participate in safe atmospheres.

I developed the nature of safe atmospheres by reference to Waters-Lynch and Duff's characterisation of atmospheres as affective, and Sturdy's presentation of liminal space as a felt, rather than physical, space, 'a space where the regular routines of the formal organization are suspended' (Sturdy et al. 2006, p.930; Waters-Lynch and Duff 2021). I drew attention to the temporal extremities of affect, as affect can arise 'in the moment', or extend across decades or longer, to influence contemporary atmospheres. From this, I advanced the view that there is a perpetuation of unsafe atmospheres due to collective memories and narratives of surgeons' status and

behaviour in the past. These serve to maintain hierarchical leadership, contrary to the organisational resolve to extend the use of collective leadership and societal norms. I proposed that this 'temporal lock-in' (Blagoev and Schreyögg 2019) may be addressed by organisational support for the use of templating to enable the (re)creation of safe atmospheres.

#### 7.2.1.3. *Contribution 3: Virtualizing the leadership space*

Thirdly, I introduced the concept of '*virtualizing*' the leadership space' which concerns the changes to leadership activities due to the greater use of digital technology, moving from leadership happening face-to-face arrangements to fully virtual arrangements. I showed how one of the ways that leadership in surgical teams was 'virtualized' happened during the COVID-19 pandemic. This involved the extension of the pre-pandemic facilitation of leadership, through handheld devices and instant messaging applications to the greater use of videoconferencing.

I envisaged how virtualizing occurs in leadership space, that is the space between people, where they interact, and changes occur in how leadership happens or is resisted. It includes the interaction of people with objects, and requires examination of less visible aspects of work, such as emotions. Through virtualizing people can construct and maintain shared feelings of community amongst surgical team-members and with other colleagues in the organisation. I considered how the failure of leaders to carry out face-to-face relational work to complement leadership delivered via virtual means created a relational vacuum. I proposed that atmospheres, once forged, break down with catastrophic consequences for morale and staff retention. This is in the absence of leaders' attention to atmospherics and also to followers' perceptions of leadership.

I conceptualised the effects of virtualizing as causing disruption which is triggered by events that may be avoided through pre-emptive action. An example of this was to address the limited experiential understanding of what is expected in a virtual leadership space. Additionally, I contributed to the existing knowledge of power distance with my exemplified proposition of distancing. Previous studies had proposed that digital technology supports inclusivity and people's readiness to speak up. This thesis extends our knowledge by explaining how virtualizing can both increase and decrease barriers to willingness to communicate with team-members who hold a different role and/or seniority. This can act to increase and reduce the perceived power distance between people.



## 7.2.2. Empirical

In the opening three chapters of this thesis, several areas of conflicting or unanswered issues were identified (West *et al.* 2015; Kline 2019). The rich data emerging from my qualitative methods provide a detailed empirical account of clinicians' and non-clinicians' experiences of leadership of surgical teams since the 1980s. The clarification that this provides empirically underpins my theoretical contributions and policy recommendations. It does so by including accounts of change over the years and recent changes in leadership which occurred during the NHS's response to the COVID-19 pandemic. There are five areas in particular that I provide novel empirical findings which are set out in the following five sub-sections.

### 7.2.2.1. *Identification of 'bundles' of leadership activities*

Firstly, in respect of the overall transition from the traditional model to contemporary leadership, I discerned activities related to the production, reproduction, and changes in leadership. These contribute to identifying the 'essence' of collective leadership, which was limited in previous accounts. I determined that the individual activities can be organised in bundles, each bundle focusing on a particular element of leadership. Additionally, where activities have not been identified in previous studies, I conceptualised and devised terms for them. Examples include 'intercommunicating', 'diminishing', and 'decisioning'. For the purposes of this thesis, I advanced bundles of activities for atmospheric work, templating, virtualizing, and contextual contestation. By surfacing activities at a micro-level empirically, as recommended by White *et al.* (2016), this allowed for the examination of both normative experiences of leadership, and a critical analysis of the complexity of hierarchical and collective leadership interactions and relational outcomes (White *et al.* 2016; McCauley and Palus 2021).

### 7.2.2.2. *The move from hierarchical to collective leadership*

Next, I addressed the conflicting views in previous research as to whether there has been an overall adoption of collective leadership, whether hierarchical leadership prevails in healthcare, or whether hybrid forms of leadership are in play with hierarchical and collective leadership operating simultaneously. There was an indication in the leadership literature that collective and hierarchical leadership may co-exist, but this and a clear understanding of the status of Consultant surgeons' leadership in contemporary surgical teams was limited (Holm and Fairhurst 2017; van de Mierop *et al.* 2019).

In relation to surgical teams specifically, my findings indicated that contemporary leadership of surgical teams engages a hybrid approach. I show that physical and relational aspects of leadership have changed during a transition following organisational reforms, and in response to three different extreme contexts. I distinguished between slow, ongoing changes that reduce relational aspects of team-working due to legal and organisational changes, and the rapid changes appearing during the pandemic. The analysis demonstrated that there is a perception by people working in and with surgical teams of a gradual shift towards collective leadership as the previously dominant hierarchical model declined. This study demonstrates that surgical team-members consider there had been a move away from Consultant surgeons wielding 'unquestioned' power over the surgical team and within the wider NHS organisation. However, as described below, there are occasions they retain their hierarchical status. In some situations, this is considered acceptable by surgical team-members. In other circumstances, people view it as 'old school' behaviour which is not considered appropriate in the contemporary surgical environment. However, it is predominantly tolerated on the basis that it will die out when the Consultants retire.

Earlier studies in other work environments proposed that working with a familiar team is the best foundation for collective leadership in an extreme situation (Livingston 2015). However, there was less understanding of what, if anything, has replaced the 'team relationships' and 'team feeling' that were traditionally generated within the traditional stable surgical teams. Whilst my research supports the proposal that familiar teams are well placed for the exercise of collective leadership, this study surfaced ways which contemporary leadership of surgical teams is used to adapt to the new working arrangements. I defined these new arrangements as 'Lego working' because surgical staff perceive they are organised as individual pieces rather than as a team.

The adaptations are shown to be needed to compensate for the reduced, or absent, relational aspects associated with the traditional hierarchical model of leadership. I show this reduction or loss of the relational element has affected feelings of community, or 'camaraderie', and threatens to reduce the ability of surgical teams to deal with challenging work. Adaptions include the leveraging of the WHO mandatory surgical checklist process to provide the leadership to create *safe atmospheres* for surgery. It is an indication that surgical teams are passing from the old to new ways of working and leadership. This is further demonstrated by the evidence of

encouragement amongst team-members for colleagues to become part of a safe atmosphere, and an expansion of who feels included in safe atmospheres.

Previous studies in other fields have posited that technology overcomes barriers. Empirically this study supports that, showing that digital technology can both create or reduce barriers in people's willingness to communicate with others. Moreover, it has been shown in this study more specifically that technology impacts on issues such as power distance, feelings of community, and safe atmospheres.

#### 7.2.2.3. *Retention of hierarchical leadership and stalling of collective leadership*

The most evident situation producing the retention of hierarchical leadership is in emergencies, such as complications during surgery. Furthermore, there is evidence of a stalling of the use of collective leadership, or possibly a reversion to hierarchical team leadership in some circumstances, because of new Lego working arrangements. This contrasts with empirical evidence in other fields where flexible work arrangements facilitate a shift away from hierarchical authority (Barton *et al.* 2015).

There has been limited theorisation of how hierarchical leadership is maintained in an organisational environment in which collective leadership has, and continues to be, supported at a policy level. Previous studies present possible explanations of what the reason(s) for the persistence of hierarchical leadership is/are. One explanation is that it is due to the bidding of those at the top of the hierarchical structure, possibly demonstrating the dark side of heroic leadership by arrogant, narcissistic, manipulative leaders (Willcocks and Wibberley 2015). An alternative proposal is that hierarchical leadership is exercised with the wider team's approval (Jaffrey 2019), or that top-down and wider-based empowerment are occurring concurrently. The empirical response from my study is that there is evidence of concurrent reasons for hierarchical leadership persisting in relation to NHS surgical teams.

In respect of the darker side of leadership, previous studies have suggested that more research is needed about how to tackle ego driven behaviour, and that the cycle that perpetuates entrenched 'old school' hierarchical leadership views could be broken (Myers *et al.* 2018). Whilst this study did not empirically test Myers *et al.*'s proposition that the cycle could be broken by tactical selection and promotion of surgeons, this thesis provides evidence that rather than break the cycle of 'old school' views and behaviour, a waiting game has been adopted. There are some examples of 'undesirable' behaviour being addressed directly, both formally and informally. However, generally the participants' accounts indicated that people are waiting for

colleagues to retire so that their 'old school' approach to leadership withers away, rather than them directly challenging 'old school' leadership. Doing so appears to be justified at some level in people's minds by drawing on the historical narrative that mythologises the Consultant as the heroic leader.

In summary, by considering participants' historical narratives and contemporary accounts, I revealed that 'Traces of previous eras reappear' (Trethewey and Goodall 2007, p.468). These are brought about or affected by the changes in leadership experienced by surgical teams. Overall, there was the indication of a move towards collective leadership activities over time. However, the extreme working conditions during the COVID-19 pandemic, and the NHS' response to it, resulted in many staff quickly experiencing a reversion to a less collective type of leadership. I provided insight into these experiences, how command leadership operationalised during this time was exercised, and the effects of command leadership.

The ability to adopt innovative practices is reliant on 'the history, culture, and the quality of relationships' (Fitzgerald *et al.* 2002, p.1443). The empirical findings have demonstrated that these are dependent too on the contemporary context in which they are situated, and the atmospheres generated within that context. All these components of the empirical findings extend the knowledge of what, if anything, has taken the place of the traditional model of hierarchical leadership, a topic that little had been discussed in detail previously.

#### *7.2.2.4. How atmospheric work is increasingly engaged with*

My empirical findings address the limited understanding of the role of atmosphere in the field of surgical leadership, for traditional and flexible teams. Building on Edmondson's indication that atmosphere is a contributing factor for feeling safe to speak up (Edmondson 2003; Edmondson 2004; Edmondson *et al.* 2016) I have provided empirical examples of how atmospheric work is increasingly engaged with in contemporary leadership practice of surgical teams. This included revealing evidence of the deliberate creation of safe atmospheres through the process of templating.

#### *7.2.2.5. Contextual contestation*

Finally, I demonstrated how, in a change to previous leadership patterns, the Executive and Senior Managers who work directly or indirectly with surgical teams retained power and control through the protracted use of command leadership. I proposed they did so by engaging in atmospheric work to build on and develop a

sense of urgency, panic, and fear. Through the ongoing maintenance of this crisis narrative during the COVID-19 pandemic they were able to centralise control during a period of crisis. This impeded surgical team-members' ability to make decisions and to act autonomously.

Previous leadership studies have not provided an explanation for the detrimental effects that have started to be reported due to a reversion to a 'top-down' approach to leadership in surgical teams. These effects included a degradation in staff morale and an increase in staff's intentions to leave the NHS. The findings show that as the senior leaders' narrative became increasing incongruous with organisational reality, frontline staff perceived the context differently, an event I term *contextual contestation*. Within an illusory war zone, the presence, or absence, of certain relational activities guided people's perception of whether leadership was appropriate for the context. Contextual contestation provoked disempowered frontline staff to 'push back' against the senior leaders' narrative, as a way of reclaiming collective leadership and clinical autonomy.

This alternative perspective, that forms of leadership are recognised from the varying levels of presence and absence of relational activities, frames how people make sense of contemporary leadership. My examination of relational activities supported a critical analysis of the complexity of command and collective leadership interactions.

Previously, there had been little examination at this level (McCauley and Palus 2021). My engagement with the mismatch of relational expectations contributes a novel account of contextual leadership to the literature. This contribution extends research into the contextual dimensions of leadership which is limited, and primarily concerning studies of how people in leadership positions actively (re)construct contexts to fit their specific (political) purposes (Grint, 2005; McGivern *et al.*, 2017).

### **7.2.3. Policy**

This study identified three areas that could inform future policy and training initiatives. These relate to safe atmospheres, virtualizing, and command leadership.

#### *7.2.3.1. Extending the use of templating to create safe atmospheres*

The first policy recommendation is based on the revelation of the way people intentionally create safe atmospheres. The findings indicated the use of templating holds promise for building individual and team confidence to speak up within surgical teams about matters that cause them concern related to patient safety. Accordingly, there is scope to acknowledge at policy level the reproducibility of safe atmospheres, and to provide for policy support and training in the use of templating.

In doing so, practitioners may want to address too, a related issue that the findings revealed. Some participants reported a tendency to not speak up about issues that indirectly could impact negatively on patient safety, for example broken equipment. This was said to be because they perceive it to be futile to speak up to managers about such matters. After completion of the data collection for this study, an updated 'National freedom to speak up policy' was published by the NHS Employers organisation in July 2022 (NHS Employers 2022). This is to be adopted locally by January 2024. The policy states its aim to enable 'creating a safe space for anyone to raise concerns, and confidently knowing their concerns will be listened to and followed up'. It is recommended that monitoring takes place to assess if the implementation of the revised policy addresses the tendency not to speak up. If it does not, then I would advocate further revisions to the policy.

#### *7.2.3.2. Pre-emptive measures to avoid unwanted disruption and distancing due to virtualizing*

The second recommendation for policy development relates to virtualizing resulting in the greater reliance on digital technology in contemporary leadership for surgical teams. This research is relevant to recent initiatives in health and social care that aim to 'nurture the health and happiness of staff who offer care' through vocalising their ostensible aspiration for understanding, empathising, helping, and attending (listening) to others (HEIW 2021). The study does so by providing insight on how the use of digital technology and different forms of leadership are experienced by clinicians, and how they adapt to them. It is proposed that future initiatives could benefit from putting in place pre-emptive measures to avoid unwanted disruption and distancing. As disruption was shown to arise from people's lack of experiential understanding of what is expected in virtual leadership spaces, training policies could reflect the need to provide guidance on the expectations for chairing and attending virtual and hybrid meetings, and organisational expectations for inclusivity in WhatsApp groups.

Further, the findings highlight opportunities for the organisation to identify trigger events leading to disruption. This presents the potential for the organisation to develop a strategy for dealing with potential 'disruptive events'. An example is to anticipate the impact of the negative effect of social media on NHS staff. A policy response could be to avoid or reduce the impact of this by providing training in the use of social media, and formulation of organisational responses to address threats to staff morale and retention arising from digital media outputs.

### 7.2.3.3. *Adaption of command leadership*

The revelation of experiences of virtualizing surgical team leadership overlapped with the accounts of people's experiences of the use of command leadership. This change, along with experiences of Lego working, exposed the negative reactions by people to relation-less leadership when they are accustomed to relationally rich leadership. The flexible way of working appears to be an ongoing trend in the surgical team, as does the potential impact of viruses such as COVID-19. Viruses present the threat that 'in the presence of a new, highly transmissible variant, vaccination alone might not be enough to control COVID-19' and new viruses, thereby producing potentially large numbers of hospital admissions (Sonabend *et al.* 2021, p.1826). These may result in constant pressure on healthcare: unlike the historic winter peak for influenza, waves of COVID-19 and its successors may occur throughout the year (Baker *et al.* 2020).

Accordingly, the third policy recommendation is to propose that a dialogue be initiated about adapting the policy, the NHS Emergency Framework (NHS England Emergency Preparedness Resilience and Response Unit 2016), which governs the use of command leadership in the NHS, in preparation for it to be used more frequently. Areas for discussion could include introducing a process for decisions to be taken at a policy level about safeguarding the well-being of staff when command leadership is implemented for a protracted period under the existing the NHS Emergency Framework (2016).

A second area relates to adjusting the form of leadership if the form used at the beginning of the crisis is not fit for purpose in the middle and towards the end of a crisis. An alternative to the current blanket imposition of command leadership throughout extreme contexts could be debated. One option would be to take a tiered approach: to ring-fence departments that do not require the implementation of command leadership and/or for whom the use of command leadership may be detrimental. This need for such an adaptation was illustrated by surgical teams' experiences during the COVID-19 pandemic and their push back against command leadership to reclaim autonomy and collective leadership locally.

### **7.3. Limitations**

The limitations of this study fall into two categories: those previously acknowledged in qualitative research literature as applicable to studies generally, and limitations that arise specifically due to the COVID-19 pandemic.

### **7.3.1. General limitations**

In relation to the first category, the results from this study are not generalisable to all settings, although they may provide insights applicable to other extreme settings. This is evident from the diversity of experiences recounted within the findings. However, whilst the findings may not be generalisable as they would in an experiment, they can serve to 'shed empirical light' (Yin 2014, p.40) on changes to leadership in the NHS and more abstractly to other environments. This is supported by the appearance of common themes across sites, such as the impact of digital technology, and the importance of atmosphere within operating theatres. Also, the data do offer a perspective wider than solely the context of the three hospitals from which the participants were predominantly drawn. This is because the data reference people's experiences at approximately seventy different locations that cumulatively they were based at throughout their careers.

The second limitation is that as the research was for a doctoral thesis, necessarily the research was conducted by one researcher. Accordingly, it did not benefit from the scrutiny of, and discussion with, other researchers during the analysis and interpretation of the data to the extent that would happen in studies undertaken for other purposes.

### **7.3.2. Limitations due to the COVID-19 pandemic**

Limitations arise from the restrictions on the research methods because of the COVID-19 pandemic. It was necessary to change the planned methodology and methods after the start of the data collection. On reflection the effect of the pandemic may also have impacted on types of experiences that the participants presented to me. In particular, regarding gender, race and ethnicity issues.

#### *7.3.2.1. Methodology and methods*

There was no indication of the forthcoming COVID-19 pandemic at the time that the research plan for this study was designed. The final clearance from the NHS to begin data collection was given on 21 January 2020. I began interviewing at the earliest opportunity based on participants' availability, on 24 February 2020. Knowledge of the extent of the COVID-19 pandemic was starting to unfold at that time. On 18 March 2020 the NHS Trust sent out notification that all non-COVID-19 related research was suspended until further notice. There was no indication of how long this suspension would last.



I had managed to conduct three initial interviews with members of the surgical teams by then. This enabled me, as planned, to analyse the data from these initial interviews, and to identify if the interview question schedule needed adjusting to focus on any emerging themes. At this stage more information about COVID-19 started to be known, and it had become apparent that the inability to carry out data collection at the hospital sites may continue for some months. Accordingly, I took several steps to continue to collect data and to enhance triangulation and validity of the data in the absence of the planned observations of surgical teams during surgery and other aspects of their work. I considered asking participants to complete diaries to triangulate information provided during interviews. However, I felt, ethically, that this could not be justified. This would be placing an additional burden on people at a time that they were already facing (and struggling with in many cases,) new personal and professional challenges. The diaries would provide a second type of self-reporting of experiences, rather than an independent assessment through observations. Therefore, in the unique circumstances of the COVID pandemic in the NHS, this additional method did not appear justified.

However, I did undertake observation through virtual media, which had not originally been planned<sup>49</sup>. This provided the opportunity for triangulation of interview data and provided the opportunity to test the validity of participants' accounts of the impact of virtualization. Additionally, wherever possible, I took the opportunity for triangulation by asking participants, on an anonymous basis, about issues that other participants had raised, to test the validity of accounts of experiences. For this purpose I asked questions in a naïve way, with an open question style, to obtain genuinely corroborative, or contradictory, perspective that was not influenced by me or earlier data. If they said they corroborative experiences, I asked participants to give concrete examples of what they had witnessed.

Within days of the hospitals' decision to cease research taking place, I took the decision to expand my pool of participants. Policy makers, training organisation staff, and academics are examples of the wider potential pool of participants, recruited on the basis that they might have an informed view on the subject of my research. In respect of recently retired participants, there was the opportunity to gather data from individuals whose knowledge of leadership in surgical teams spanned further back than most current NHS employees. They presented the opportunity to potentially

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<sup>49</sup> Details of these observations are provided in sections 3.7.7, 3.7.9 and Appendix C.

gather data to inform the research, even if they were unable to support the reporting of current leadership practices.

I successfully applied for extensions to the permissions granted by the IRAS and the hospitals Research and Development departments. However, data collection tended to be sporadic, dependent on when staff were able to participate between the peaks of the pandemic and the subsequent catching up on waiting lists once elective surgery was allowed to take place again. There was also some difficulty, because I was not physically located on site, to obtain individuals' signed consent to their data from group virtual meetings being included in the study. Recruitment has been challenging. As a researcher and being married to someone who works in the NHS, I was mindful of the constraints and burdens that staff were under during this particularly challenging time. I took a carefully balanced approach between pursuing my research project and being sensitive to the incredibly difficult professional and personal position that my participants found themselves in. An example of this was my attempts to gain direct, or indirect, knowledge of discussions between senior leaders and members of surgical teams. Access to meetings or meeting notes may have enhanced triangulation of interview and virtual field observations. However, I did not obtain consent following my request in respect of these types of meetings. Furthermore, one of the requirements of the ethics approval, amended in response to the COVID-19 pandemic, was that I should only make a request for participation once, and not pursue matters further.

All these unexpected changes in the research plan have resulted in an 'messy' approach to the research project, taking opportunities to gather data, then analyse it in a relatively opportunistic fashion. That is rather than adhering to timescales and systematic approach as envisaged in the original research design. This has had some positive impact on the research though. Empirically, the main benefit was the opportunity to research the unique operation of the command leadership being used, unusually, for an extended period and the sudden upturn in virtual communications. Also, to study leadership more generally within an extreme context which has not been experienced before, at least during the working lifetime of the participants.

There was a methodological benefit too: as the data collection was extended, rather than conducting interviews in a block then carrying out analysis, there was a greater opportunity than would have been possible with the original plan, to identify emerging themes, and to adapt the interview schedule to focus on those themes in future interviews.

However, there was a negative effect due to the unexpected changes. When it became apparent that access to carry out field work in hospitals was not possible due to restrictions imposed by the Government and the NHS, I was unable to continue the case study with a practice-based underpinning as originally intended. In addition to the interviews, I intended to carry out observations and shadowing in the field. However, it became apparent that access to carry out field work in hospitals was not going to be possible during the timespan of the project, due to restrictions imposed by the Government and the NHS.

Consequently, I took the difficult decision that if observations were not possible it was not feasible to conduct the research based on practice theory and a practice-based approach. The practice research community strongly advocates the need for practice studies to include data collection through observations in the field. Without this essential component I considered that from an epistemological perspective it was not possible to continue using the practice-based approach.

On reflecting how my research methods were evolving in response to the restrictions, and what approaches would be aligned to my own epistemological views, I continued to use a qualitative, case study, interpretative approach, but I adapted to an emergent case study approach rather than use the originally intended practice-based case study approach.

It did become possible to carry out some observations. However, these were predominantly virtual, so they did not warrant a return to a practice theory-based study. The observations included attending a training event in person and observing surgical team meetings using virtual media. It would have been informative to have augmented these and the interviews with in-person field observations.

However, as I could not do so, in accordance with previous practice in healthcare research, to increase the trustworthiness of data and findings, I encouraged participants to give concrete examples of their experiences (Sartirana *et al.* 2019). This enabled me to provide theoretical and practical insights in my discussion without having conducted such observations (Mcgovern *et al.* 2015; Fischer *et al.* 2016; Sartirana *et al.* 2019). Additionally, I conducted second interviews with seven participants, who had been interviewed early in the interview stage. This was to discuss the insights from data gathered during interviews and virtual observations in the earlier stages of the project. Their comments established the trustworthiness of my findings in that they confirmed my understanding of the experiences of leadership, atmosphere, and leadership changes that had occurred.

### 7.3.2.2. *Gender, race and ethnicity issues*

It is notable that there were very few comments from participants regarding their experiences with reference to gender, race, or ethnicity. In light of the importance of these issues and previous studies concerning them (for example Brathwaite, 2018; Chasma & Khonat, 2020; Shah, 2020) this may be surprising. In part the lack of data generated by this study concerning gender, race and ethnicity could be attributed to the research design: the research was not created with these issues as a focal point. Furthermore, unlike atmosphere, gender, race, or ethnicity did not emerge as an issue raised by participants, such that it would have warranted the later inclusion of BAME or gender issues as the study progressed. Secondly, on reflection, another reason it was not raised by participants may have been because of the unique timing and background to this study. It is feasible that participants were far more conscious of the impact of COVID-19 and the associated changes to their working life as a result of the pandemic, so did not present their experiences of gender, race and ethnicity more markedly. However, rare examples of experiences related to gender or ethnicity have been recorded and are presented in the findings: see p.117 (quotation from participant P14) and in section 4.4.2.3 at p.106. In light of these 'hints' in the data that BAME and gender issues are present, even if apparently not voiced more widely by the participants of this study, I would recommend this as an area for future research.

The characteristics of participants in respect of their race or ethnicity were not recorded. Whilst Appendix B provides details of the participants' gender, their gender is not provided alongside the participant identifiers given with quotations (e.g. 'P12'). This was presented in this way on the basis of my discussion with the NHS Research Ethics Committee and its desire to protect participants' anonymity.

## **7.4. Recommendations for further research**

I propose that the empirical findings, theoretical contributions, and limitations imposed on this study due to COVID-19 may be used as a springboard in future research studies, to develop a better understanding on four themes: creating safe atmospheres, digital technology, command leadership, atmospherics, and leadership practices.

### **7.4.1. Creating safe atmospheres**

Based on the revelation of the way people intentionally create safe atmospheres, using atmospheric work and templating, the findings indicated the use of templating holds promise for building individual and team confidence to speak up in within surgical teams during surgical procedures, and potentially other extreme

environments. Whilst atmospheric work and templating seemed to be used effectively overall within surgical teams, there was a tendency reported that surgical team-members did not to speak up about issues that required action by people outside of the team, for example reporting broken equipment. This was said to be because they perceive that even though the issue could impact adversely on patient safety, to speak up seems futile as managers often do not respond to these types of concerns purportedly. It is recommended that this area is suitable for future research. The ambit for this is envisaged to be to identify reasons for differences in practice, and to explore if atmospheric work can be extended to support surgical team-members' interactions with managers.

#### **7.4.2. Digital technology**

Scientific predictions state pandemics are expected to increase over the coming decades. There are potentially policy means of addressing this eventuality in relation to digital technology. Future research could explore the extent to which the disruptive effect of technology could be beneficial, or not. It could investigate whether we can continue to harness the reported unexpected window of opportunity to achieve change, as long-established barriers were put aside for prompt solutions to the crisis. This is an alternative to the reversion to practices which were prevalent before COVID-19 relating to the use of digital technology, leadership, and the intersection of them. As an example, future research could explore the longer-term impact of more people being included in meetings and decision-making by virtue of the use of digital technology.

#### **7.4.3. Command leadership**

The third theme recommended for future studies is the use of command leadership. This study exposed the tension in leadership practices during extreme conditions, when frontline staff's established expectations of leadership conflicted with a sudden, but sustained, switch in the type of leadership used in the organisation. Given the substantial negative effect this apparently had on staff morale and retention, I propose that it would be prudent to analysis two wider pools. Firstly, other clinical specialities beyond surgical teams and professionals allied to healthcare; and secondly, other NHS organisations across the four countries of the United Kingdom, as my research focused on leadership experiences in Welsh and English hospitals.

This would be with the aim of a focused exploration of what generated the "examples of really good leadership", and how to avoid future "examples of awful leadership". The

findings from this may form the basis of a review and adaptation of current management practices and organisational policies, such as the existing the NHS Emergency Framework (NHS England Emergency Preparedness Resilience and Response Unit 2016) in the manner suggested in the Policy section above. These issues surfaced in this study, but as they are extensive subjects they may be experienced differently in local contexts. Accordingly, they warrant further focused investigation, drawing on a wider pool of participants, with the potential for the conclusions to inform a national revision of the existing policy to address these issues.

As highlighted above, viruses present the threat of resulting in the protracted use of command leadership in accordance with the NHS Emergency Framework.

Accordingly, firstly future studies may consider how leadership, or expectations of it, need to adapt to being on a year-round war footing against deadly diseases. Based on the impact of COVID-19 across industries globally, this is a topic that would be relevant to a wide range of organisations, not only those associated with healthcare.

#### **7.4.4. Atmospherics**

Finally, study of the practice of atmospherics holds promise for future research projects. Atmospherics, as described in the military literature, were seen to be used effectively within surgical teams, but as yet have not been explored in academic organisation studies of leadership in healthcare. Attention could be directed at the use of atmospherics in other roles in healthcare. In particular, the existing use or potential for use by the NHS command role-holders and senior managerial role-holders both during extreme and more routine contexts. This could be to explore whether they gain a sense, or 'vibe', of the local atmosphere, and whether that can be used to pre-empt damage to morale and staff turnover in different situations.

#### **7.4.5. The practice of leadership for atmospheric work**

The final area recommended for future research that I propose brings us full circle to the beginning of this research project. Due the unexpected onset of the global COVID-19 pandemic I was unable to carry out observations and shadowing in the field as originally planned. I propose that future research may use the findings from this study to devise a research framework on which a practice-based approach could be developed. This could be adopted to confirm whether the self-reported accounts and virtual field observations of leadership activities in this thesis are engaged with as practices. 'Practices' refer to *routine* behavior, which may involve physical and mental actions, objects, emotions, motivations and understanding arising out of background knowledge or experience (Jarzabkowski *et al.* 2007). 'Practice' is understood to arise out of everyday practices (Heidegger 1962).

The framework could build on my analysis of the bundles of activities, effects of the types of leadership, and changes in leadership practices, in relation to atmospheric work and other aspects of leadership. This could incorporate study of the effect of changes in leadership in different types of contexts or changes in context. With an increasing use by organisations of flexible teams, rather than stable ones, I encourage researchers to focus anew on what enables the 'ebbs and flows' of leadership activities, where there is fluidity, and change, in leadership forms. Additionally, for a practice-based approach it would be fitting to develop my theorisation of how people rooted in historically relationally-rich experiences react to relation-less extreme contexts.

## 7.5. Conclusion

It has been suggested that the COVID-19 pandemic has affected the course of leadership and leadership theory (Grint 2020). The use of a time-spanning approach for research provided the opportunity to consider a variety of aspects of this. They include the past's influences on the most recent disruptions of leadership: changeable team-membership, an accelerated use of technology, and the occurrence of extreme conditions produced by the pandemic (Powley, 2009; Christianson *et al.*, 2009; Marti & Fernandez, 2013). In my study, we see the leadership process spanning time, with multiple connections to other processes and activities, including atmospheric work. Vestiges of social matters, such as understandings, relations, and shared meanings influence contemporary leadership. Leadership forms, perceptions of leadership, and perceptions of context are fluid. Indeed, more than one context may seemingly co-exist, because the context is perceived differently by the actors engaged in the one reality.

Additionally, the study demonstrates how the emergence and/or sustainability of a leadership form is dependent on different levels of relational activities. The reaction to contemporary leadership, particularly the use of command leadership, exposes underlying tensions created by well-established expectations of the relational activities associated with forms of leadership and context. It highlights that we cannot neglect these contextual traces if we are to understand people's experience of emergent factors in the leadership space in healthcare. These traces are seen to surface, even years later, in spontaneous, or intentionally crafted, atmospheres in the surgical environment. The development of a more comprehensive understanding of surgical teams' contemporary experiences of leadership afforded by this thesis, responds to the concerns of previous studies of performance failings in NHS hospitals due to hierarchical approaches to leadership (Kennedy 2013; Evans *et al.* 2019; James *et al.* 2020). Additionally, it offers theoretical and empirical perspectives related to the concerns expressed in those reports regarding top-down leadership. This relates to the policy driven command leadership. Predominantly, the use of command leadership was perceived to have "decimated" morale and to have "wrecked" the relationship between those in command or senior leadership roles and people working in and with surgical teams.

Concerns have been raised that the adoption in NHS policy of a collective form of leadership may allow blame to be shifted to people nearer the frontline (Martin *et al.* 2015). In contrast, withdrawal of collective leadership during the crisis of the COVID-



19 pandemic in many instances prevented safe and community atmospheres forming, or continuing, and prevented surgical team-members from contributing clinical opinions or undertaking surgery. It appears it was a case of senior leaders wielding too much hierarchy (McClelland and Smith 2016).

This is not necessarily the result of a dark side of heroic leadership, driven by arrogant, narcissistic, and manipulative leaders (Willcocks and Wibberley 2015). Rather, I propose it represents a poorly informed response to the war zone atmosphere, which resulted in senior leaders failing to maintain surgical teams' autonomy, two-way communication, and relational aspects of leadership. This response not only damaged morale, but also deprived senior leaders of opportunities to assess the local atmosphere, reduce contextual contestation, and prevent the loss of personnel. By elaborating surgical teams' experiences over the years, I contribute to the understanding of how the 'dark side' of leadership 'takes many forms' (Tourish 2013, p.158). Additionally, I contribute a number of novel perspectives, some of which offer an optimistic note and the potential to underpin future initiatives to develop leadership practices. The potential is warranted by evidence of a 'new generation' of surgical team-members. Despite increasingly relation-less work arrangements, they demonstrate an adaptability to leadership initiatives through their use of atmospheric work.

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## Appendix A: NHS Research Ethics Committee approval



Ymchwil Iechyd  
a Gofal Cymru  
Health and Care  
Research Wales

Gwasanaeth Moeseg Ymchwil  
Research Ethics Service



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11 October 2019

Prof Martin Kitchener  
Professor of Public Sector Management and Policy  
Cardiff University  
Aberconway Building  
Colum Drive  
Cardiff  
CF10 3EU

Dear Prof Kitchener

<b>Study title:</b>	<b>Contemporary Leadership Practices in Surgical Teams: a Leadership-As-Practice approach to explore forms of leadership experienced by healthcare staff in NHS surgical settings.</b>
<b>REC reference:</b>	<b>19/WA/0281</b>
<b>Protocol number:</b>	<b>Not applicable</b>
<b>IRAS project ID:</b>	<b>270938</b>

Thank you for your letter of 04 October 2019, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

### Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

### Conditions of the favourable opinion

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

Confirmation of Capacity and Capability (in England, Northern Ireland and Wales) or NHS management permission (in Scotland) should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for HRA and HCRW Approval (England and Wales)/ NHS permission for research is available in the Integrated Research Application System.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations

### Registration of Clinical Trials

It is a condition of the REC favourable opinion that **all clinical trials are registered** on a publicly accessible database. For this purpose, 'clinical trials' are defined as the first four project categories in IRAS project filter question 2. Registration is a legal requirement for [clinical trials of investigational medicinal products \(CTIMPs\)](#), except for phase I trials in healthy volunteers (these must still register as a condition of the REC favourable opinion).

Registration should take place as early as possible and within six weeks of recruiting the first research participant at the latest. Failure to register is a breach of these approval conditions, unless a deferral has been agreed by or on behalf of the Research Ethics Committee ( see here for more information on requesting a deferral: <https://www.hra.nhs.uk/planning-and-improving-research/research-planning/research-registration-research-project-identifiers/>

As set out in the UK Policy Framework, research sponsors are responsible for making information about research publicly available before it starts e.g. by registering the research project on a publicly accessible register. Further guidance on registration is available at: <https://www.hra.nhs.uk/planning-and-improving-research/research-planning/transparency-responsibilities/>

You should notify the REC of the registration details. We will audit these as part of the annual progress reporting process.

**It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

### After ethical review: Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study, including early termination of the study
- Final report

The latest guidance on these topics can be found at <https://www.hra.nhs.uk/approvals-amendments/managing-your-approval/>.

### **Ethical review of research sites**

NHS/HSC sites

The favourable opinion applies to all NHS/HSC sites listed in the application subject to confirmation of Capacity and Capability (in England, Northern Ireland and Wales) or management permission (in Scotland) being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

### **Approved documents**

The final list of documents reviewed and approved by the Committee is as follows:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Covering letter on headed paper [Invitation letter]	v0-1	30 August 2019
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Insurance_cover_letter]	v0-1	01 August 2019
Interview schedules or topic guides for participants [Interview schedules]	v0-1	09 August 2019
IRAS Application Form [IRAS_Form_12092019]		12 September 2019
IRAS Checklist XML [Checklist_04102019]		04 October 2019
Letter from funder [ESRC_funding_letter]	v0-1	02 July 2018
Letter from sponsor [Sponsor_letter]	v0-1	29 August 2019
Letters of invitation to participant [Participant_covering_letter]	v0-1	30 August 2019
Organisation Information Document [IRAS_organisation_information_document]	v0-1	30 August 2019
Other [script for introduction of researcher]	1	07 October 2019
Participant consent form [Interview_Consent_form_for_participants_to_sign]	v0-1	22 August 2019
Participant information sheet (PIS) [Information-sheet-for-participants-Rosell-IRAS]	v0-2	
Referee's report or other scientific critique report [University review approval]	v0-1	15 April 2019
Research protocol or project proposal [Protocol - Rosell v0-1 22_08_2019]	v0-2	01 October 2019
Research protocol or project proposal [track changes]	v0-2	01 October 2019
Response to Request for Further Information		04 October 2019
Schedule of Events or SoECAT	1.0	16 September 2019
Summary CV for Chief Investigator (CI) [Summary CV for Chief Investigator MK]	v0-1	05 September 2019
Summary CV for student [CV_TRosell]	v0-1	05 September 2019
Summary CV for supervisor (student research) [CV_MKitchener]	v0-1	05 September 2019
Summary, synopsis or diagram (flowchart) of protocol in non technical language [Protocol_flowchart]	v0-1	22 August 2019
Summary, synopsis or diagram (flowchart) of protocol in non technical language [Protocol_flowchart]	v0-2	01 October 2019

#### Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

#### User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: <http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/>

#### HRA Learning

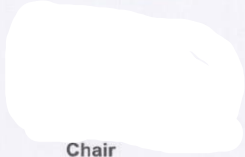
We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities— see details at: <https://www.hra.nhs.uk/planning-and-improving-research/learning/>

19/WA/0281

Please quote this number on all correspondence

With the Committee's best wishes for the success of this project.

Yours sincerely



**Chair**

Email:Wales.REC7@wales.nhs.uk

*Enclosures:* "After ethical review – guidance for researchers" [SL-AR2]

*Copy to:* Mrs Helen Falconer  
Mrs Tracey Rosell

## Appendix B: Log of interviews and participant details

<i>Occupation</i>	<i>Specialism</i>	<i>Gender</i>	<i>Years qualified</i>	<i>No. of interviews</i>	<i>Interview(s) -hours:mins.</i>	<i>Interview - word count</i>
Nurse	Multi-disciplinary	Male	2>5	1	0:49	8695
Consultant						
Anaesthetist	Anaesthetics	Male	15+	1	1:07	9175
Consultant						
Anaesthetist	Anaesthetics	Male	15+	1	1:27	13568
Consultant						
Anaesthetist	Anaesthetics	Male	15+	1	1:27	10479
Consultant						
Anaesthetist	Anaesthetics	Male	15+	1	1:13	9726
Consultant						
Anaesthetist	Anaesthetics	Female	15+	1	1:37	12298
Anaesthetist	Anaesthetics	Male	15+	4	6:13	44105
Manager	N/A	Male	N/A	1	0:58	8346
Manager	N/A	Female	15+	1	1:17	14457
Nurse	Multi-disciplinary	Male	2>5	1	1:12	8637
Manager -						
Exec. level	N/A	Male	N/A	1	1:09	9499
Manager	N/A	Female	N/A	1	0:37	6026
Other - non-surgical	Leadership training	Female	N/A	1	1:03	10110
Manager -						
Exec. level	N/A	Male	N/A	1	1:22	12475
Manager	N/A	Male	N/A	1	1:07	11124
Other - non-surgical	Leadership training	Female	N/A	1	0:45	6522
Other - non-surgical	N/A	Female	15+	1	1:22	12276

<i>Occupation</i>	<i>Specialism</i>	<i>Gender</i>	<i>Years qualified</i>	<i>No. of interviews</i>	<i>Interview(s) -hours:mins.</i>	<i>Interview - word count</i>
Manager	N/A	Male	N/A	1	1:22	12456
Manager - Exec. level	N/A	Male	N/A	1	1:32	15679
Nurse	Colorectal	Female	7>10	1	1:06	11809
Nurse	Colorectal	Female	15+	1	1:04	11651
Nurse	Colorectal	Female	15+	1	1.15	11861
Nurse	Colorectal	Female	15+	1	1:06	9735
Nurse	Colorectal	Female	15+	1	1:09	10995
Nurse	Colorectal	Female	15+	1	0:56	8434
Nurse	Colorectal	Female	2>5	1	0:42	7752
Nurse	General surgery	Female	15+	1	1:09	10213
Nurse	Multi-disciplinary	Female	15+	1	1:12	10677
Nurse	Colorectal	Female	15+	1	1:00	9559
ODP	Anaesthetics	Female	10>15	1	0:49	7655
ODP	Multi-disciplinary	Male	15+	1	1:16	12527
ODP	Anaesthetics	Female	10>15	1	0:55	7271
Other - non-surgical	N/A	Female	15+	1	1:30	11870
Other - surgical	Radiology	Male	7>10	1	1:13	10110
Consultant Surgeon	UGI	Male	15+	1	1:00	9961
Consultant Surgeon	Endocrine	Male	10>15	1	1:10	12110
Consultant Surgeon	Colorectal	Male	15+	2	01:57	18883



<i>Occupation</i>	<i>Specialism</i>	<i>Gender</i>	<i>Years qualified</i>	<i>No. of interviews</i>	<i>Interview(s) -hours:mins.</i>	<i>Interview - word count</i>
Surgeon	Colorectal	Male	10>15	2	01:12	14031
Surgeon	Vascular	Male	10>15	1	1:17	11570
Surgeon	Multi-disciplinary	Female	5>7	1	1:12	11823
Consultant						
Surgeon	Obs & Gynae	Male	10>15	1	1:03	8977
Surgeon	Emergency	Male	7>10	1	1:22	11897
Consultant						
Surgeon	Colorectal	Male	15+	1	0:56	6689
Consultant						
Surgeon	Hepato-biliary	Male	15+	1	1:00	10779
Surgeon	General surgery	Male	7>10	1	1:07	10798
Consultant						
Surgeon	Orthopaedic	Male	15+	1	0:53	6764
Consultant						
Surgeon	Colorectal	Male	15+	2	1:03	11545
Consultant						
Surgeon	Colorectal	Male	15+	2	0:45	7829
Consultant						
Surgeon	Colorectal	Female	15+	2	1:54	16939
Consultant						
Surgeon	Colorectal	Male	15+	1	1:54	17798
Surgeon	Colorectal	Male	5>7	2	0:30	4868
Surgeon	Colorectal	Male	5>7	2	0:30	5288
Surgeon	Plastics	Male	5>7	1	1:07	9884
Surgeon	Colorectal	Male	10>15	1	1:12	11296
Consultant						
Surgeon	Colorectal	Male	10>15	1	1:16	11972

<i>Occupation</i>	<i>Specialism</i>	<i>Gender</i>	<i>Years qualified</i>	<i>No. of interviews</i>	<i>Interview(s) -hours:mins.</i>	<i>Interview - word count</i>
	General					
Surgeon	surgery	Male	10>15	1	1:10	13180
Anaesthetist	Anaesthetics	Male	15+	1	0:58	7048

## Appendix C: Observation log

<b>Date of observation</b>	<b>Duration of observation</b>	<b>Type of meeting</b>	<b>Type of observation</b>
02/07/2021	7hr 45mins	Training	Field
11/06/2021	0hr 40 mins	Individual team-meeting	Virtual
19/07/2021	01hr 50mins	Multi-disciplinary meeting	Virtual
26/07/2021	02hr 10mins	Multi-disciplinary meeting	Virtual
02/08/2021	02hr 02mins	Multi-disciplinary meeting	Virtual
09/08/2021	03hr 00mins	Multi-disciplinary meeting	Virtual
16/08/2021	02hr 18mins	Multi-disciplinary meeting	Virtual
23/08/2021	01hr 50mins	Multi-disciplinary meeting	Virtual
06/09/2021	02hr 00mins	Multi-disciplinary meeting	Virtual
13/09/2021	02hr 52mins	Multi-disciplinary meeting	Virtual
20/09/2021	01hr 48mins	Multi-disciplinary meeting	Virtual
27/09/2021	01hr 49mins	Multi-disciplinary meeting	Virtual

## Appendix D: Steps of process to obtain permissions for research

Stage of process	Date commenced	Date completed
Ethical approval and clearance process started	Nov. 2018	
Cardiff Business School Research Ethics Committee approval	29/01/2019	15/04/2019
Cardiff University Research Governance Team's sponsorship to conduct research in the NHS	06/11/2018	29/08/2019
Completion of Introduction to Good Clinical Practice training	06/08/2019	06/08/2019
Attending the NHS Research Ethics Committee (REC) meeting	N/A	24/09/2019
Health Research Authority (HRA) and Health and Care Research Wales (HCRW) approval considered by the REC. Application made via the NHS online Integrated Research Application System.	25/07/2019	11/10/2019
Obtaining Disclosure and Barring Service certificate	11/10/2019	25/10/2019
Obtaining a 'fit to work' certificate from Cardiff University Occupational Health Division	11/10/2019	14/10/2019
NHS research passport for hospitals W1 and E1. Includes consideration of application by local NHS Trust's Research and Development Risk Review committee meeting.	22/07/2019	21/01/2020
Application to the Research and Development committee for clearance to carry out interviews at Hospital W2 under service evaluation process.	30/11/2020	15/12/2021
Application to IRAS and to the hospitals Research and Development committees to	08/04/2021	21/04/21

<b>Stage of process</b>	<b>Date commenced</b>	<b>Date completed</b>
extend approvals and clearances due to delays in data collection during the COVID-19 pandemic.		
Second application to IRAS and to the hospitals Research and Development committees to further extend approvals and clearances due to delays in data collection during the COVID-19 pandemic.	07/03/2022	16/03/2022

## Appendix E: Definitions of activities perceived as elements of leadership in atmospheric work

Bundle of activities	Individual activities	Definition
Organising	Designing	This is an envisioning and directing activity. Team-members discuss possible approaches to what is going to be done and may require strategic overview. They decide on respective responsibilities, including for tasks.
	Signalling	Redirecting people's attention to work on a project. The activity may include meaning-making, by drawing on the organisation's memory to achieve cognitive consensus and facilitate the sharing of knowledge.
	Scanning	An organising activity or process to identify human and non-human resources. This may be, but is not restricted to, information, tools or technology. Finding out what the strengths and weaknesses of team-members are.
	Stabilising	Offering feedback to evaluate individual and/or team effectiveness. This may lead to learning, structural, and behavioural changes.
	Weaving	By motivating, inspiring and, or empathising, webs of interaction are created to focus on the activities to be undertaken. Trust amongst team-members may be built through this process.
Communicating	Finding out	Based on experience, finding out how and when to communicate.
	Intercommunicating	Intercommunicating stretches beyond 'communicating' and is not restricted to written or verbal communication, for example listening and observing body language. It envisages two-way engagement, which invites and receives communication from others. It may require the support of other activities, for example 'welcoming'.
	Welcoming	Being approachable and reactive to others' concerns and needs.
	Diminishing	Showing no respect or reducing the respect held by others for a person. This may reduce the individual's own confidence in participating in leadership or other people's respect for their ability to do so. The activity includes direct and indirect verbal and physical activities, for example how a person is spoken to or ignored.

Bundle of activities	Individual activities	Definition
Respecting		Respecting activities include engendering respect, possibly as a figurehead, and (not) respecting others' opinions; seeking advice, opinions and help.
Decisioning		Decisioning activities include the act or process of accessing information from one or multiple external sources, and drawing on personal recollections, knowledge and using initiative. It may result in a decisive action, a referral for a decision by another person, or inaction.
Empowering	Balancing provision of autonomy and support	Empowering activities involve balancing the giving or delegating of power, authority, autonomy, or ability. They may enable individuals to, and support them when they take charge and/or make decisions without having to consult a person occupying a role that is considered more senior in the organisational hierarchy.
	Supporting development to enable activity or process	Supporting people to develop by allowing autonomy to take the initiative and accepting that mistakes may happen. Demonstrating a willingness to support less experienced people if mistakes do occur.
	Promoting collaboration and inclusivity	Empowering people to offer collaboration and to develop a feeling of inclusivity within the team.
	Interceding	Acting as a go-between to intervene on behalf of another person.

Bundle of activities	Individual activities	Definition
Atmospheric work	Creating a safe atmosphere	<p>Encouraging or manipulating the working environment and activities of people to promote a safe atmosphere. 'Safe' refers to two linked outcomes: (1) the psychological safety of individuals, so they feel able to speak up about concerns without fear of negative consequences, personal reprisals such as blame or damage to their career; and (2) patient safety, that is the prevention of harm to patients.</p> <p>An '<i>atmosphere</i>' is understood as an 'in the moment' feeling, which can be contrasted with the longer duration that might be expected from a 'culture'<sup>50</sup>.</p>
	Inviting	Encouraging team-members' participation, especially if they are reticent to do so. Encouragement is not only physical but may also be by sharing ideas and sentiments.
	Reflecting	Inviting team-members to openly challenge current views or expectations. This can lead to learning to meet mutual needs and interests. This is in the course of a dialogue in which the team-members display an interest in listening to others, reflecting on perspectives that differ to their own, and being open to the possibility of changing on the basis of what they hear and learn.
	Templating	A deliberate activity to create a safe atmosphere following prior knowledge and experiences.

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<sup>50</sup> Culture has been defined as 'what an organization is the *ongoing* social construction of reality that renders a collective unique' (Ashcraft *et al.* 2009, p.13) [my emphasis].



## Appendix F: Interview Themes and Questions

<p><b>Theme 1: General opening questions exploring the work of surgical team-member</b></p> <p><b>Broad areas of focus</b></p> <ul style="list-style-type: none"> <li>• <i>How members of a surgical team experience their work.</i></li> <li>• <i>How their experience differs according to their role and status in the team.</i></li> <li>• <i>Whether their experience has changed over time due to other features (e.g. changes in working practices / the move away from the ‘firm’ structure.</i></li> <li>• <i>How they perceive leadership in their work environment.</i></li> </ul>	
1.	Can you tell me what your role is at the moment, including how long you have been working in it and similar roles?
2.	Who do you work, whether that’s people in the operating theatre or people in other roles that impact on what you do or can’t do?
3.	<p>Has how your work changed over time?</p> <p><b>Prompt-</b> For example, would you agree that since</p> <ul style="list-style-type: none"> <li>• <b>[if qualified pre-1998]</b> ETWD and changes to shift systems...</li> <li>• <b>[if qualified post-1998 &amp; pre 2006/8]</b> electronic patient records were introduced...</li> <li>• <b>[if qualified post-2009]</b> Covid-19 arrangements came into place... there is less opportunity for all the team to physically come together?</li> </ul>
4.	Has this change affected the ability to form relationships with your team?
5.	How would you describe leadership usually works in your team? E.g. hierarchical, collaborative or something else?
6.	Has this changed over time?
7.	Have there been any changes that are due to the Covid-19 arrangements?
<p><b>Theme 2: What members of surgical teams do to produce leadership</b></p> <p><b>Broad areas of focus</b></p> <ul style="list-style-type: none"> <li>• <i>Do theatre staff do things according to explicit rules</i></li> <li>• <i>What do they do that relies on tacit understanding/routines</i></li> <li>• <i>What implicit routines do theatre staff use</i></li> <li>• <i>Are these implicit routines apparent i.e. observable and learnable</i></li> <li>• <i>Distance: physical and relational – the effect of virtual communication tools</i></li> <li>• <i>Disruption: changes from traditional F2F to more virtual leadership</i></li> </ul>	
8.	Would you explain when specific rules or formal protocols govern how your work is carried out?
9.	Where would your team find these rules or protocols?
10.	To what extent does the team follow rules or, alternatively, improvise to get things done?
11.	What sort of work is done using an understanding of or familiarity with what needs doing, rather than because there are specific rules or protocols?

12.	If you use these understandings of what needs doing, rather than specific rules, would someone, who is new to the team, be able to observe and learn them?
13.	Would you agree that there are 'things', rather than people, that might help someone understand or guide them in what needs doing e.g. tools, technology, visual prompts like whiteboards, Electronic Patient Records? Can you think of examples of these types of objects?
<i>I'd like you to think about the use of virtual types of information sharing and communicating. For example, using electronic patient record, Microsoft Teams and Apps like WhatsApp.</i>	
14.	Do you use an App, like WhatsApp, for work purposes and/or virtual meetings tools, like Teams?
15.	Comparing the use of [Whatsapp/other App]to more traditional face-to-face and telephone discussions - is the Consultant less or more involved in certain things?
16.	What things are Consultants less/more involved in?
17.	Are other members of the team more likely act as leader or have greater input in making decisions and directing people?
18.	How did you feel when you started accessing information virtually by yourself e.g. using EPR rather than talking to the team with notes?
19.	How did you find the experience of taking part in discussions or handovers from home compared to being physically present when you talked to your team?
20.	Thinking about the relationships that you build with your team, does using virtual ways of working feel more impersonal, make you feel more distant from the rest of the team? Or more connected?
21.	Has the amount of influence, or control you have over what happens, changed? In what way?
22.	Comparing how [/you supported] junior staff's development [/was supported] before virtual tools were used so much, do you think you do this differently now? So junior staff need less direction from you about what they need to do? [ <b>Prompt:</b> Do they contact the Reg more than before maybe?]
23.	Do you find using virtual types of working gets people to work more collaboratively, than when they're working face-to-face?
24.	Do some people get excluded from some activities/decisions because discussions are happening virtually?
25.	Do you think people use [Whatsapp/other App] to avoid speaking to other people? [ <b>Prompt:</b> e.g. excluding them from an App's Group or by avoiding F2F].
26.	Do you do anything to compensate for: <ul style="list-style-type: none"> <li>• not being present in the hospital as much, or not with the team as much as you might have done in the past? [e.g. to inspire and motivate people]</li> <li>• [for the loss of influence / control / impersonality / distance you've described?]</li> </ul>
27.	Do you think the changes to use virtual ways of working have been beneficial or not? In what way are they [ <i>not</i> ] beneficial?
28.	What has your experience been of changes in the way people have used Apps and virtual meetings for work during the Covid-19 pandemic?

### Theme 3: How theatre staff experience (not) generating the leadership effect

#### Broad areas of focus

- *What experience do theatre staff have of how they are producing the leadership effect*
  - *Designing*
  - *Scanning*
  - *Mobilising*
  - *Weaving*
  - *Stabilising*

	<b>[Designing]</b>
29.	Thinking about different aspects of your working day, what is a common surgical activity that might be carried out?
30.	How is it decided who is going to do what for <i>the activity</i> ?
31.	How is it decided who has the <b>responsibility</b> for deciding on how <i>the activity</i> is carried out?
32.	How is the <b>discussion led</b> about what should be done?
33.	Is there any equipment, visual aids or technology used to help the discussion or the decision be taken?
34.	Where would that discussion take place?
	<b>[Scanning]</b>
35.	How is it identified what resources are needed to <i>carry out the activity</i> ?
36.	As <i>the activity</i> is carried out, how is its progression directed or led?
37.	Are there any tools, equipment or technology used to help direct its progression?
38.	Are there circumstances, technology or equipment issues that may prevent the activity being carried out, no matter how long that might be before it is carried out?
	<b>[Mobilising]</b>
39.	When <i>the activity</i> is in progress, how are people's attention kept focused on it?
40.	Can you give an example of where this has happened?
41.	Are there any circumstances that reduce people's focus?
	<b>[Weaving]</b>
42.	How do you communicate with one another to carry out <i>the activity</i> ?
43.	How do you collaborate with other members of the team?
44.	Are there any objects or technology that might be used to communicate or collaborate, formally or informally? For example, emails, or sending messages on your mobile phone.
45.	How do you know you can <b>trust</b> someone in the team?
46.	What happens to make team-members not trust someone?
47.	Where and when might trust building happen?

48.	Over time, have you noticed any changes in trust issues?
49.	Are there any objects or technology that might help to <b>build trust</b> ? For example, chatting over a cup of tea, sending messages on your mobile phone, or chatting online.
	<b>[Stabilising]</b>
50.	How does debriefing or feedback start, formally or informally, for team-members to evaluate how <i>the activity</i> has gone?
51.	Would debriefing/feedback take place in the same way or differently if changes are needed in how <i>the activity</i> should be carried out?
52.	Where and when does this feedback/debriefing take place?
53.	During the discussions, how is the debriefing led or directed?
54.	Are there any objects that are or might be used to do start or help feedback/debriefing when it takes place? For example, whiteboards, glitch books, mobile phones?
55.	Can you give an example of where debriefing has changed leadership practices?
<p><b>Theme 4: Socio-emotional aspects they experience relating to the leadership effect</b></p> <p><b>Broad areas of focus</b></p> <ul style="list-style-type: none"> <li>• <i>What experience do theatre staff have of socio-emotional aspects</i> <ul style="list-style-type: none"> <li>○ <i>Inviting</i></li> <li>○ <i>Unleashing</i></li> <li>○ <i>Reflecting</i></li> </ul> </li> <li>• <i>Atmosphere</i></li> </ul>	
	<b>[Inviting]</b>
56.	Can you describe whether, and if so how, open challenges about current work practices take place?
57.	Can you give an example of where this has happened?
58.	Do such challenges result in learning, for example about how to meet mutual needs or the interests of the team or patients?
	<b>[Unleashing]</b>
59.	What, if anything, is done to make sure anyone who wants to contribute to a discussion or give feedback can do so, without worrying about personal repercussions?
60.	Are there any objects that do or might help achieve this (e.g. emails or anonymous log books)?
	<b>[Reflecting]</b>
61.	How is participation in discussions encouraged, particularly by team-members who might be reticent to do so?
62.	Where and when might this encouragement be given?
	<b>[Atmosphere]</b>

	<p><i>I'd like to talk about the atmosphere in theatre. So, by atmosphere in other situations, we might think of how it feels at a funeral, with grief hanging in the air, or, by contrast the euphoria felt at the end of a school term or at a wedding.</i></p> <p>Thinking about your work:</p>
63.	Do you think there is a such a thing as a “safe” atmosphere in a surgical team? By which I mean a kind of climate where people feel able to speak out if there are issues that they are worried about?
64.	So, we agree that there is a thing called a “safe” atmosphere, how would you describe it?
65.	What is a safe atmosphere to you? What effect does it have on you?
66.	Is a safe atmosphere something you actively promote, or try to create? If yes, how so? What do you do?
67.	In your experience, are there things that will really destroy the atmosphere with a team? If yes, like what? How do you recover from that?
68.	What is an “unsafe” atmosphere? How would you describe it and what effect would you say it has on you/other people?
69.	Are changes in atmosphere something you’ve been aware of all throughout your career? [ <i>What changed / when / why?</i> ]
70.	Are you aware of changes in atmosphere happening outside the operating theatre, e.g. during conference calls/virtual meetings [ <i>what happened then?</i> ]
71.	Comparing the different teams and Consultants you have worked with – have you been aware of other people intentionally trying to change the atmosphere? [ <i>where / when / what happened?</i> ]
72.	How do know what you need to do to create the right conditions in which they are comfortable to speak out? [ <i>e.g. do you use memories of previous occasions?</i> ]
<p><b>Theme 5: The process experienced in (not) producing the leadership effect</b></p> <p><b>Broad areas of focus</b></p> <ul style="list-style-type: none"> <li>• <i>How does their experience differ according to the context of their work</i></li> <li>• <i>What experience do theatre staff have of the inputs to the process that produces leadership</i></li> <li>• <i>What experience do they have of corporate agency as an input to the leadership process</i></li> <li>• <i>What experience do theatre staff have of primary agency as part of that process</i></li> <li>• <i>How do they describe the outputs of the leadership effect</i></li> </ul>	
	<b>[Context]</b>
	Would you think about the difference between previous teams you have worked with and the team you are in now, or even the team you are in now, but when there is a change to it?
73.	First, if there is a change due to in the clinical type of work, have you noticed a difference in the way the team is led?
74.	As your or others’ seniority has progressed, have you noticed a difference in the way you or they are involved in leadership?

75.	Again, thinking about previous teams you have worked with and the team you are in now, have you noticed a difference in the way the team is led if it is emergency rather than elective work?
76.	Are there any differences in leadership if the operation starts as a routine one, but there are complications?
77.	Can you give an example of where this has happened?
	<b>[Inputs]</b>
78.	Would you think about previous teams you have worked with and the team you are in now, or even the team you are in now but when there is a change in the [surgeon/anaesthetist/senior theatre nurse – insert according to participant's role]. Have you noticed a difference in the way the team is led?
79.	Can you describe why there might be a difference? <i>[If necessary, follow up with questions of whether this was due to one or more of the following: individual/team practices, ideas, assumptions, relationships, technologies, tools/materialities, histories/background]</i>
80.	<u>Q for non-consultants:</u> When would you contact the Consultant directly? Are there situations when you would decide not to contact the Consultant directly? Why?  <u>OR: Q for Consultant:</u> Would you agree that there are times that people avoid speaking to Consultants? Why would you say they do this?
	<b>[Corporate agency]</b>
81.	If people have different expectations of how <i>the activity</i> you described should be carried out, how does this change the way team leadership happens?
82.	If team-members have different work experience or background, what effect, if any, have you noticed this has on leadership in the team?
83.	What effects, if any, have you seen on the way that leadership occurs in your team, depending on differences in people's power in your workplace?
84.	What effect, if any, have you experienced in the way leadership is altered by the ethical views of team-members?
85.	Can you give an example of where this has happened?
86.	Do the ethical views of people external to the team have any effect on the way leadership is practiced?
	<b>[Agency – primary]</b>
87.	Can you give an example of when your ethical values differed from someone else's? What effect, if any, did this have on you using your or someone else's leadership to intervene in the situation?
88.	What feeling would you describe, in that or any other situation, that might make you decide to try to take the lead, or help others take the lead to get something done?  <i>[If necessary, follow up with examples of feeling uninspired, demotivated, directionless, purposeless, low self-efficiency, unconfident]</i>
	<b>[Output]</b>

89.	Would you give examples of what you consider good leadership to be, and what it can achieve?
90.	Can you describe how good or effective leadership makes you feel? [ <i>If necessary, follow up with examples of feeling inspired, motivated, self-efficiency, clear direction, confident, sense of purpose, psychologically safe (i.e. able to contribute without fear of repercussions or blame)</i> ]
91.	Would you give examples of what you consider to be poor leadership?
92.	What are the effects of poor leadership on the team and the hospital?
93.	Can you give any other examples of how leadership affects patients, for better or worse? For example, patient safety, patient outcomes or patients being included in MDT <sup>51</sup> discussions about their treatment?
94.	<p><b>Style card</b></p> <ol style="list-style-type: none"> <li>1. Routine work</li> <li>2. When there's a complication / emergency work</li> <li>3. Use of autocratic leadership style – if someone uses that style, <ul style="list-style-type: none"> <li>• how do you feel</li> <li>• What could the person do at the time or later to make that use of style more understandable/acceptable?</li> </ul> </li> </ol>
95.	Is there anything about leadership in NHS surgical teams that you would like to add that I haven't covered in my questions?

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<sup>51</sup> Multi-disciplinary team