

**USING PHRONESIS TO ENACT
DESIGN ETHNOGRAPHY:
METHODOLOGICAL
CONSIDERATIONS FOR
REBALANCING SOCIO-TECHNICAL
PHENOMENA IN CMS
PERFORMATIVITY**

Submitted in fulfilment of the requirements for the degree of

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FACULTY OF COMMERCE

RHODES UNIVERSITY

by

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USING PHRONESIS TO ENACT DESIGN ETHNOGRAPHY: METHODOLOGICAL CONSIDERATIONS FOR REBALANCING SOCIO-TECHNICAL PHENOMENA IN CMS PERFORMATIVITY

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ABSTRACT

As a practitioner, I had been part of two Content Management System (CMS) Projects in a particular setting that did not deliver on the expected outcomes. The expected outcomes of the projects included streamlined processes, better access to information, functionalities to drive engagement, reduced time searching for information, and improved reusability of content. As I began to reflect on the projects, a certain discomfort developed when the social aspect was ignored in favour of the technological. I sought a better understanding, but I was unaware of the fact at first. The techno-centricity as a concept found in literature and my experience as content management (CM) practitioner – together informed my interest in rebalancing the social and the technological.

Thus, I focused on conduct in performing of tasks and emphasised attention on the practices of experts who gave insight into context of CM and use. The research participants are communication practitioners who have the responsibility to communicate internally and externally on behalf of a publicly-funded university in South Africa. Guided by the abductive argument and literature, the key themes for the research focused on technology, individuals and the organisation. The focus on technology (CMS as a subfield of Information Systems) began with my involvement in two CMS Projects. What came to the fore was that the practitioner perspective, and thus their experiential knowledge are neglected in research and that it may be an over-emphasis on techno-centrism in CMS research. I sought to better balance the social and technological aspects. The second focus on individuals (communication practitioners) was to value the stakeholder who was considered representative of the worldviews of the community. I sought to support corporate communication practices in the task of relationship building with stakeholders. The findings showed that the culture of information sharing was low at the University. The third focus on the organisation (the University) was to prioritise the success of the communication undertaken by the University. I interrogated the role of power. I demonstrated how the role of power could be seen as productive and positive in the context of HE, the social reality of CUT, and this IS research itself.

I positioned the research as interpretivistic. I used hermeneutics as a mode of analysis because as researcher-practitioner, I am part of the social reality of the research. A safeguard against



my subjectivity was the use of *Phronesis* as an orientation to knowledge. An organisation with a shared understanding of ethics and values will balance instrumental rationality (scientific and technical reasoning) with value-rationality (moral reasoning about right and wrong actions). *Phronesis* is the virtue that should ensure ethical behaviour in actions, yet over time, social science research, in a quest to mimic the natural sciences, centred on *episteme* and *techne*. I constructed the lens by particularising the four value-rational questions of Flyvbjerg's contemporary *Phronesis* to the performative perspective of the research. My interest in social reality, as well as socio-technical aspects, have led to design-ethnography (D-E) to emerge as the most suitable and most appropriate approach to the research. D-E asked the prescriptive 'How' and descriptive 'What' questions, whilst the Flyvbjergian *Phronesis* lens brought focus on the 'Why' question. D-E emphasised the betterment of the interaction and synergy between research conducted and practice. My status as an immersed researcher needed careful consideration, and D-E accepted that a certain level of immersion is necessary, D-E has short interventional fieldwork, and D-E has future-oriented engagement. The contemporary *Phronesis* used in the research is to enact D-E and not an all-encompassing guide for doing *Phronesis* research.

The key contributions to the research are predominantly methodological. The claims draw on evidence focused on the three themes technology, individuals and organisation, and the phenomena of interest which are to rebalance the social and the technological in CM practices. The first claim is that immersion in the context is possible and supported by the specific particularised approaches to the research. The second claim suggests a way to rebalance the socio-technical nature of Information Systems (IS). The third claim suggests that there is a viewpoint for power that is not focused on power's oppressive nature which could see a diverging focus on power in IS research in future. In this viewpoint, the status quo of social reality is not questioned, nor are their emancipatory ambitions. The fourth and final claim suggests that *Phronesis* as a lens could enact D-E, which in turn is a method that assists in valuing the experience of the practitioner and the support of collaborative work.

The research is recommended for IT/IS practitioners who prefer to value participants' views in design. The approaches used could be of value for researchers who consider the context of their research to be of higher importance than the generalisation of outcomes. Researchers



who find themselves in the position of being immersed in the context but question the correctness of active engagement in the field may discover some value from the research approaches and my experience. Also, researchers or practitioners who have an interest in the balance between social and the technological aspects of IS projects. Researchers or practitioners interested in Phronesis, and perhaps the viewpoint of a lens may also find value in this research.

KEYWORDS: Content management, corporate communication, work practices, performativity, immersion, Phronesis, Design-Ethnography, interpretive research, power, worldviews, South Africa, Higher Education.



DECLARATION

I declare that the Thesis entitled, *Using Phronesis to enact Design Ethnography: Methodological considerations for rebalancing socio-technical phenomena in CMS performativity*, which I hereby submit for the degree, Doctor of Philosophy in Information Systems at Rhodes University, is my own work. I also declare that this Thesis has not previously been submitted by me for a degree at this or any other tertiary institution and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

A handwritten signature in black ink, appearing to read 'Jordaan', with a horizontal line underneath it.

Leandra Jordaan



ACTIVITIES

I conducted my PhD in a part-time capacity. I hold a full-time position in the management of a University in the Higher Education sector of South Africa. Thus, I had limited time to engage in conferences, workshops and the review of papers. Below is a list of these activities.

Conference(s)

25th European Conference on Information Systems (ECIS), Guimarães Portugal, 7-10 June 2017.

ECIS Doctoral Consortium: 25th ECIS: accepted as one of twenty candidates and represented SA at the Doctoral Consortium, 5-6 June 2017.

Workshop(s)

Attended four Rhodes University Workshops for postgraduate research, 2016.

Closed Workshop: Making Impact Using Design Science and Qualitative Research Workshop series presented by Prof. Richard Baskerville at UNISA, 24-25 October 2017.

Reviewer

Special Interest Group ICT Global Development (SigGlobDev) 2017.

Reviewed four papers for IDIA2018.

The 15th International Conference on Social Implications of Computers in Developing Countries 2019.

Programme committee member

10th International Development Informatics Association (IDIA) 2018, Programme committee member, 23-24 August 2018.

Online discussion groups

I joined online discussion groups to compensate for the fact that I was not in a position to travel extensively.

LinkedIn:

Association for Information Systems (AIS)

Higher Education and Research

Web Content Developer

CMS User Group

International Information Management Association

Information, Knowledge and Content Management Specialists

Information Architect (IA)

Facebook: IS Womens Network



ACKNOWLEDGEMENTS

Do you know the children's story 'The Wonderful Wizard of Oz'? It is a fictional story about a great journey by a young girl who (along with her dog) gets swept up by a cyclone and is transported to the magical land of Oz. Dorothy wants to go home. Her uncle and aunt are old and rely on her, so she needs to go to Emerald City and ask the Wizard of Oz for his help to go home. Emerald City is at the end of the yellow brick road, which in the original version of the story, Dorothy must first find before she can begin the journey. On the way, she makes friends in Oz who assist her. Scarecrow (who wants a brain), Tinman, (who wants a heart) and the Cowardly Lion (who wants courage). They join her on the journey because they think they need the Wizard to help them too.

Spoiler alert – Dorothy's friends had what they wanted all along, which comes in handy on their adventure. The group finds the yellow brick road and sets off on their journey. I now see that my PhD was a journey to a destination where I had hoped to find something.

On my journey, I too had friends who assisted me. To my colleagues and management of CUT, my deepest thanks for your support. I appreciate your willingness and kindness.

To my family and friends, I have been blessed to have people who care deeply around me all my life. I know the value of this now. Your encouragement and love are priceless.

I have lost people on my journey. In the memory of my friend Niël – you were the best of us, and my dear colleagues Dineo, Natasja and Sandra. Gert, though we are now on different paths in life, I want to thank you for all the years of understanding and support. You generously gave what you could, which I appreciate. This is not an easy journey; it is filled with struggle, but we do the best we can.

To my dogged supporters, Gaia and Zeus. Thank you for the times you just stayed in the study with me or patiently waited as I finished a thought before we could go for that promised walk. Your tenacious nature in everything was an example to me. Because my dogs, never did you let me forget about that walk!

To my loved ones, the people whom I turn to for the hard questions and know I will find unwavering support but also honesty. You keep me grounded. Thank you.

Prof. Kirstin Krauss, my supervisor. I, much like Dorothy, went on a journey and needed friends with brains, heart and courage. I was lucky enough to have chosen you. You possess all three qualities. Your passion and commitment to the research were unwavering. My sincere thanks to you.

May happiness fill your life



TABLE OF CONTENTS

Abstract.....	i
Declaration.....	iv
Activities.....	v
Acknowledgements.....	vi
Table of Contents.....	vii
<i>List of Figures</i>	<i>xii</i>
<i>List of Tables.....</i>	<i>xii</i>
<i>Thesis terms and definitions.....</i>	<i>xiv</i>
1 BACKGROUND AND PURPOSE OF THE RESEARCH	1
1.1 <i>Background of the research.....</i>	1
1.2 <i>An abductive argument supported with key foci from literature.....</i>	6
1.2.1 <i>Managing content with systems</i>	9
1.2.2 <i>Performativity in corporate communication practices.....</i>	13
1.2.3 <i>Higher Education in South Africa and the role of power.....</i>	17
1.3 <i>Problem discovery in research guided by Phronesis.....</i>	22
1.3.1 <i>Articulating the research problem.....</i>	26
1.3.2 <i>The sub-research questions, problem and contribution claims.....</i>	27
1.4 <i>Approaches to the research given the research problem.....</i>	33
1.5 <i>Thesis structure.....</i>	37
1.5.1 <i>The thesis map</i>	40
1.5.2 <i>Graphical representation of research questions, problem and contribution claims</i>	41
2 INFORMATION SYSTEMS AND APPROPRIATE PHILOSOPHICAL ASSUMPTIONS	42
2.1 <i>Introduction</i>	42
2.2 <i>Phronesis from the viewpoints of Aristotle and Flyvbjerg.....</i>	43
2.2.1 <i>Aristotelian Phronesis.....</i>	43
2.2.2 <i>Flyvbjergian Phronesis.....</i>	45
2.3 <i>The socio-technical nature of Information Systems.....</i>	47



2.4	<i>Why is this research Interpretive?</i>	50
2.5	<i>Being critical in this interpretive research</i>	52
2.6	<i>Significance of hermeneutics and the principle of suspicion</i>	55
2.7	<i>The approach to theory explained</i>	56
2.8	<i>Summary</i>	58
3	CONSTRUCTION OF THE PHRONESIS LENS	60
3.1	<i>Introduction</i>	60
3.2	<i>Phronesis as a particularised lens</i>	60
3.2.1	Where are we going with CM practices?	65
3.2.2	Is this development desirable?	69
3.2.3	Who gains, and who loses and by which mechanisms of power?	73
3.2.4	What, if anything, should we do about it?	80
3.3	<i>Summary</i>	83
4	DESIGN-ETHNOGRAPHY AS METHOD	84
4.1	<i>Introduction</i>	84
4.2	<i>Ethnographic research methodology</i>	84
4.2.1	Exploring the design science research and case study methods	86
4.3	<i>Design-Ethnography</i>	89
4.3.1	The research participants	93
4.3.2	Data collection methods	103
4.3.3	Data analysis and interpretation	116
4.4	<i>Ethical clearance for the empirical research</i>	118
4.5	<i>Evaluation and self-evaluation of the ethnographic research</i>	119
4.6	<i>Summary</i>	121
5	PRACTICAL CONTRIBUTION: PERFORMATIVITY OF CORPORATE COMMUNICATION	123
5.1	<i>Introduction</i>	123
5.2	<i>A reader's guide for the practical contributions</i>	124
5.3	<i>Contribution claim 3: Corporate communication practices support the task of relationship building with stakeholders</i>	126
5.3.1	Valuing the individual practitioner's professional network	126



5.3.2	Practitioners experience working with the internal stakeholders.....	134
5.3.3	Summary of the contribution claim	145
5.4	<i>Contribution claim 4: The time-consuming task of searching for information performed by communication practitioners is not justifiable</i>	<i>147</i>
5.4.1	Summary of the contribution claim	153
5.5	Summary	154
6	METHODOLOGICAL AND THEORETICAL CONTRIBUTIONS: UNDERTAKING PHRONESIS TO ENACT DESIGN-ETHNOGRAPHY RESEARCH.....	156
6.1	Introduction	156
6.2	A reader's guide for the methodological and theoretical contributions	157
6.3	<i>Contribution claim 1: Phronesis seeks to balance the social and technological aspects</i> <i>159</i>	
6.3.1	Summary of the contribution claim	167
6.4	<i>Contribution claim 2: A practitioners' contribution to the design process is different when leveraging the uniqueness of the D-E method.....</i>	<i>168</i>
6.4.1	Contributing to the socio-technical nature of IS	169
6.4.2	New knowledge in IS – states of immersion.....	185
6.4.3	Summary of the contribution claim	186
6.5	<i>Contribution claim 5: There are significant implications for power in practitioners' work practices when the focus is not on limitation and exclusion</i>	<i>188</i>
6.5.1	The role of power in the contexts.....	189
6.5.2	Summary of the contribution claim	193
6.6	Summary	194
7	SUMMARY, FINDINGS, KEY CONTRIBUTIONS AND CONCLUSIONS	196
7.1	Introduction	196
7.2	Summary of the thesis.....	197
7.3	Findings – addressing the sub-research questions.....	200
7.3.1	How can Phronesis enact D-E in a performativity-oriented research context?..	200
7.3.2	What should the D-E method interrogate for performativity in corporate communication in a HE SA context to emphasise content management practices?.....	202
7.3.3	Given the phronetic perspective, how is the role of power supported in this research about practitioner's work practices?.....	202



7.3.4	Reflecting on how findings contributed to a new CMS Project C.....	203
7.4	<i>Key contributions</i>	204
7.4.1	Ethnographical states of immersion when doing organisational research.....	204
7.4.2	Rebalance the socio-technical nature of IS.....	205
7.4.3	Viewpoint of power when productive and positive.....	205
7.4.4	The Phronesis lens – a contribution to theory.....	205
7.5	<i>Evaluation and self-evaluation of the research</i>	207
7.6	<i>Reflection on shortcomings and difficulties</i>	212
7.7	<i>To whom will this research be of value?</i>	214
7.8	<i>Possibilities for future research</i>	214
REFERENCES		216
Appendix A: Content Management Practices Framework		234
Appendix B: Guidelines for Design		243
Appendix C: Content Management Strategy		246
Appendix D¹: Mind Map – Phronesis Overview		251
Appendix D²: Mind Map – Phronesis as social science		252
Appendix D³: Mind Map – Analysis of power		253
Appendix D⁴: Mind Map – Phronesis applied in a profession		254
Appendix E: Mind Maps – Content Management Systems		255
Appendix F: Mind Map – Design-Ethnography		257
Appendix G: Mind Map – Design Science Research		258
Appendix H: Mind Maps – Data collection methods		259
Appendix I: Mind Map – Methodological guidelines and D-E – which ones are phronetic?		261
Appendix J: CMS Literature review (techno-centric focus in research)		262
Appendix K: Core Network mapping: Social structure of participants		277
Appendix L: Interview guide		279
Appendix M: Interview notes template		290
Appendix N: Field notes, Reciprocity notes template		291
Appendix O: Informed consent form		292
Appendix P: Letter of invitation to participants		294



Appendix Q: Permission letter to conduct study by CUT	296
Appendix R: Rhodes University – Research Ethics Approval Feedback	297
Appendix S: CMS Project C – screenshots	299



List of Figures

Figure 1-1: Sub-research question 1.....	30
Figure 1-2: Sub-research question 2.....	31
Figure 1-3: Sub-research question 3.....	32
Figure 1-4: The thesis map	40
Figure 1-5: Graphical representation of the research questions (for referencing).....	41
Figure 3-1: Exploratory question: Where are we going with CM Practices?.....	66
Figure 3-2: Exploratory question: Is this development desirable?	70
Figure 3-3: Exploratory question: Who gains, and who loses and by which mechanisms of power?.....	74
Figure 3-4: Exploratory question: What, if anything, should we do about it?.....	81
Figure 4-1: Framework for Design-Ethnography in IS	93
Figure 4-2: Six participants work experience depicted in years.	98
Figure 4-3: Actual research activities: collection, analysis, interpretation and write-up.	108
Figure 4-4: Screenshot of the template for field notes	113
Figure 5-1: A conceptual net: third problem claim.	126
Figure 5-2: Excerpt from Atlas.TI: the analysis of data with the tag.	129
Figure 5-3: Extract from Appendix K. individuals in the core network	133
Figure 5-4: A conceptual net: fourth problem claim.	147
Figure 6-1: A conceptual net: first problem claim.	159
Figure 6-2: Atlas.TI screenshot 1 2016 MACE Conference field notes.....	161
Figure 6-3: The revolution will be tweeted 22-10-2015 cartoon by Zapiro.....	164
Figure 6-4: A conceptual net: second problem claim.	168
Figure 6-5: A conceptual net: fifth problem claim.....	188
Figure 7-1: Graphical checklist to corroborate that all the approaches.....	208
Figure 7-2: Screenshot of code groups from Atlas.TI.....	212

List of Tables

Table 0-1: Thesis terms and definitions.....	xvi
Table 1-1: Mind maps.....	9
Table 3-1: Amalgamation of the Phronesis attributes.	69
Table 3-2: Phronetic methodological guidelines	72



Table 3-3: The role of power: six features that characterise power.....	77
Table 3-4: Phronesis as professional knowledge.....	80
Table 4-1: The toolkit support intervention as a way of studying settings with D-E	91
Table 4-2: Types of relationships between ethnography and design.....	92
Table 4-3: Participants' comfort level self-assessment of their comfort with technology.....	97
Table 4-4: Summary of research planning.....	107
Table 5-1: Chapter reading guide summary.....	124
Table 5-2: Excerpt from Phronesis as professional knowledge, part 4 of the lens.....	128
Table 5-3: Extract from Appendix A: collection of the CM practices framework.....	131
Table 5-4: Extract from Appendix A: authoring tools of the CM practices framework.....	139
Table 5-5: Extract from Appendix B: functionality of the CMS.	140
Table 5-6: Extract from Appendix C: consistency in practices of the CM strategy.....	145
Table 5-7: Extract from Appendix C: context rules of the CM strategy.....	153
Table 6-1: Chapter reading guide summary.....	158
Table 6-2: Outcome example of the hermeneutic iteration in Atlas. TI	164
Table 6-3: Extract from Appendix C: relevant CM strategy crisis communication.	167
Table 6-4: Extract from Appendix B: contributions to the guidelines for design	173
Table 6-5: Extract from Appendix A: collection of the CM practices framework.....	181
Table 6-6: Extract from Appendix C: concept of collaborative work.....	184



Thesis terms and definitions

Reference Table 0-1 below for abbreviations and important terminology used throughout the chapters to follow. Included for convenience are selected definitions considered necessary.

Abductive	Inference to the best explanation. (Honderich, 2005)
Abductive reasoning	Abductive reasoning use “a dialogic strategy to interrogate taken-for-granted assumptions, implicit understandings and norms”. Ngwenyama and Klein, 2018, p.4
CM	Content Management
CMS	Content Management Systems
Communication practitioner	Professional writers, approvers, visual designers, editors, and in this study focused on knowledge-driven organisation individuals who write as part of their profession.
Corporate communication	A management function that “offers a framework and vocabulary for the effective coordination of all means of communications with the overall purpose of establishing and maintaining favourable reputations with stakeholder groups upon which the organisation is dependent”. Cornelissen (2004, p.23)
CUT	Central University of Technology, Free State https://www.cut.ac.za
D-E	Design-Ethnography
DITA	Darwin Information Typing Architecture
DSR	Design Science Research
DHET	Department of Higher Education and Training
ECM ECMS	Enterprise Content Management Enterprise Content Management Systems
HE	Higher Education



HEI HEIs	Higher Education Institution Higher Education Institutions
Instrumental rationality and value-rationality	Instrumental rationality is scientific and technical reasoning. Value-rationality is moral reasoning about right and wrong actions. (Kinsella and Pitman, 2012; Flyvbjerg, 2001)
IS	Information Systems
MACE	Marketing, Advancement, Communications in Education http://mace.org.za/ (Community of practice)
Performativity	Performativity is doing something – to put it into practice. (Schultze and Orlikowski, 2010)
Performative perspective	“A performative perspective is associated with a focus on action and enactment”. (Schultze and Orlikowski, 2010)
Practice	“Practice is doing, knowing, being, and becoming.” (Kinsella and Pitman, 2012, p.75)
Practitioner	An individual “immersed in practice, experiencing their tasks through the emotions, standards of excellence and moral values the practice engenders or enacts”. (Shotter and Tsoukas, 2014a)
Praxis	Praxis is acting truly and rightly in a particular context. Praxis is a moral disposition. The aim is to enhance individual or social well-being. (Ngwenyama and Klein, 2018)
Reflexive	Being reflexive in social research means the research should “study and criticize itself as well as its subject matter”. (Neuman, 2014, p.110) Knowledge: “Knowledge used to broadly examine the assumptions, context, and moral value positions of basic



	or applied social research, including the research process itself and the implications of what is learned". (Neuman, 2014, p.36) Process: "Ethnography can be understood as a reflexive process". (Hammersley and Paul, 2007)
RSA	Republic of South Africa
Social reality	Rapport, trust, and a sense of equality between the researcher and the interviewee are prerequisites for exploring the participant's inner world of meaning and feelings, as well as their experienced social reality. (Schultze and Avital, 2011)
USAf	Universities South Africa http://www.usaf.ac.za/
UoT UoTs	University of Technology Universities of Technology
Worldview(s)	The ideology of a particular group or individual influenced by their history, beliefs, values, and social organisation. (Scollon and Scollon, 2001)
XML	Extensible Markup Language

Table 0-1: Thesis terms and definitions.



CHAPTER 1

1 BACKGROUND AND PURPOSE OF THE RESEARCH

1.1 Background of the research

An example of practice-driven innovation is Tim Berners-Lee's invention of Hypertext Transfer Protocol (HTTP) (Rosenfeld and Morville, 1998) and Hypertext Markup Language which led to the World Wide Web (Couldry, 2012; Rockley and Cooper, 2012). As a practitioner – whom Shotter and Tsoukas (2014b, p.377) define as an individual “immersed in practice, experiencing their tasks through the emotions, standards of excellence and moral values the practice engenders or enacts” – Berners-Lee was driven by the need for better access to information. He wanted better sharing practices, to improve browsing for information, and to link documents for project team members (Berners-Lee, 1990). Berners-Lee had undertaken the task to solve the particular problem of information sharing with other scientists. His unassuming proposal had succeeded but had also gone far beyond the intended scope and use (Hevner and Chatterjee, 2010). The unintended hypertext ingenuity of Berners-Lee contributed to easier access to information in a time when the commercialisation of the Internet brought dramatic change to the business environment in terms of communication methods and information practices (Shen, Lyytinen and Yoo, 2014; Rosenfeld and Morville, 1998). Organisations were adapting to communication methods and information practices that were driven by constant connectivity (Hirschheim and Klein, 2012).

The subsequent and insatiable need for information has brought its difficulties for the Information Systems (IS) discipline, as the field can no longer claim ICTs in organisations and society as a field unto itself (Walsham, 2012). In response to the changes experienced in the computing world, IS research has struggled to reconcile its simultaneous social and technological nature (Orlikowski, 2002; Paul, 2007; Lee, 2010; Alter, 2008; Orlikowski, 2000, 1992; Hirschheim and Klein, 2003). IS scholars even questioned the identity of the field with some calling for the IT artefact as the core (Benbasat and Zmud, 2003), and others wanting IS to consider its socio-technical nature (Agrawal and Lucas Jr, 2005; El Sawy, 2003; Robey, 2003; Robey, Anderson and Raymond, 2013; DeSanctis, 2003; Beynon-Davies, 2009; Boland and Lyytinen, 2004; Carlsson, 2007). IS scholars offer differing views of the field and draw on their



years of experience or reviews of trends in IS research (Paré et al., 2015; Lee, 2010; Walsham, 2012; Mingers, 2003; Hassan, 2011; Hirschheim and Klein, 2012; Willcocks, Sauer and eds. Lacity, 2015). Therefore, it is debatable whether a single core for IS exist; instead of an open, flexible IS discipline that supports multiple viewpoints in IS research and practice are argued for (Hevner and Chatterjee, 2010; Myers, 2003; Hassan, 2011). The debate about the core of the IS field is set to continue as Walsham (2012) noted that the diversity of disciplines engaged in the IS field include education, health, marketing, communication, production systems and financial services. Nevertheless, he called for IS researchers to choose a community and fully engage in its practices and knowledge traditions. I continue the discussion on the IS field in Section 2.3.

Similar to how Berners-Lee responded to a real-life problem situation, this research also emanated from how I (a practitioner), puzzled by a particular socio-technical problem, sought answers to interrogate the problem (Alter, 2015; Sarker, Chatterjee and Xiao, 2013). Before I began this research, I had already been part of two project iterations that designed and developed systems to manage content for communication practitioners. These systems did not deliver on the expected outcomes. I continue the discussion of the systems in Section 1.3, but I will underline the expected outcomes not met briefly. The expected outcomes include streamlined processes, better access to information, functionalities to drive engagement, reduced time spent searching for information, and improved reusability of content. The team I work with is responsible for internal and external communication on behalf of a publicly-funded University in South Africa, as well as the marketing of the University to prospective students and employees (see Section 1.2). The team will be the research participants and are full-time employees at the Central University of Technology, Free State (CUT) Bloemfontein campus. As content creators, managers, users, editors and disseminators for the University, their work practices comprise of strategies, tools, processes, and skills related to managing these content assets for information processes and functions (Grahlmann, et al., 2012; Munkvold, Päivärinta, & Kristine, 2006; O'Callaghan & Smits, 2005).

This research regards the work practices of the participants as part of the corporate communication field. Cornelissen (2004, p.23) defines corporate communication as a management function that “offers a framework and vocabulary for the effective coordination



of all means of communication with the overall purpose of establishing and maintaining favourable reputations with stakeholder groups upon which the organisation is dependent". Corporate communication can be considered the primary activity of our team whose work practices and the problems experienced therein is the focal point of this research. The dynamics of this problem scenario; however, imply problems that include both social and technological issues (discussed in Section 1.3 are the particularities of this problem).

In a knowledge-driven organisation that is publicly-funded such as the University, the work practices are undertaken supposedly for "the good of a community" (Hart-Davidson et al., 2007; Kinsella and Pitman, 2012; Flyvbjerg, Landman and Schram, 2012). In this case, corporate communication and more specifically, the Content Management (CM) practices thereof. CM practices become "a type of conduct" when the team creates and disseminates information for "the good of the community"; it is not merely about 'making texts' (Hart-Davidson et al., 2007). In this research, I consider the concept of praxis "...a form of practice that is ethically informed, committed and guided by the critical reflection of practice traditions and one's own practice" (Kinsella and Pitman, 2012, p.75). However, to examine how participants seek to do the right things for the right reasons, I draw on Phronesis as a lens (Mingers and Walsham, 2010; Schwartz and Sharpe, 2006).

In Section 4.3.2.1, where I discuss my preconceptions and prejudgements in more detail, I state that the principle of reflexivity acknowledges that the researcher is part of the setting but capable of change and that ignoring self would be self-deception (Atkinson and Hammersley, 2007; Lareau and Shultz, 1996). The moment to engage reflexivity is described as glimpses into an alternate reality when the assumptions and ideas are disturbed, leading to learning, questioning and re-evaluating of your stance (Flyvbjerg, Landman and Schram, 2012). Phronesis appealed to me and the problem context from the very first text I read. I had found theoretical guidance to better understand the importance of social aspects within the phenomena of interest, and this awakened my awareness (Chughtai and Myers, 2014). As I continued the search and explored different avenues of theory, methodology and philosophy, I did not waver in my conviction that Flyvberg's contemporary Phronesis should be the cornerstone of my research. At this point, I judge it appropriate to convey the rationality for the use of Phronesis as a lens as it will be utilised throughout this research in data collection,



data treatment, data analysis and interpretation. Firstly, I will discuss what *Phronesis* is; secondly, how I plan to use the lens; and thirdly, why *Phronesis* is an appropriate approach to the research problem. In outlining the *Phronesis* lens at this junction, my intention is to emphasise the importance thereof. More in-depth discussions follow in Sections 1.4 and 2.2, and Chapter 3.

Firstly, *Phronesis* (the original Greek terminology) is predominantly translated as prudence or practical wisdom in contemporary texts; Aristotle explained that *Phronesis* is the “true state, reasoned, and capable of action with regard to things that are good or bad for man” (Flyvbjerg, 2001). A well-functioning organisation with a shared understanding of ethics and values will balance instrumental rationality (i.e. scientific and technical reasoning) with value-rationality (i.e. moral reasoning about right and wrong actions) and effectively apply Aristotle’s intellectual virtues: *episteme*, *techne* and *Phronesis* (Flyvbjerg, 2001; Kinsella and Pitman, 2012; Costello, 2018). *Episteme* is scientific knowledge, and *techne* is technology or know-how (Flyvbjerg, 2001). Aristotle’s master virtue *Phronesis* represents reflexivity, value-judgement, intuition, ethics, values and virtues (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012). *Phronesis* is the virtue that should ensure ethical behaviour in actions, yet over time, social science research, in a quest to mimic the natural sciences, centred on *episteme* and *techne* (Flyvbjerg, 2006b, 2001; Bentz and Shapiro, 1998). In Section 2.2.1, I discuss Aristotelian *Phronesis*, and in Section 2.2.2, I discuss how Bent Flyvbjerg expanded on the works of Aristotle and brought the concept of *Phronesis* forth to present-time including the role of power (which he states Aristotle neglected to address).

Secondly, to express how I plan to use *Phronesis* as a lens, I must first express that this research’s epistemology is performativity (discussed in Section 1.2.2). Performativity is doing something – to put it into practice (Schultze and Orlikowski, 2010) and thereby use it to gain experiential knowledge (Shotter and Tsoukas, 2014b; Flyvbjerg, Landman and Schram, 2012). I discuss the reason for the use of a lens and its formulation in Section 3.2. I previously argued that CM practices are a “type of conduct” in corporate communication for the University; work practices are undertaken for the good of the community. To this end, *Phronesis* offers a unique viewpoint when consideration is given to work practices. *Phronesis* suggests that the focus is on the details rather than the ‘big idea’ (Flyvbjerg, 2001). The focus on minute details for a



performative approach will utilise the four phronetic value-rational questions posed by Flyvbjerg: (1) *Where are we going?*, (2) *Is this desirable?*, (3) *What should be done?*, and (4) *Who gains, and who loses and by which mechanisms of power?* (Flyvbjerg, 2005, 2001, 2008a, 2012; Costello, 2017). I utilise value-rational questions as a way to reflect upon the rightness of the actions (Flyvbjerg, Landman and Schram, 2012). In Chapter 3, I will discuss the value-rational questions and how these questions assist in the formulation and articulation of the Phronesis lens (Section 3.2). In short, the lens consists of:

1. Phronesis attributes, also a key contribution to the field of interest (Section 3.2.1).
2. Methodological guidelines for doing Phronesis which I will also use in the self-evaluation of my conduct (Section 3.2.2).
3. The role of power when seen as productive and positive, and Phronesis as professional knowledge (Section 3.2.3).
4. Valuing experience, the importance of context and the role of collaborative work (Section 3.2.4).

Together, these phronetic components constitute how I plan to enact Phronesis as a lens at different phases during the research. Phronesis, as a lens, will assist me, as an immersed researcher to mitigate the risk by prioritising my knowledge and reflection on context (Flyvbjerg, 2001, 2008b, 2006b). The lens will also assist in the act of interpretation, needed because the IS research is itself a practice of power, and thus a reason to reflect on the role of power (Flyvbjerg, Landman and Schram, 2012). I discuss this in more detail in Sections 3.2 and 6.4.1.3.

Thirdly, I will now outline (more detail in Section 1.4) why Phronesis is an appropriate approach to the research problem that was touched upon in a previous paragraph as socio-technical. Phronesis focuses on 'How?' questions, in addition to more structural 'Why?' questions. It is, therefore, concerned with both understanding and explanation (Flyvbjerg 2001, 2008b, 2006b). The reason for this is that, in Phronesis research, problem situations can only develop when comprehensive insight is gained about the situation; it is imperative to the practice of Phronesis (Flyvbjerg, 2001). Thus, the knowledge assumptions for a research problem that requires Phronesis are that the particular situation – or as referred to in ethnography, a social reality – will allow for reflection, judgement and praxis (Kinsella and Pitman, 2012; Flyvbjerg,



2008b). Concerning this research, the systems designed and developed that had not met all the expected outcomes of the practitioners as they conduct their work practices should be reflected upon (discussed in Section 1.3). When we pay attention to context, worldviews and mindsets become differentiated – giving a richer and varied representation of the situation (Weick and Sutcliffe, 2011). Such representations may require reflection and judgement to interrogate assumptions about taken-for-granted understandings since the focus is individuals (worldviews, practices), as well as the historical and social context (Kinsella and Pitman, 2012; Ngwenyama and Klein, 2018).

The particular assumptions about knowledge in Phronesis bring Design-Ethnography (D-E) to the fore as an appropriate method for this research. Two key assumptions in ethnography are that individuals attach meaning to things that result from the action, and what individuals do may differ, from what they say they do in their practices (Baskerville and Myers, 2015); consider the puzzling problem of the developed systems not meeting all the outcomes. Another important assumption about knowledge is that context in ethnography is treated as a socially constructed reality (Myers and Avison, 2002). To this end, D-E emerged as an appropriate method. These methodological assumptions are also in alignment with interpretivism and its assumptions (see Section 2.4). Discussed in Sections 1.4 and 4.2 are D-E and its uniqueness as an ethnography.

In the next section, I unpack the three key literature foci which guide the research and can be considered the theoretical context that will inform my understanding of the research problem. The foci are Content Management Systems (CMS), the performativity of corporate communication practices, and Higher Education (HE) in South African (SA) context and the role of power. I will articulate how the foci feed into the research problem claims, which I put forward in this thesis (Section 1.3.2); according to how one should conduct Phronesis.

1.2 An abductive argument supported with key foci from literature

In the previous section, I mention that the Phronesis lens is proposed to address the concern of rebalancing the social and the technological aspects within the field of IS (discussed in Section 2.3). In this section, I give prominence to the importance of literature in understanding the particular research problem that came to the fore during my work practices. The research began abductively with a puzzling problem whilst Phronesis foregrounds the 'Why' question



(explanation) to give strength and reason to the potential effect on the empirical setting (Flyvbjerg, 2008a; Costello, 2017). As a result, I have taken the decision not to relegate the literature review on key themes (CMS, practices of communicators and corporate communication) to the traditional separate chapter. Due to the importance thereof in the articulation of the research problem and questions (Section 1.3); and guided by Phronesis, I have brought the key discussions from literature forward (Sections 1.2.1 and 1.2.2). Notwithstanding, in Chapter 2, prevalent theories and methodologies used in IS, and a deeper understanding of the philosophical assumptions are discussed. I will now explain my reasons for why I view discussing literature next as necessary – the phronetic ‘Why’, or explanation (mentioned above).

The key literature foci and the explicitly intertwined contextual discussions throughout this chapter are needed because I am immersed in the research context and a key member of the CMS team (discussed in Section 1.3). I am capable of identifying which of the project outcomes (I refer to CMS Projects A and B) had been met and which had not been fulfilled (see Section 1.3). I have also briefly referred to the outcomes in Section 1.1; streamlined processes, better access to information, functionalities to drive engagement, reduced time spent searching for information and improved reusability of content. However, these CMS Projects were not fully delivered, and I am hesitant to pronounce myself entirely capable of identifying why this was the case. At this point, my subjectivity may be a hindrance. Subsequently, to assist me to infer a better or the best possible explanation (Honderich, 2005) the literature fulfils two purposes. First, I give an overview of the relevant fields. Second, I need literature to understand the potential reasons the projects did not meet the expected outcomes beyond my abductive reasoning on this puzzling problem. Ngwenyama and Klein (2018, p.4) explains that abductive reasoning use “a dialogic strategy to interrogate taken-for-granted assumptions, implicit understandings and norms”. I should also mention that reading literature as you do the problem discovery is a customary style of engagement for ethnography (Hammersley and Paul, 2007; van Maanen, 2011). Thus, during and after the review of literature for the foci, I continuously call attention to the key problem issues found (end of Section 1.2.2). I do this to support my abductive argument for this research which began in my work practices in a particular context, namely SA HE (Section 1.3). I view my inferences as potentially limited, due to my subjectivity and immersion. Further, a social inquiry is subjective and deals with matters



such as values, contexts and power (Nonaka and Toyama, 2007). These are particular strongholds for Phronesis. Therefore, when I articulate the research problem (Section 1.3.1), I also draw from the contextual discussions to follow in this section and do so with the assistance of the Phronesis knowledge assumption that guides my praxis – I seek to “act truly and rightly” (Ngwenyama and Klein, 2018, p.3). Likewise, I am guided by the Phronesis knowledge assumption that there is strength in the narrative (Flyvbjerg, 2001).

The literature I choose to include is to broaden what is known about the particular focus areas. I also include literature that may explain the phenomena of interest, which is to rebalance the social and the technological in CM practices. I consider the questions already asked and what questions may still need to be explored. In line with Phronesis knowledge assumption that implicit understandings may be taken-for-granted (Ngwenyama and Klein, 2018), I employ the strength of narrative description to incorporate my experience as a practitioner in the HE sector. In particular, I draw on the example of the #FeesMustFall campaign to bring to the fore the impact of the particular case on HE corporate communication practices. Briefly: In 2015/2016, the #FeesMustFall student protests took place on a national level in South Africa. The focus was to call for the government (and in some cases the universities themselves) to address the issue of the inefficient financial aid for poor and working-class students as well as the overall underfunded HE sector (discussed in Section 1.2.3).

To make sense of the literature during the review process and to contextualise meaning several mind maps were created (see Table 1-1 for a list of the mind maps that are appendices to the thesis). A mind map affords you the ability to represent and organise information graphically, show relationships using a visual tool, and in so doing, develop perspective and understanding (D’Atri and Saccà, 2010). Moreover; Weick, Sutcliffe and Obstfeld (2005, p.409) describe sensemaking as “turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action”. I refer to the relevant mind maps as I continue through the thesis where they played a role in my sensemaking process.



MIND MAP	APPENDIX
Phronesis:	D ¹⁻⁴
Phronesis Overview	D ¹
Phronesis as social science	D ²
Analysis of power	D ³
Phronesis applied in a profession	D ⁴
Content Management Systems	E
Ethnography and Design-Ethnography	F
Design Science Research	G
Data Collection Methods	H
Methodological Principles – which ones are phronetic?	I

Table 1-1: Mind maps that assisted with literature review, methodological selection, a better understanding and sensemaking.

In the next Section, I unpack the three key literature foci. The research problem identified CMS as a focus because the information systems (CMS Projects A and B) developed did not deliver on the expected outcomes such as streamlined processes, better access to information, functionalities to drive engagement, reduced time searching for information and improved reusability of content (Section 1.3). The performative nature of the research brought forth the focus on corporate communication practices, to consider what participants do, and how they do it (Section 1.2.2) (Salvador, Bell and Anderson, 1999; Flyvbjerg, 2001). Finally, the importance of context informs the decision to interrogate HE in SA – I use narrative description to shed some light on the role of power in the empirical setting (Section 1.2.3).

1.2.1 Managing content with systems

Managing content with systems became a topic of interest to researchers and practitioners in the early 2000s (Vitari, Ravarini and Rodhain, 2007). CMS is considered a subfield of IS, but in IS particular attention and consideration is given to the technologies of Enterprise Content Management (ECM) (vom Brocke et al., 2009; Grahlmann et al., 2010; vom Brocke, Herbst and Urbach, 2014; Tyrväinen et al., 2006). I will consider ECM from a literature perspective, but the focus in the research is CMS. ECM is an integrated system that manages enterprise information including documents, data, reports, websites, digital assets (Benevolo and Negri, 2007) and information practices such as strategies, tools, processes, and skills needed by the organisation



(Grahlmann et al., 2012; Alalwan and Weistroffer, 2012). In the case of CMS, content that this research aims to support is communication and marketing endeavours of the University that are channelled to the public website. This includes print publications published online, brochures, press releases, news articles and also social networks used by the institution. This type of CMS is not classifiable as an enterprise because purpose-specific or enterprise systems manage critical information sources such as organisational reports and documents (agendas, minutes of meetings), statistical data (enrolment, human resources), financial systems, and e-mails (Boiko, 2005; Benevolo and Negri, 2007). The system is also more than a Web CMS because it incorporates print publications, media related items and other forms of content (Benevolo and Negri, 2007). These types of systems (that is less than enterprise but more than Web CM systems) are referred to by Boiko (2005) as full CMS allowing the University the freedom to analyse user and business needs, develop their information architecture and create unified processes and strategies needed for management and sharing of the content (Andersen, 2014; Boiko, 2005; Arshad, Milton and Bosua, 2012; O'Callaghan and Smits, 2005). In reading the literature and bettering my understanding of the CMS field, I made use of a mind map (Appendix E). The mind map unpacks the topics found in CMS literature and include the work ways of collection systems, publishing and management systems, functionality, content organisation and context (workflow, strategy and roles). The issues that arise from the CM literature (this section) and the additional issues that will transpire in the next section on practices of communicators and corporate communication will be incorporated into the research problem claims and questions (Section 1.3.2). I summarise the issues at the end of Section 1.2.2.

Research that pertains to CMS can be found in various fields including information resource management (IRM), electronic document management (EDM), IS, and knowledge management (KM) (Vitari, Ravarini and Rodhain, 2007; Pullman and Gu, 2007; Päiväranta and Munkvold, 2005); whilst the practices of managing content receive some direction in the technical communication field (Pullman and Gu, 2007). One of the issues raised in research is the effect of implementing CMS on work practices for the organisation and the need to align functions of the system with the nature of the processes (vom Brocke J. et al., 2009; Grahlmann et al., 2010). It is also argued that CM systems are enablers in the design of new and improved



processes over the contents' entire life cycle; the same research, however, questions the fulfilment of this particular expectation (vom Brocke, Herbst and Urbach, 2014).

Vom Brocke, Herbst and Urbach (2014) created an evaluation tool to measure ECM success. The tool measures the success of ECM in delivering on the expectation of improved CM practices and process performance. Though researchers accept the impact on work practices during implementation (Herbst et al., 2014; Wiltzius, Simons and Seidel, 2011), they also argue that little guidance exists for practitioners on how to implement ECM (Herbst et al., 2014; vom Brocke J. et al., 2009; Grahlmann et al., 2010; Hullavarad, Hare and Roy, 2015). Guidance for the ECM implementation phases to consider is put forth as the architecture of the CM systems, to identify key challenges in implementation, and an implementation road map strategy (Hullavarad, Hare and Roy, 2015). I mention these particular research endeavours to raise the matter of work practices as a concern, which I will consider in relation to the research problem and the previously unfulfilled system outcomes. Some of the unfulfilled expected outcomes, as mentioned previously, are streamlined processes, better access to information, functionalities to drive engagement, reduced time searching for information and improved reusability of content.

Another concern raised in the literature – that I find to be relevant to this research – is the strong focus placed on the technological aspect of managing content with systems. As I grappled with finding relevant socio-technical research, I began to see merit in the concern. In a comprehensive research review, Alalwan and Weistroffer (2012) stressed their trepidation about the strong focus on the technical aspect. The inference is that the focus on the technical aspect in literature leads to the absence of the social aspect (Alalwan and Weistroffer, 2012). Two other dimensions neglected in favour of the techno-centric focus are process and strategy, but none are as neglected as the focus on individuals and social aspects (Alalwan and Weistroffer, 2012). The research of Scott (2011) discusses user perceptions of ECM as a determining factor in technology acceptance. I then undertook to conduct a review of the CMS literature, which I had found relevant to this research. I assessed the validity of the claim that technological aspects enjoy priority in the CMS field (Alalwan and Weistroffer, 2012; Grahlmann et al., 2012) (See the CMS Literature Review in Appendix J for the breakdown of the review). The items considered included the theory or method used; my reason for the



selection of the research; the main focus of the research selected; the presence of the three actors in technology research according to Orlikowski, (2000), namely technology, organisation, individuals; and the presence of culture or a social aspect. In conducting the review, I found the concern to be reasonable as the focus of literature persistently seems to favour the technological aspect (Appendix J). It is, in part, to address this concern that I prioritise the rebalancing of social and the technological aspects in this research, assisted by the Phronesis lens (Section 3.2). In Section 2.3, I discuss prioritising the socio-technical nature of IS.

In the South African context, a few CMS research endeavours are undertaken within the HE or public sectors. Steele (2012) conducted an exploratory investigation to implement a CMS for the institutional websites at Stellenbosch University. The research finds that among the participant groups (undergraduate students, postgraduate students, support and academic employees) the type of information (content) available within the systems was flagged as a matter to address. This correlates with the unfulfilled expected outcome in the system development that the CMS Project A team had conducted, i.e. better access to information (Section 1.3). An assessment of the effectiveness of SharePoint as a tool for knowledge preservation in the public sector were of interest as SharePoint is also the chosen CMS for the University. Though the research findings indicate that no processes for the preservation of knowledge were used, the research finds that SharePoint is useful when used as a collaboration tool, communication tool, for knowledge sharing, discussion forums and document management (Madiba, 2014). This speaks to two unfulfilled expected outcomes from the previous developments we had conducted which are functionalities to drive engagement and improved reusability of content (Section 1.3).

The CMS literature has given direction to this research in the following aspects: it calls attention to the concern for work practices when implementing a system, the techno-centric focus prevalent in research for the field, and the connections that were found between the concerns raised in the South African context research, and my experience as a practitioner with the unfulfilled outcomes of the developed systems. These include access to information (Steele, 2012) and functionalities to drive engagement, as well as improved reusability of content (Madiba, 2014). I will take the aspects of concern forward into the next section as I review



literature that pertains to corporate communication. The next section will first contextualise the communication practitioner, and their work practices followed by the performativity of corporate communication practices.

1.2.2 Performativity in corporate communication practices

As mentioned, performativity is doing something – to put it into practice (Schultze and Orlikowski, 2010) and thereby use it to gain experiential knowledge (Shotter and Tsoukas, 2014b; Flyvbjerg, Landman and Schram, 2012). I turn my attention to the practices of the communicators who use the systems discussed in the previous section. Not only is there a techno-centric focus in CMS literature, but the decision-making on CMS implementation seems to favour the opinions of IT teams or management, to the neglect of the practitioners' perspective (Andersen, 2007; Pullman and Gu, 2007; Andersen, 2014). I will unpack three themes from the literature. First, the practitioner, then writing as a profession, and finally work practices particularised to the context of this research and the focus of corporate communication. As mentioned before, corporate communication is the primary activity of the participants whose work practices and the problems experienced therein are the focal points of this research. Cornelissen (2004, p.23) defines corporate communication as a management function that "offers a framework and vocabulary for the effective coordination of all means of communications with the overall purpose of establishing and maintaining a favourable reputation with stakeholder groups upon which the organisation is dependent".

As mentioned previously, there is a glaring lack of involvement by communication practitioners in literature and on decision-making for the type of CMS to implement (Andersen, 2007). This carries over to their involvement in CMS design as well, with IT teams or management taking the lead (Pullman and Gu, 2007; Andersen, 2014). Nevertheless, these practitioners are expected to adopt the CM systems (Andersen, 2007). Research focusing on writing practices, in particular, reveals that communication practitioners may find new and creative ways to use the system not considered by the system designers (McCarthy et al., 2011). This behaviour is arguably an innovation or a risk for the organisation. That is, by including the practitioners in the design process the behaviour may be created or avoided. This research will further explore this particular literature viewpoint to include the practitioner in the process of planning and design.



Continuing with the topic of writing, I will focus on the theme for the literature writing as a profession. As a practitioner in the field who writes, I spent a substantial amount of my time searching for content. This can be, research on a new topic or archival content from my or other writers' previous writings, and I also obtain new content from other predominantly online sources. Another resource is the custodians of the research or the project within the University. In the expected outcomes of the systems developed, as stated before, three unfulfilled concerns speak to this matter and which should demonstrate the importance thereof. They are better access to information, reduced time searching for information and improved reusability of content (Section 1.2.1). Research conducted on writing in the workplace also finds that the majority of a writer's time is spent on searching through sources (Leijten et al., 2014). Thus, communication practitioners should be highly skilled in their digitalisation competencies as it causes the context to be fluid and dynamic (Shahlaei, Rangraz and Stenmark, 2017). I will pause the literature review a moment to underline that this type of reflection on my experience of work practices as well as literature is phronetically aligned. In Phronesis driven research, iteration between the context, valuing of experience and literature may assist in the discovery of the research topics (Section 1.3).

The final theme is work practices and links to the previous section, which found work practices to be a concern in CM system implementation. In the context of work practices and with a focus on the practitioner and what they do, the literature indicates that the main tasks are advanced writing and visual design activities (Schrive, 2012; Leijten et al., 2014). However, the literature also calls attention to the need for workplace feedback procedures, the sense of control, the team/individual development in the context, support for the mentioned work practices, as well as processes to focus, strategise and collaborate to support the main tasks of the practitioner (Schrive, 2012).

The practices of communicators and CMS literature have foregrounded four important aspects. First, the neglect of the practitioner perspective, and thus their experiential knowledge in research because of a techno-centric focus (Section 1.2.1). Second, the practitioners seem to have limited involvement in system design (Section 1.2.1). Third, searching for information is the task that takes up the majority of a communication practitioners time (Section 1.2.2). Fourth, the support needed in work practices may require the practitioner to be more involved



not only in the design of the CM system but also the decision-making around such systems (Section 1.2.2). The Phronesis lens will offer a unique viewpoint to consider work practices (as mentioned in Section 1.1) with a focus on the details rather than the 'big idea'. See Table 3-3 in Section 3.2.3.1 for the role of power which has 'small questions' as the point of departure.

I will now particularise the work practices to corporate communication and reveal how the phenomena of interest require a Phronesis perspective. Communication practitioners - who are the focus of this research - have to assess the reputation and the identity of the University. They use advanced writing and visual design activities to the benefit of the organisation (Schraver, 2012; Cornelissen, 2004; van Riel, 1997). These activities include messages, images, stories and the communicative interactions of organisational communication that creates and maintains the University identity (Cornelissen, 2004). Once created, the communication should reach the intended stakeholder groups in a way that matters to the groups, and in a way that matters to the University (Cornelissen, 2004). This is the overall objective of their work practices, which requires experiential knowledge of the practitioner. Therefore, the work practices (reputation, identity and other communication interactions) should prioritise the needs of the organisation and support its mission to perform the undertaking it has been set or exists to do (van Riel and Fombrun, 2007; van Riel, 1997). These activities should be supported by a strategy, which I will discuss next.

There are several reasons to value strategy when it comes to communication. In the case of this research, the focus will be the CM strategy, which brings together planning and design with the intent to improve the experience of stakeholders (Rockley and Cooper, 2012). Raised as a concern in the CMS literature review (Section 1.2.1), the CM strategy contribution will attempt to curb the tendency to value technological aspects above social aspects. The CM strategy will be devised in support of the University's overarching strategic plan which, in turn, supports the University vision. This is not a stand-alone endeavour. The intent then is to use the skills and competencies of the team of communication practitioners to manage the reputation and identity of the University. Whilst also valuing the stakeholders (prospective students, current students, employees, alumni, partners in government, business and industry) who are considered representative of the worldviews of the community (Cornelissen, 2004; Shahlaei, Rangraz and Stenmark, 2017).



Studies conducted in the South African context in the field of corporate communication foregrounds the important role the field has to play in supporting the senior management function of the University. Research indicated the value and role of power in strategic management and the confusion or undervalued status thereof as an executive level business function (Toyer, 2011; Steyn, 2012). Another study considered the role communication practitioners play in relationship building (consider stakeholders mentioned previously) and findings showed that the practitioners have excellent skills and expertise for the task, but are limited by the unsatisfying devaluation of communication by management (Rampjapedi, 2016). The use of Phronesis as a lens to interrogate the performativity set the intention to contribute to a CM strategy that would consider work practices, praxis, and the practitioner - a strategy-as-practice (Tsoukas, 2018). I discuss the strategy-as-practice in Section 5.3.2. During the introduction (Section 1.2), I briefly mentioned the performative nature of the research, which has led to corporate communication literature. This will be discussed in more detail next.

As previously mentioned, performativity is doing something – to put it into practice (Schultze and Orlikowski, 2010) and thereby use it to gain experiential knowledge (Shotter and Tsoukas, 2014b; Flyvbjerg, Landman and Schram, 2012). Hence, the connection in this research is made to corporate communication as that it is considered the work practices. It has been mentioned briefly in Section 1.1 that the epistemology of the research is performativity. Epistemology is defined as “an area of philosophy concerned with the creation of knowledge; ... focuses on how we know what we know or what are the most valid ways to reach truth” (Neuman, 2014, p.95). As discussions in this section, the rest of Chapter 1, as well as in Chapters 2, 3 and 4 unfold, three definitive priorities for the research will come to the fore, namely the work practices themselves (includes performativity and praxis), the practitioner(s) of the practices (participants in the research) and the context (socially constructed reality within the organisation, the technology used – CMS). Emphasis is thus placed on practices. As a result, the position taken is that the epistemology is “practice as a way of seeing a context” (Corradi, Gherardi and Verzelloni, 2010, p.268).

To briefly summarise what is meant by work practices in the context of this research: the communication practitioners assess the reputation and identity of the University. They then



have the task to use messages, images, stories as communicative interactions to the benefit of the University (Schraver, 2012; Cornelissen, 2004; van Riel, 1997) and the improved experience of stakeholders (Rockley and Cooper, 2012). In this, the Phronesis lens and D-E will support 'How?' questions, and in addition, Phronesis supports the more structural 'Why?' (Section 1.3.2). The Phronesis lens guides both understanding and explanation Flyvbjerg (2001, 2008b, 2006b). Already mentioned, was the use of the lens to question practice, to draw on experiential knowledge and advance socio-technical approach of IS practice. In Chapter 3, I will further discuss how the Phronesis lens will be put to practical use and the benefit of performativity in this research. The following is a summary of what the literature for CMS, practices of communicators and corporate communication have put forth in terms of key problem themes:

1. Neglected in CMS research because of a techno-centric focus is the practitioner perspective, and thus their experiential knowledge.
2. The practitioners seem to have limited involvement in system design.
3. Searching for information is the task that takes up the majority of communication practitioners' time.
4. In the corporate communication field, the literature indicates that executive management support is needed for communication to succeed (the role of power).
5. Communication practitioners play an essential role in relationship building with stakeholders.
6. The potential ways to support work practices (advanced writing, visual design activities, communication activities) that will consider the needs of the organisation, because of its social impact as a publicly-funded institution (Section 1.2.3).

The matters from literature and my experience will be considered going forward in the design of this research, particularly in the research problem discovery (Section 1.3). In the next section, the importance of context informs the decision to interrogate HE in SA and the role of power which will be followed by the research problem and questions. I will then turn to the issue of the articulation of the appropriateness of the chosen approaches given the nature of the research problem.

1.2.3 Higher Education in South Africa and the role of power

Ethnography requires reflection on the context and particularising literature to context (Atkinson and Hammersley, 2007). D-E, in particular, is a work of discovery and will require



context to execute the problem discovery in the next section (Salvador, Bell and Anderson, 1999). I discuss ethnography in Section 4.2. Universities in SA are part of a number of social systems, the HE sector (also Africa, and globally) and has stakeholder groups with market (economic beneficiaries employees and service providers) and non-market (government and community) interests upon which the organisation depends for its meaning and its continued existence (Cornelissen, 2004). Hence, I will contextualise the HE sector, Universities of Technology (UoTs) and CUT in the discussion to follow.

The HE sector in SA has had one major event that brought together a hugely divided education system (Jansen, 2007; Asmal, 2003, 2002). In 2001, the then Minister of Education announced the National Plan for Higher Education, stating that “transformation could not be left to chance” (Asmal, 2001). The HE sector had three key challenges which the plan sought to address, namely inequality and inefficiency in addressing the skills and human resources needs of the country, and administration, management and financial issues that were being experienced in institutions (Asmal, 2001). The plan contained a number of mechanisms to restructure the HE system, including equity, enrolment guidelines and a separate funding model for research (Asmal, 2001). The biggest impact may have been the restructuring and merging of institutions to remove the racial fragmentation and to alter the contribution of HE. HE had to be responsive to the human resource and knowledge needs of South Africa (Asmal, 2001, 2002, 2003). The number of institutions was reduced, from 36 to 21 through mergers. The groupings established three types of Higher Education Institutions (HEIs) in Republic of South Africa (RSA), namely traditional Universities (strong academic and research focus), UoTs (the old name was Technikons which offers career-focused programmes and applied research) and comprehensive universities (University and Technikon mergers) (Asmal, 2002). The empirical setting used in this research forms part of the UoT grouping, the CUT, so-called for its central location in South Africa. CUT is part of the central region social system.

These institutions, with very different approaches to information practices and disparate campuses, had to be unified, employees and students had to incorporate into new situational environments, and campuses had to be assessed, upgraded and supported to become one institution with shared values and outlooks (Symes et al., 2004; Auf der Heyde et al., 2007). This mammoth task of transforming the HE system in RSA took years and considerable effort



(Jansen, 2007; Asmal, 2003, 2002). The following few paragraphs will consider research conducted in HE post-merger, with a specific focus on UoTs and CUT. The intent is to establish whether this research aligns with any research problems already considered, which could assist in a better understanding of the research problem. The main fields focused on are content and information management, corporate and organisational level communication, worldviews, and practitioners relevant to the previously mentioned fields.

At UoTs in the RSA research showed the marginalisation of social sciences which includes communication as social science (Thathiah, 2013), practices of knowledge sharing not being institutionalised (Harker, 2015) and data as a crucial organisational asset that should be reliable, timely and organised for employees to access and use to the benefit of the UoT was an obstacle that needed some consideration (Mlangeni, 2015). At CUT, certain factors restricted middle management administration practices (Taljard, 2008), better retention of competent employees was needed (Moeketsi, 2013) and multi-campus communication needed attention (Delpont, Hay-Swemmer and Wilkinson, 2014). The next paragraph contains more details of the research endeavours I now briefly mentioned for UoTs in RSA and CUT.

In consideration of the context, Master's dissertations and doctoral theses from South African universities that had UoTs as their focal point, were explored. The research problems focused on strategic matters for UoTs (Thathiah, 2013; Harker, 2015; Mlangeni, 2015). The first master's dissertation considers the impact of globalisation – which is seen as desirable and neutral – thus rendering culture and context unimportant to ongoing development. The result is the marginalisation of humanities, social science and creative arts within UoTs (Thathiah, 2013). As a social science, heavily reliant on context, communication would perhaps be one such field. Another dissertation indicates that the practice of knowledge sharing in UoTs was not institutionalised as well as it ought to be, which the research reports owed to a lack of retention of valuable know-how, inefficient work practices and the reinvention of the wheel (Harker, 2015). The final research found to have relevance suggests that reliable, timely and organised information is imperative to maintain the performance of a UoT. This dissertation found that to define principles of data governance would assist UoTs. UoTs could then better recognise and treat data as a crucial organisational asset (Mlangeni, 2015). Bringing the research even closer to the context, certain research problems with the Central University of Technology as



the focus was also found to be relevant. There was an evaluation of factors that restricts middle management administration practices. The various practitioners assisted in identifying factors that could hamper productivity including a lack of communication between the various departments, employee shortages and policies and procedures that stifle their ability to execute their duties (Taljard, 2008). Additional issues are employee retention, particularly competent employees and the retention strategies that could assist in doing so (Moeketsi, 2013); and the conceptualisation of an internal communication model for the multi-campus CUT (Delpont, Hay-Swemmer and Wilkinson, 2014).

Interesting to note from the CUT research (Taljard, 2008; Moeketsi, 2013; Delpont, Hay-Swemmer and Wilkinson, 2014) is the alignment with some of the strategic matters that also received attention in the UoT research. In both instances, a focus on practitioners, communication, information, worldviews and strategy emerges. I align this literature foci with the literature from Sections 1.2.1, and 1.2.2 (six key problem issues from CMS literature, practices of communicators and corporate communication) when I articulate the research problem. In particular, I explore the six key problem issues in question form (Section 1.3.1). Next, I discuss the issue of the role of power using narrative description to contextualise the importance thereof in the HE sector.

Mentioned in the background of the research is the fact that the corporate communication practices of the team are influenced by organisational communication of the University, such as the mergers discussed previously (Weilbach, 2013). A more recent example would be the "subsidised free Higher Education for poor and working-class students" (Mkhize, 2018) which emanated from the 2015/2016 student protests. Protests took place on national level, and the focus was to call for government (and in some cases institutions themselves) to address the issue of inefficient financial aid for poor and working-class students. The protests also shed a light on the overall underfunded HE sector. The hashtag #FeesMustFall was used to drive the message, but more importantly, to connect the student-led protest movement across the country. The CEO of the Council of Higher Education in South Africa, Professor Narend Bajinath, reported that the HE sector in SA "has never been more volatile than it is currently" (Webbstock and Fisher, 2016, Foreword). He highlighted the underfunding of HE which lead to the #FeesMustFall protests in 2015/2016 wherein students expressed their frustrations with



financial aid. In fact, the institutions themselves are experiencing the same underfunding, leading to the implementation of cost-saving measures which jeopardises the quality and provision of education (Webbstock and Fisher, 2016, Foreword).

These sectoral matters impact on the HE communication practitioners and their practices, both in terms of the unprecedented protests that became the #FeesMustFall movement and the monetary resources available to do the expected work. Marketing, Advancement and Communication in Education (MACE) is a community of practice in HE who come together annually for a national conference and meet in regional groups throughout the year. They had in recent years included both the student protests and cost-saving measures in the discussions because the topics had high relevance to the practitioners. The communication practitioners of MACE had shared what they know and how they approached situations during #FeesMustFall because the communication experience had been on an unprecedented scale affecting everyone in the field (examples from data in Section 6.3 and 6.5). A WhatsApp group was established for the Directors to engage on a day-to-day basis for information share, actions that have or would be taken, and to strategise as a group. No one had been prepared for the powerless position it would lead to for Higher Education sector in South Africa. #FeesMustFall was communication driven by user-generated content. When the users of your content start also to generate content, sharing their views and experiences, we refer to it as user-generated content (Marland, 2009). No crisis communication plan or years of experience prepared the practitioners for the students to prefer the voices of their peers and disregard the official communication channels of the Universities and the Department of Higher Education and Training (DHET). The teams had made every effort to present the case of the various bodies they represented, but students had been unmoved.

If then, consideration is given to power, like in this case, the focus cannot be on the issue of who has power, and who does not. If anything, the #FeesMustFall narrative description has shown that power is episodic (Flyvbjerg, Landman and Schram, 2012). The interest in power is also not one of whether power is good or bad, and the intent is not whether to confront power but how well we use power and its implications (Flyvbjerg, Landman and Schram, 2012; Flyvbjerg, 2001). In Section 3.2.3.1, I discuss the role of power. This brings me back to the initial point, which was that corporate communication practices are influenced by organisational



communication of the University. Power, therefore, plays a role in influence (Jansson, 2014; Ngwenyama and Klein, 2018). Thus, the emphasis on the hermeneutic principle of suspicion as a mode of analysis (Section 2.6). I continue the discussion of the role of power in Section 3.2.3.

This concludes the literature review of the three foci needed to understand the research problems. As previously mentioned, I elaborate on the information found to be relevant to this research in Section 1.3.2, where I will put forth the research questions. The following section will articulate the research problem, and establish the overarching research question, after which I will elaborate on the research problem claims, contributions claims and the sub-questions. In the final section of this chapter, I focus on why I consider the chosen approaches appropriate for the research.

1.3 Problem discovery in research guided by Phronesis

The problems that this research interrogates draws on my involvement in two CMS Projects at CUT. Whilst the initial understanding of the problem started as a puzzling problem (Section 1.2), my reading of the literature on content creation, content management, content strategy, content practices, CMS and socio-technical aspects of IS assisted me to better articulate the problem of not meeting the outcomes set for the custom development of a system project. This is in line with how problem issues typically emerge in ethnographical research, described as encountering the unfamiliar and attempting to make sense thereof (Beynon-Davies, 1997). Whilst the problem situation offered several issues to focus on; I have a particular interest in the viewpoint of communication practitioners who create content and use the system in their work practices (performativity). This led me to explore worldviews and the culture of work (social reality) in the context of this research. My immersion was another potential problem that I considered when choosing the approaches to the research (Section 1.4). Thus, the problem started abductively – I developed an explanation from close examination of the particular situation (Hammersley, 2005). Abductive reasoning uses “a dialogic strategy to interrogate taken-for-granted assumptions, implicit understandings and norms” (Ngwenyama and Klein, 2018, p.4). Owing to the fact that Phronesis is concerned with both understanding and explanation (Flyvbjerg, 2001) as a mode of knowing, it is especially well suited to these types of problems (see Section 1.4 and Chapter 3 for further elaboration). Since I was interested



in the context as well as socio-technical aspects, ethnographic methodology emerged as the most suitable and most appropriate approach to the research (see Section 4.2). Using narrative description, I will, in the next paragraph, contextualise the research problem, and call attention to the successes as well as failures we had in meeting the expected outcomes for the two project iterations.

The first project (CMS Project A) started in 2010. The project expectation was to design and develop a custom CMS for the University's public website. I gathered project requirements through interview sessions with executive team members, employees identified as stakeholders, the Communication and Marketing (C&M) team and literature. The expected outcomes were a new design, direct access to update content for the C&M team, edit and create webpages by C&M, new information architecture, full content revision, better access to information, more functionality to drive engagement, streamlined processes, reduce time spent searching for information and improve reusability of content. Following the interview sessions and clarity on the outcomes, I formulated specific phases for the project. The first phase was identifying the CM platform that would suit the needs of the University, which was a phase undertaken with the Information Technology (IT) team. SharePoint was approved. This was followed by the design and development of the custom CMS. My role in the project was to conduct the interviews on the campuses that would establish the expected outcomes, manage the design (look and feel of the website), establish the information architecture, and source or create the content of the website. The project had difficulty as the University experienced a competency shortage in SharePoint. However, the team could not forego development of the system and approval was given for outsourcing the project. The development of the interim CM system on WordPress promised to fulfil certain outcomes successfully. These included a new design, direct access to the system by C&M – the content custodians (the IT team performed the updates on the then CMS for the websites, but the responsibility had been reassigned to C&M), new information architecture, a much-needed full content revision and streamlined processes. The new WordPress CMS was launched in 2013. As an example of streamlined processes, content had to be submitted to the C&M team who had to revise and submit to the IT team for uploading to the relevant webpages. The new process would see content revised and uploaded by one team (C&M) rather than have two teams (C&M and IT) engage in what is essentially a single process. This reduced the turnaround



time and unnecessary handling of information by employees who could be doing something else. Also, urgent updates or information share could take place faster as the system was open even when employees were off-campus. Improved information flow through the use of functionalities gained with the CMS, such as online forms, empowered employees. For example, the completion of an online form allowed stakeholders to register to attend a workshop or conference, request information from student recruitment, or submit an application for various university offerings. These online forms could be created by the C&M team to capture information from the stakeholder groups. In this instance, relevant stakeholder groups included prospective students, current students, employees, alumni, HE affiliates, research partners and partners in government, business and industry. The CMS would then sent the information submitted to relevant employees to action via e-mail, without human intervention. Importantly, the C&M team could take ownership of the website as a powerful communication tool in the engagement with the stakeholder groups. Another matter to consider is the outcomes that were not met in CMS Project A. I will discuss these later in the section. CMS Project A was not developed on the University approved SharePoint platform. Thus, it was considered an interim CMS – a matter that would have had to be corrected. The reason for the use of WordPress rather than SharePoint was that the turnaround time for the project delivery was very short, and the SharePoint development would not have been possible in the time frame. The University also lacked the SharePoint expertise needed at the time of the development and so did the external service provider, which further complicated the project. Hence, the eventual decision to develop the CMS on the WordPress platform as an interim system.

CMS Project B was undertaken a year later (2014), this time with the IT team as the project leaders. The intent was to migrate to SharePoint and correct some of the shortcomings rather than the design and layout of the website as was the case in the CMS Project A. As part of a tender that would design and develop a new internal website; the external service provider would also migrate the WordPress public website (CMS Project A) to the approved SharePoint CMS platform. The issues that were to receive attention was the removal of the interim platform in favour of the approved one; thus, correcting the security issues and give employees access to specific areas. Also, the addition of assistive templates for guidance when the information was added to the system. The internal website was launched but the public



website development was never completed. After a manual migration of content by the C&M team, the feedback was given on the system corrections needed which was the last engagement on the project; the project was then halted and the custom CMS built-in SharePoint never launched. My role in the project as an editor was analysing the design, layout and content. I was interviewed by the service provider team, along with other identified stakeholders on campus.

Neither CMS Project A or B fully delivered on the expected outcomes for content management of the University. CMS Project B was never launched, therefore the case in point stipulated next is from CMS Project A. Expected outcomes that were not met was better access to information, as well as improved content consistency. I use distributed access for employees as an example of access to information. There was a security threat for the corporate communication of the University in the setup of CMS Project A. The system was not able to limit access to certain areas thereby giving users (internal stakeholders, i.e. support and academic employees) permission and access to only the required webpages. The system allowed all users access to all areas. However, because the C&M team would be empowered to assist employees; the decision was to continue. Access to update and publish content was limited to specific employees in the C&M team in order to curb the consistency threat for the University. This is the second outcome which I will discuss next.

The designed templates for the content of webpages used were an open format and thus did not offer enough guidance for users who would require an understanding of compliance issues as well as an understanding of the content layout and design to use the design templates. The free form webpages could lead to content design mistakes, which would affect the functionality of the website. The expectation of reduced inconsistency and reusability of content was not met because content and design were not properly separated as would have been the case if the templates were implemented as intended. 'Not properly separated' means that the content had format styles embedded in the text. To be reusable, content should be free of styles and layout information (Rockley and Cooper, 2012). Therefore, it could be said that CMS Project A benefited from the experience and commitment of practitioners. It also seems that the support of executive management assisted in its measured success, though



granted not all the objectives were reached, the majority were, and it made a difference to the work practices of the communication practitioners in the C&M team.

The initial understanding of the problem was puzzling to me, in the same manner as Ngwenyama and Klein (2018) describe the failure of the health innovation to automate drug dispensary infrastructure through medication blisters in Germany. This project saw success in other European countries (Denmark, Sweden, Norway, Finland). Based on the similarities of the contexts and societal value, project failure was also a puzzling problem (Ngwenyama and Klein, 2018). Therefore, the importance of engagement in the social reality, as well as to value pragmatic, variable and context-dependent work practices appeared to be linked to the potential for success in CMS Projects (Schwartz & Sharpe, 2006; Halton, 2014; Thacher, 2006; Flyvbjerg, 2001) which would need to be interrogated. To follow is an articulation of the research problem which is guided by the background of the problem, (Section 1.1) the literature (Section 1.2) and my experience as a practitioner (Section 1.3).

1.3.1 Articulating the research problem

The techno-centric focus found in the literature calls attention to the fact that CMS research predominantly focuses on the technology involved but lacks insight about the practitioners who use the information systems and their work practices, as well as how these practices are taken into consideration during the design process if considered at all. Consequently, it could be said that CMS literature may benefit from emphasising a better understanding of the social reality and the potential that can be gained when prioritising experiential insight for work practices (Kokt, 2012; Buckley, 2012; Smit, 2012; Ramsey, 2010; Tyrväinen et al., 2006). There are some attempts made to allow communication practitioners the space to achieve their goals and acknowledge their processes during the design (Pennington, 2007), but overall, there is a lack of involvement from practitioners in CMS design with management and IT employees taking the lead (Pullman and Gu, 2007).

The context of the research also has unique aspects that need to be considered. After the merger of HEI, universities with very different approaches to information practices and disparate campuses had to be unified, employees and students had to incorporate into new situational settings, campuses had to be assessed, upgraded and supported to become one institution with shared values and outlooks (Symes et al., 2004; Auf der Heyde et al., 2007).



Research at CUT revealed that impeded middle management administration practices could be problematic (Taljard, 2008). Give attention to the retention of competent employees (Moeketsi, 2013). Likewise, the multi-campus communication also needs attention (Delport, Hay-Swemmer and Wilkinson, 2014). The worldviews involved in the work practices which are undertaken for the good of the University community (Hart-Davidson et al., 2007; Kinsella and Pitman, 2012; Flyvbjerg, Landman and Schram, 2012), will be considered a type of conduct (Hart-Davidson et al., 2007). The research interrogates the expectation that power in the practices and power in communication will be influenced by and on behalf of the University, as well as the HE sector (Jansson, 2014; Kinsella and Pitman, 2012). To this end, the research problem seeks a better understanding of how to value practitioners' experience in corporate communication focused on social impact (HE), and how to consider these insights can in CMS design. I propose as the overarching research question being investigated for the research, the following:

How should content management practices be examined when considering performativity and the value of practitioners' experience in corporate communication?

1.3.2 The sub-research questions, problem and contribution claims

The overarching question incorporates the three literature foci, namely CMS, corporate communication and the context of HE. I turn my attention to the problem claims and contribution claims. As mentioned, when studying a puzzling problem in a socially constructed reality phronetically (getting close to reality) it is necessary to let the problem context inform your understanding of the research problem and the literature on the problem (Ngwenyama and Klein, 2018). The research began from the position of a puzzling problem in practice; thus, literature explored systems that manage content as a specialised type of IS and literature on the process of managing content. I also considered the corporate communication field as it pertains to the work practices of the participants in this research and the socially constructed reality, which includes content practices and strategy.

In Section 1.2.2 the following key problem issues were summarised from the literature for CMS, practices of communicators and corporate communication. I have reworked these issues into problem claims and contribution claims. The research begins abductively, thus the chosen structure of claims. Each research sub-question has a graphical representation (see below) that



alludes to the relevant chapters and sections. I do this to contribute to why Phronesis and D-E are the appropriate approaches to this research. In Section 1.4 I discuss the reason for the approaches given the research problem. Problem claims contributed from the literature in Section 1.2 are:

1. Why are the practitioner perspective and their experiential knowledge neglected in CMS research with a prevalent techno-centric focus?
2. How do we include practitioners who seem to have limited involvement in system design in the process of design?
3. Why is searching for information the task that takes up the majority of communication practitioners' time?
4. In the corporate communication field, the literature suggests that executive management support is needed. What is the significance of the role of power for communication to succeed?
5. How important is the role of communication practitioners and their worldviews in relationship building with stakeholders?
6. Why should the potential ways to support work practices (advanced writing, visual design activities, communication activities) consider the needs of the publicly-funded institution?

The importance of context to this research informed the decision to interrogate HE in SA and the role of power which showed influence as an implication that should be considered (Section 1.2.3). I contextualise the research to the broader empirical setting, which is HE in SA, but also focused on UoTs and CUT when I reviewed the literature. The following was discovered at UoTs in RSA: research indicated the marginalisation of social sciences including communication as a social science; not institutionalised are practices of knowledge share; and data as a crucial organisational asset that should be reliable, timely and organised for employees to access and use to the benefit of the UoT was an obstacle that needed some consideration. At CUT, the following was found: certain factors restricted middle management administration practices; better retention of competent employees was needed, and multi-campus communication needed attention.

In line with the Phronesis methodological guideline, asking the question 'How' during narrative description incorporates my experience as a practitioner in the HE sector. I draw on the



example of the #FeesMustFall campaign to emphasise the role of power and the impact on corporate communication practices (Section 1.2.3). In the background to the research problem, I again make use of narrative description to share the experience of the problems this research interrogates, and I draw on my involvement with the two CMS Projects that did not meet the expected outcomes (Section 1.3).

I structure the research problem and contribution claims using the three foci during the literature review, namely the technology **(CMS)**, the individuals **(communication practitioners)** and the organisation **(the University)**. The selection of the three foci comes from the literature (Orlikowski, 2000; Leonardi, Nardi and Kallinikos, 2012; McGrath, 2006), the context and my experience in the field as a practitioner (Section 1.2 and 1.3). In the remainder of the section, I will address each focus and their aim in the research, align the problem and contribution claims and the three sub-research questions.

Research sub-question 1

How can Phronesis enact D-E in a performativity-oriented research context?

I outline the experience of the problems this research interrogates. I draw on my involvement with the two projects – CMS Projects A and B – **(CMS)** that did not meet the expected outcomes. It highlights that the practitioner perspective, and thus their experiential knowledge is neglected in research because of a techno-centric focus (problem claim 1 from literature), which is the **first claim** of this research. It applies a methodology that seeks to balance the social and technological aspects. Following that, the **second claim** will centre on D-E and its unique characteristics, which may improve practitioner involvement in system design, as they seem to also have limited involvement in the process of design (problem claim 2 from literature). The research question asks 'How', and thus, expected is a methodological contribution that is prescriptive.

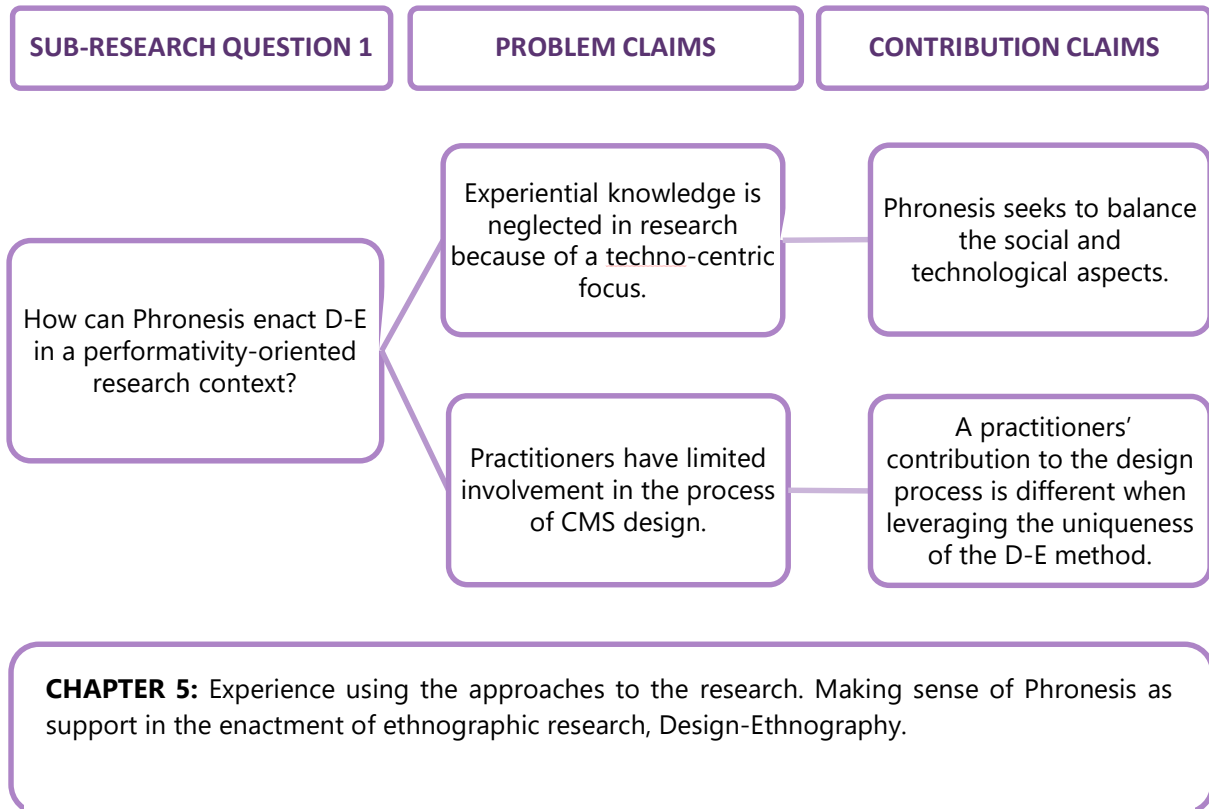


Figure 1-1: Sub-research question 1, the problem and contribution claims and the chapter that seeks to address the sub-research question.

Research sub-question 2

What should the D-E method interrogate for performativity in corporate communication in a HE SA context to emphasise content management practices?

The intent of the research in terms of individuals (**communication practitioners**) is to value the stakeholders (prospective students, current students, employees, alumni, partners in government, business and industry) who are considered representative of the worldviews of the community whilst consideration is given to the needs of the publicly-funded institution (problem claim 6 from literature). The **third claim** is that the worldview of communities served are not valued when the needs of the organisation are considered. Therefore, corporate communication practices support the task of relationship building with stakeholders (problem claim 5 from literature). The **fourth claim** is that the time-consuming task of searching for

information performed by communication practitioners is not justifiable (problem claim 3 from literature). The problem claim pays attention to practices of knowledge sharing which may not be institutionalised, and thus makes the task of searching for information cumbrous. As a crucial organisational asset, the information should be reliable, timely and organised for employees to access and use to the benefit of the UoT. The research question asks 'What', and therefore a practical contribution that is descriptive is expected.

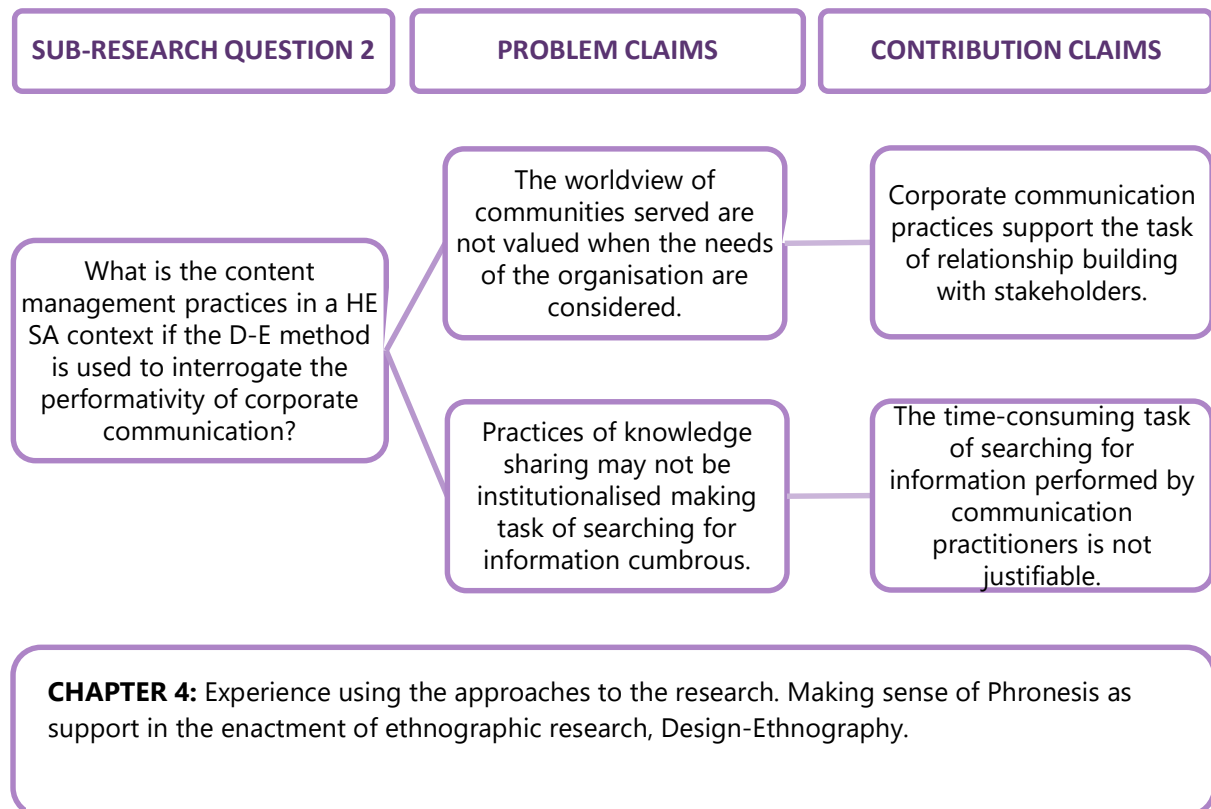


Figure 1-2: Sub-research question 2, the problem and contribution claims and the chapter that seeks to address the sub-research question.

Research sub-question 3

Given the phronetic perspective, how is the role of power supported in this research about practitioner's work practices?

The intent of the research - in terms of organisation **(the University and its contexts)** - is to prioritise the success of communication undertaken by the University. Thus, the **fifth claim** is that there are significant implications for power in practitioners' work practices when the focus is not on limitation and exclusion (problem claim 4 from literature). Further to that, the problem claim examines the potential for significance if power is seen as productive and positive. The research question asks 'How', and thus, expected is a methodological contribution that is prescriptive.

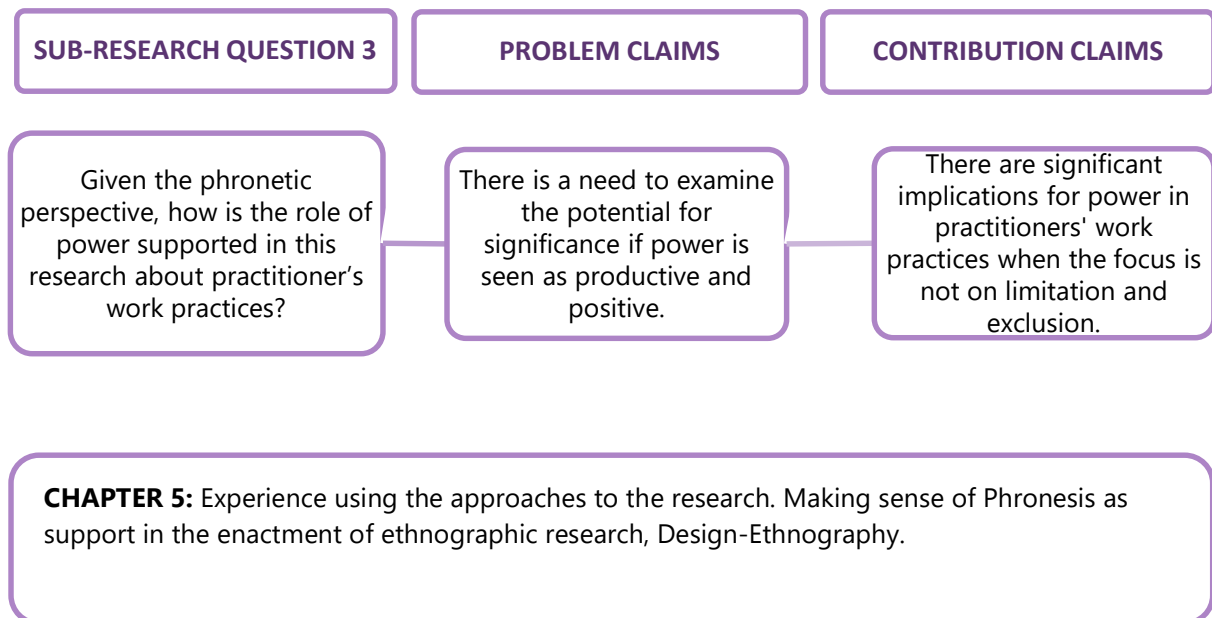


Figure 1-3: Sub-research question 3, the problem and contribution claims and the chapter that seeks to address the sub-research question.

The research seeks to provide practitioners with the opportunity to share their experiential knowledge; in this, I include myself as well as experiential knowledge found in the literature, I discuss the participants in Section 3.3.2. Focused on conduct in task performance may focus attention on the practices of experts and give insight into the context of content management and use. I plan to place value on the communication practitioners experience. The Phronesis



lens will assist as I interrogate how individuals interact with technology in work practices. Subsequently, I plan to advance the socio-technical aspect of IS practice. The overarching research question that asks 'Why' supports all three research sub-questions. This is the phronetic way. To find an explanation, and as this research began abductively, the intent is to infer a better explanation (Section 1.2). Section 1.5.2 contains an overall graphical representation of the overarching research question (at the base of the figure), the three sub-questions, their problem claims and the contribution claims. The placement is for reference purposes when reading the thesis.

1.4 Approaches to the research given the research problem

Before I begin to unpack the approaches to the given research problem, I want to explain the first-person writing perspective used. In the previous section, I discussed the research problem that starts abductively. What is important to note about abductive reasoning is that it develops the explanation from close examination of the situation (Atkinson and Hammersley, 2007) I am immersed in the context as the researcher, as well as an internal stakeholder employed by the organisation, and thus I am a researcher-practitioner. In Section 4.3.1.2, I declare my preconceptions and prejudgements which is required by the hermeneutic principle of suspicion (Section 2.6). Initially, first-person writing may read uncomfortably, especially if the expectation is the traditional third-person perspective. In research practices, Denzin and Lincoln (2005) refer to three writing approaches:

1. Objective approaches see practice from an outsider perspective (third-person).
2. Subjective approaches see practice from the perspective of an insider (second-person).
3. Reflexive reasoning (such as in ethnographies) of the insider group (participants of the research discussed in Section 3.3.2) constitute and reconstitute the social practices (first-person).

Call to mind the assumption about knowledge in ethnography is that context is treated as a socially constructed reality (Myers and Avison, 2002). Phronesis is congruous to this subjective approach in writing. The methodological guidelines (Section 3.2.2) aptly has the ability to adapt a dual functionality from a value-rational viewpoint. Incorporated into the Phronesis lens, it will support my involvement in the context, as I interrogate how individuals interact



within the organisation and with technology (Orlikowski, 2000). The guidelines will also be valuable indicators of direction for my conduct as I seek to better understand the research problem (Section 4.5). I will not outline all (see Section 7.5 for a self-evaluation of the research) but use the guide to 'focus on values' as an example for my conduct (Flyvbjerg, 2001). The guide 'focus on values' calls for balancing instrumental rationality with value-rationality, and subtlety, these shifts focus on prioritising both the social and the technological. To this end, the significance of writing from the first-person perspective is that I am able to convey the information and better demonstrate commitment to the ideas presented by not delivering the research in a neutral and distanced third-person voice (Boland and Lyytinen, 2017). Therefore, I write this research from a first-person perspective.

Another writing phenomenon I will briefly explain is the use of "to better". Depending on your research field the use may be perceived as out of place or incorrect language. However, it is an expression used in Flyvbjergian Phronesis. It is also present in Design Ethnography of Baskerville and Myers (2015), which is the method used. Thus, the phrase is present in Phronesis and ethnography papers. **To better understand** (Flyvbjerg, 2001; Bødker, 2017; Baskerville and Myers, 2015; Carolyn, Adams and Bochner, 2011; Alvarez and Urla, 2002), **to better recognise** (Alvarez and Urla, 2002), and **to better the situation** (Clausen, 1994).

Given the research problem, I discuss the research paradigm of interpretivism (Section 2.4). I also discuss the decision to use D-E as a method, and the aim of contemporary Phronesis, particularly to enact the D-E approach (full details in Chapter 4). Geoff Walsham argues that knowledge of reality (which includes work practices) are socially constructed by human actors (Walsham, 2006, 1993). To better my understanding of the meanings that individuals assign, and the process of influence, as well as being influenced by context, I have chosen interpretivism (Myers, 1997; Myers and Avison, 2002). In interpretive research, the assumption is made that access to reality is given or socially constructed from language, consciousness and shared meaning (Myers, 1997; Stahl, 2005). By having a clear understanding of the context and the ability to connect the interpretations (Pozzebon, 2004), this research will include a polyphony of voices (Flyvbjerg, Landman and Schram, 2012). This is made possible through the dialogical nature of Phronesis with no one voice claiming final authority (Flyvbjerg, Landman and Schram, 2012). This will require criticality, which will question and deconstruct



the taken-for-granted assumptions inherent in organisational activity (Doolin, 1998). I discuss why the research is interpretive in more detail in Section 2.4 and how I aim to be critical in this research in Section 2.5.

Flyvbjerg resuscitated an invaluable source to better our understanding of context, and he puts forth present-day cases where he had applied Phronesis. One such case was the urban politics of planning the city of Aalborg, Denmark, where he uncovered the local business community were in power rather than the democratically elected city council (Section 2.2.2). I will examine the aspect of generalisation as a potential contribution to this research. Inquiring about the social reality of the communication practitioners became apparent when the research problems and performativity of the practices were established (Section 1.2 and 1.3). In consideration of the already mentioned mergers of HEIs, different worldviews and approaches to work practices (Section 1.2), and the particular problems emphasised (Section 1.3), support for the use of an ethnographical methodology began to emerge. Atkinson and Hammersley (2007) argue that ethnography is best understood as a reflexive process which I will draw on using the Phronesis lens (see Section 3.2). Nader, (2011, p.211) asserts that ethnography is a theory of description because ethnography is not merely description, but is in fact "theoretical in its mode of description". In Section 4.2, I elaborate on this theoretical stance and why it is appropriate for this research. As underlined in previous sections, my status as an immersed researcher-practitioner needed careful consideration, and D-E accepts that a certain level of immersion is necessary (Baskerville and Myers, 2015). Unlike traditional ethnographies, in D-E "the researcher goes beyond observation and actively engages with people in the field" (Baskerville and Myers, 2015). The immersed researcher is "engaged with others in a future-oriented way: designing, creating, innovating, and improvising artefacts that may affect the cultural and social values under study" (Baskerville and Myers, 2015, p. 30). This intervention sets D-E apart as an ethnography as it can improve a socio-technical situation, and because it has both prescriptive and descriptive modes of theorising at its disposal, it can be concerned with the 'How' and the 'What' (Baskerville and Myers, 2015). Another unique characteristic of D-E as opposed to traditional ethnographies is the short interventional fieldwork which is considered part of the method's approach (Baskerville and Myers, 2015; Crabtree, Rouncefield and Tolmie, 2012). The long-term fieldwork approach of traditional ethnographies will be difficult to implement in my empirical setting as I am also a practitioner



immersed in work practices. I will need the freedom to move from my profession to research focus at a moment's notice. The methods for data collection include traditional ethnographic tools such as fieldwork, interviews, archival research, and D-E tools such as social mapping, design thinking, experience juxtaposing (Section 3.3.3).

The importance of Phronesis led to a detailed discussion early in this Chapter (Section 1.1). Thus, I shall briefly articulate the aim of Flyvbjergian Phronesis and put forward how I suggest it may enact D-E, keeping in mind the three foci, namely individuals, organisation and technology. First, my focus in the research is "knowledge used in action" and "knowing as part of action" (Cook and Brown, 1999, p.383). This requires the phronetic lens to examine the worldviews of practitioners when the ethnographic research centres on work practices. I aim to use the methodological guidelines (Section 3.2.1) for conducting Phronesis to better my understanding as I actively engage in fieldwork. The guidelines are focusing on values, placing power at the core of analysis, getting close to reality, emphasising the little things, studying particular situations and contexts, asking 'How' doing narrative description, joining agency and structure, and dialoguing with a polyphony of voices (Section 3.2.1). Second, ethnographic principles support that I become (or in this case already am) intimately involved with participants and the social reality leading to mutuality and reciprocity (Atkinson et al., 2001; LeCompte and Schensul, 1999). This requires careful consideration of judgement, and to do so, as was mentioned before, I will draw on contemporary Phronesis as a lens (Section 3.2). As an example, Phronesis as professional knowledge comprises of pragmatic usefulness, persuasiveness, aesthetic appeal, ethical imperatives, dialogical intersubjectivity, and transformative potential (Section 3.2.3.2). Bear in mind that Flyvbjergian Phronesis opposes the convention of looking at the 'big idea' by breaking practices down into minute details to make sense of the experience using narrative (Flyvbjerg, 2001). Because of the shorter timeframes that D-E fieldwork allows, I will move in and out of the empirical setting in different roles. I need to take care, so as to not muddle my practitioner experience with my role as an ethnographer. Third, Phronesis used as a lens may address the problem flagged of rebalancing the social and the technological which, as mentioned in the previous paragraph, also sets D-E apart as an ethnography. In this, I see the aim of Phronesis to be a safeguard for myself as an immersed researcher considering the interventional nature of the fieldwork and its potential impact on the empirical setting (Section 3.2.1). When asking the D-E prescriptive 'How' and



descriptive 'What' questions, the Phronesis lens will also bring in a focus on the 'Why' question to give strength and reason to the potential effect on the empirical setting. The lens will emphasise the value of experience and collaborative work (Section 3.2.4) to assist in the act of interpretation. This I view as necessary because the IS research is itself a practice of power, and thus a reason to reflect on the implications thereof (Flyvbjerg, Landman and Schram, 2012). I explain the role of power in Section 3.2.3.1 and examples from data are used in contribution claim 5 in Section 6.5. The final section of this chapter will structure the thesis going forward. This includes a brief overview of each chapter, a thesis map, a graphical representation of research questions, problem and contribution claims, and a table with terms and definitions used in the thesis.

1.5 Thesis structure

Chapter 1 begins with a background of the research, after which I unpack the abductive argument with support of the three key literature foci. The foci are CMS, the performativity of corporate communication practices, and HE in SA and the role of power. After I articulate the research problem and emphasise the overarching research question, I present the three sub-questions that the research will interrogate and elaborate on the problem and contribution claims. In Section 1.5.2 included a graphical representation of the sub-research questions, problem and contributions claims. Finally, I give a brief overview of the chosen approaches given the research problem. These include interpretive research, Phronesis, and D-E.

Chapter 2 continues with the process to position the research that begins in Chapter 1. I present Phronesis from the viewpoints of Aristotle and Bent Flyvbjerg. I articulate the field of IS and call attention to the debates on the nature, identity and legitimacy of the field. Examined in more detail is the position of the IS research field as socio-technical. I unpack what interpretivism is and my reason for the choice of paradigm as the most appropriate. In the final two sections, I heed the warning of Klein (1999) for criticality in interpretivism to address norm and value issues or risk the IS research being incomplete. I then proceed to discuss the use of hermeneutics as the mode of analysis. I also address my state of immersion and the hermeneutic principle of suspicion. Finally, I explain the approach to theory in this research.

Chapter 3 operationalises the contemporary Phronesis lens. I take advantage of the published research about Phronesis which offers deep insight from the experiences of the researchers.



By particularising the four value-rational questions to the performative perspective in the different phases of this research, I construct the Flyvbjergian Phronesis lens. To examine the data collection, analysis and interpretation, I offer a breakdown of the research phases where the lens will be deployed in support of D-E. A key tenet of Phronesis is to focus on the minute details rather than the 'big idea' (Flyvbjerg, 2001). This focus is to make explicit the implicit understanding and norms in work practices (Ngwenyama and Klein, 2018).

Chapter 4 demonstrates the need to inquire about the social reality of the University which becomes apparent when the research problems and performativity of the practices are established. I will discuss why ethnography is my chosen methodology. Following this, the particular choice of D-E, the research participants, the research design and the data collection methods. I also discuss the unfolding of data analysis in interpretive research. I discuss the proposition of the role the Phronesis lens will play in the evaluation of the research and the research ethical clearance. Importantly, I discuss the continuous self-evaluation of the ethnographical research and how the Phronesis methodological guidelines will assist in my immersive state.

Chapter 5 reflects on the practical work of doing the research as a researcher-practitioner. This chapter focuses on the two practical contributions to performative research in corporate communication. I describe specific instances of the data analysis and interpret how I undertook the research. I select key data moments to support arguments and claims made in the research. I describe how I have developed an understanding of the social reality given the research problem, and the intertwined nature of fieldwork, design, and data analysis process. This chapter's focus is on the D-E descriptive 'What' questions. The Phronesis lens focuses on the 'Why' questions and gives strength and reason to the potential effect on the empirical setting.

Chapter 6 undertakes Phronesis to enact D-E research. The contributions are predominantly methodological but also theoretical. This chapter demonstrates specific instances of the data analysis and interprets how I undertook the research. I select key data moments from narrative description participants provided to provide hermeneutic descriptions that support arguments and claims made in the research. I seek to demonstrate that I have developed an understanding of the social reality given the research problem. The research is itself a practice of power (Section 3.2.3 and 6.4.1.3). The strategy of inquiry interrogates my status as an



immersed researcher-practitioner which needed some careful consideration. Also, exploring different viewpoints about the different kinds of thinking when it comes to data (Ngwenyama and Klein, 2018; Neuman, 2014). I continue to demonstrate the intertwined nature of fieldwork, design, and the data analysis process. The chapter focus is on the D-E prescriptive 'How' questions. The Phronesis lens focuses on the 'Why' questions and gives strength and reason to the potential effect on the empirical setting.

Chapter 7 summarises the thesis with the main outcomes of each chapter outlined. I then elaborate on the research findings that speak to the three sub-questions of the research. I address the overarching research question and establish the key contributions. I also discuss the evaluation of the research, limitations and difficulties experienced when doing the research, who should consider this research, as well as the possibilities for future research.

1.5.1 The thesis map

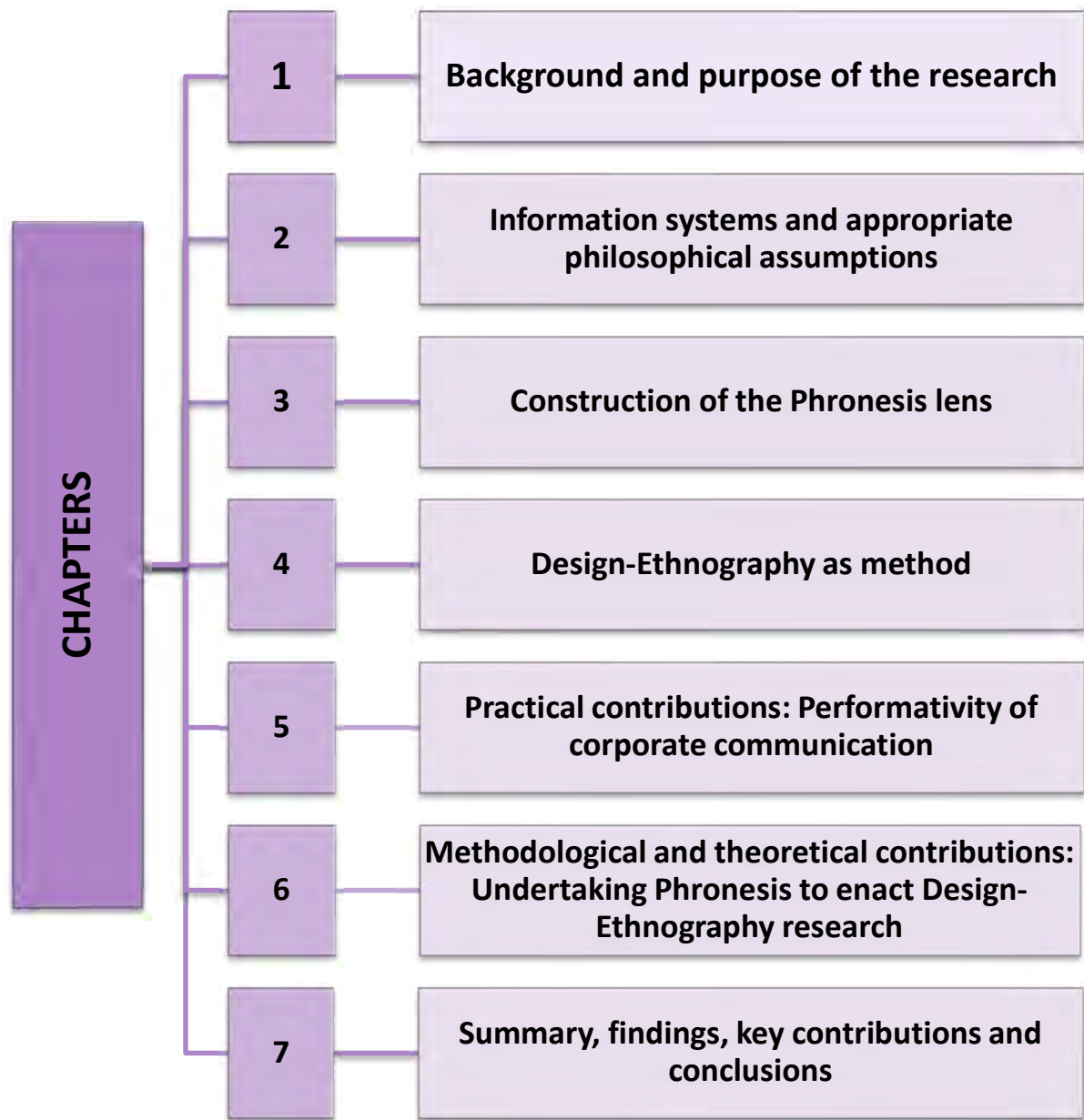


Figure 1-4: The thesis map

1.5.2 Graphical representation of research questions, problem and contribution claims

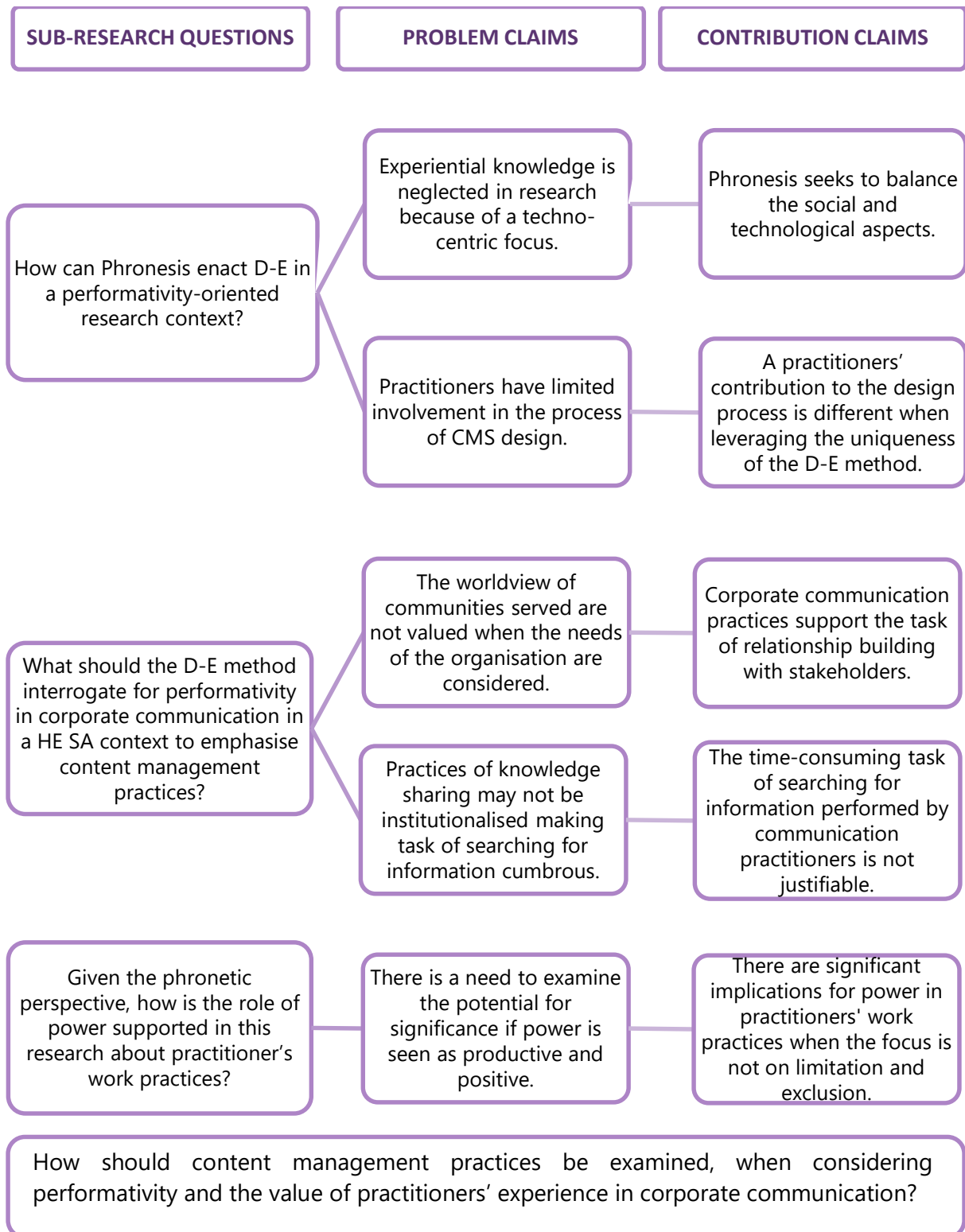


Figure 1-5: Graphical representation of the overarching research question (below), three sub-questions, problem claims and the contribution claims.



CHAPTER 2

2 INFORMATION SYSTEMS AND APPROPRIATE PHILOSOPHICAL ASSUMPTIONS

2.1 Introduction

Chapter 1 revealed three key topics, namely the management of content with systems, Higher Education (HE) in SA and the performativity of corporate communication. The literature and description of my practitioner experience led to the articulation of the research problem, the overarching research question and the three sub-questions. Briefly introduced were the theory, philosophical paradigms, and thereby the methodological choices made. In this chapter, I expand on these topics.

In the first section, I presented Phronesis from the viewpoints of Aristotle and Bent Flyvbjerg. Aristotle made an indelible impact on both quantitative and qualitative research. Flyvbjerg expanded Phronesis as a way of knowing and considers the role of power, as well as the value of collaborative work in our contemporary world. There is a view that the social sciences and studies of technology tend to use outdated lenses to investigate contemporary phenomena (Scott and Orlikowski, 2014). Thus, I chose to base the Phronesis lens on the contemporary research of Bent Flyvbjerg who places power at the core of analysis (see Section 3.2.3) and insisted that organisational inquiry can only be complete if it deals with the role of power (Flyvbjerg, 2002, 2003, 2006b).

I articulate the field of IS and call attention to the debates on the nature, identity and legitimacy of the field. The position of the IS research field as socio-technical, which I briefly touched on in the first chapter, is examined in more detail. The key argument is that prioritisation of the socio-technical is to balance both social and technological aspects rather than to follow the techno-centric viewpoint found to be prevalent in the literature. I unpack what interpretivism is and my reason for the choice in paradigm as the most appropriate. Interpretivism attempts to understand the phenomena examined (balance socio-technical nature of IS) through the meanings that the participants assign to the situation (Walsham, 1993). The viewpoint in this interpretive research is the role of power, how power is exercised, and not who has power, and



why they have it. I will not focus on oppressive power, but rather interpretive implications thereof. I do not question the status quo of the social reality nor do I have emancipatory ambitions, and I do not focus on what is wrong with the world, rather perhaps what is right (Section 2.4). Positivism is set aside because it requires an objective reality where the researcher is an observer and can describe the phenomena investigated with structured instrumentation, quantifiable outcomes and hypothesis testing (Myers and Avison, 2002; Orlikowski and Baroudi, 1991; Venable, 2006). Flyvbjerg also emphasises that we fail to see the importance of human interactions when we focus on generalisation possibilities of the research (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012). Thus, I set aside the paradigms of critical research and positivism.

In the final three sections, I first heed the warning of Klein (1999); criticality in interpretivism should address norm and value issues or risk the IS research being incomplete. With the intent to understand what practitioners say or do and why I discuss the use of hermeneutics as the mode of analysis. I also address my state of immersion and the hermeneutic principle of suspicion. I commit to acknowledge, reconstruct and move beyond my prejudices (Bentz and Shapiro, 1998). Finally, I explain the approach to theory in this research.

2.2 Phronesis from the viewpoints of Aristotle and Flyvbjerg

2.2.1 Aristotelian Phronesis

In Section 1.1, I underlined Aristotle's three intellectual virtues. *Episteme* is seen as scientific knowledge, *techne* is technology or know-how (Flyvbjerg, 2001) and Aristotle's master virtue *Phronesis* represents reflexivity, value-judgement, intuition, ethics, values and virtues (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012). I discussed (1) what Phronesis is, (2) how I plan to use the lens, and (3) why Phronesis is an appropriate approach to the research problem. The philosophical works of Aristotle are vast. This section is in no way or form an attempt to discuss all of it. Rather, I set out to get a sense of his viewpoint with relevance to this research.

Aristotle pioneered many philosophical theories and concepts. Aristotle believed that humans are essentially busy with one goal, which is what I will examine.



He believed that goal to be the pursuit of happiness, also translated as living a good life (Adler, 1997; Shotter and Tsoukas, 2014a). Without delving too deeply into Aristotle's works, in theory, he considered individuals to be good and to have good intentions. The aim then is to act good, and to do so habitually – keeping in mind who you would like to be (Ross, 1957; McKeon, 2009; Shotter and Tsoukas, 2014a). Simply put, Aristotle considered the fulfilment of the goal of living a good life to be possible only when you choose to live a life of moral excellence (Adler, 1997). This requires the ability to reflect before responding to a situation. This ability to use value-judgement was what Aristotle considered *Phronesis* (Ross, 1957; McKeon, 2009; Adler, 1997; Shotter and Tsoukas, 2014a). *Phronesis* is sometimes also translated as prudence or common sense in research (Flyvbjerg, 2001; Kinsella and Pitman, 2012).

As a philosopher, Aristotle made an indelible impact on both quantitative and qualitative research of almost every field in existence (Adler, 1997; Flyvbjerg, 2001; Costello, 2017). His research continues to have an impact even today. This does not mean that we have not improved on his works, expanded them, proven his theories or other viewpoints wrong or right, and even refuted some of his philosophical stances (Ross, 1957; Adler, 1997; McKeon, 2009).

Phronesis is not new to academic inquiry. Three of the most prolific enquiries in research has claimed *Phronesis* as the conceptual foundation. I discuss these three enquiries in my reasoning for selecting *Phronesis* as purported by Bent Flyvbjerg. The first academic enquiry is the Toulmin method, which is how to formulate a good argument of plausible reasoning about particulars (Ngwenyama and Klein, 2018). The second academic enquiry was developed by Hans Gadamer for whom the concept of *Phronesis* – especially the practical aspect thereof in discourse – was “central to his development of hermeneutical understanding” (Costello, 2017). The third academic enquiry is theories on communicative rationality developed by Jürgen Habermas to counter the dominance that instrumental rationality had developed (Adam, 2001; Linke and Jentoft, 2013). However, many researchers contend that both Habermas and Gadamer neglect the issue of power in their approaches (Schultz, Castelló and Morsing, 2013; Linke and Jentoft, 2013; Klein and Huynh, 2004b; Flyvbjerg, 2006b). There is also a view that the social sciences and studies of technology tend to use outdated lenses to investigate contemporary phenomena (Scott and Orlikowski, 2014). Hence, I chose to base the



Phronesis lens on the contemporary research of Bent Flyvbjerg who placed power at the core of analysis (see Section 3.2.3) and insisted that organisational inquiry can only be complete if it deals with the issue of power (Flyvbjerg, 2002, 2003, 2006b). I focused on the role of power because power is what distinguishes contemporary Phronesis from classical Aristotelian Phronesis (Costello, 2018). Flyvbjerg built his research on power with the texts of Machiavelli, Nietzsche and Foucault (Flyvbjerg, 2004, 2001). He presented a unique approach to applied Phronesis when he put forth the methodological guidelines (see Section 3.2.2). Flyvbjerg insists that if used, the guidelines must invite engagement by stakeholders (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012). In the next section, I discuss how he has expanded on the works of Aristotle and how he has made it possible to apply Phronesis. Applied Phronesis requires a focus on the importance of engagement in the social reality (context-dependent) and to value experiential knowledge (Schwartz & Sharpe, 2006; Halton, 2014; Thacher, 2006; Flyvbjerg, 2001). In Section 1.3.2, sub-research question 3 stated, "the research seeks to provide practitioners with the opportunity to share their experiential knowledge; in this, I include myself as well as experiential knowledge found in the literature. Focus on conduct in the performing of tasks may focus attention on the practices of experts and give insight into the context of managing and using the content."

2.2.2 Flyvbjergian Phronesis

In line with Habermas, Flyvbjerg challenges the idea of social sciences being modelled on natural sciences. Briefly, in arguing for social sciences not to be modelled on natural sciences, Flyvbjerg foregrounds that we fail to see the importance of human interactions when we focus on the generalisation possibilities of the research (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012). Flyvbjerg resuscitated an invaluable source to better our understanding of context, and he put forth present-day cases where he had applied Phronesis. One such case was the urban politics of planning the city of Aalborg, Denmark, where he uncovered that the local business community were in power rather than the democratically elected city council. The business community would negotiate deals in their favour rather than for the good of the city. At the surface, all seemed well; it was when Flyvbjerg applied Phronesis that the true nature of the situation in the setting was brought forth (Flyvbjerg, 2006a). He moves away from the 'think global' trend we have seen over the last two or three decades and appreciate practical inputs by individuals who live or work in the setting. What sort of issues emerged



from his reasoning? This speaks to my main research problem. I put forward that a better understanding of how and why the amplification of the practitioner's experience in the design of CMS could improve corporate communication for the University (see Section 1.3.1 for the articulation of the research problem). This understanding of the situation would, as with the Flyvbjerg case, require the interrogation of the situation – in this case, the CM practices of communication practitioners.

Flyvbjerg's contribution to research began when he purported that social science had begun to lose its position as a science that matters in its mimicking of the natural sciences (Flyvbjerg, 2001, 2005). In this, he applied Phronesis and constructed methodological guidelines (see Section 3.2.2). He discussed power and proved that reasoning is context-dependent (Flyvbjerg, 2003, 2006b). He drew on his previous research foci of making social science matter, and power when he put forth that organisational research should focus on values and power (Flyvbjerg, 2006b, 2008b). Flyvbjerg employed the four value-rational questions mentioned in Section 1.1 that contributed to planning research by setting out to phronetically narrate the situation which he states will give clarity on what the consequences are, and to whom (Flyvbjerg, 2002, 2009). The questions were: *Where are we going?*, *Is this desirable?*, *What should be done?*, and *Who gains, and who loses and by which mechanisms of power?* (Flyvbjerg, 2001, 2005, 2008b, 2002, 2009).

In my research, I drew on the methodological guidelines (Section 3.2.2), the role of power (3.2.3), the four value-rational questions when planning the research according to Phronesis knowledge principles (Sections 3.2.1 to 3.2.4), the priority of the particular, context, and praxis. I use the power of example in the form of narrative description in Chapter 5 and 6. Each participant has a narrative (their story), and I extracted data moments and quotes from these narratives to analyse. Thus, I created arguments from these narrative descriptions for the claims of the research. I drew on hermeneutic descriptions of the social reality experienced by the research participants. These I have begun to share in the first chapter already (Section 1.2, 1.3, 1.4). The thesis in totality is a thick description of social reality. Next, I explain how Phronesis as an orientation to knowledge will allow appropriate interrogation of the socio-technical nature of IS.



2.3 The socio-technical nature of Information Systems

In Section 1.2, I mentioned that the lens based on contemporary Phronesis, is proposed to examine the phenomena of interest which is to rebalance the social and the technological aspects within the field of IS, CMS specifically. The research title has given voice to the fact that the rebalancing of the socio-technical phenomena is also a key methodological contribution. Even though the IS field can no longer claim ICT in organisations and society as a field unto itself (Walsham, 2012), there are differing views. Therefore, I discuss related research contributions in IS, its theory and its qualitative nature, as well as the differing views of IS when it comes to social and technological aspects. I begin with theory because a theory is how we accumulate knowledge and in doing so enlightens work practices (Gregor, 2006a).

The impact of the changes experienced in the computing world on the IS field has seen IS research struggle to reconcile its simultaneous social and technological nature (Orlikowski, 2002; Paul, 2007; Lee, 2010; Alter, 2008; Orlikowski, 2000, 1992; Hirschheim and Klein, 2003). Webster and Watson (2002) raise a concern about the lack of theories in the IS discipline that they argue may be as a result of the interdisciplinary nature of the field and the approaches to the structure of literature reviews. Myers and Avison (2002) made a noteworthy contribution to IS theory by publishing a comprehensive book that addresses qualitative research in IS. The publication examines philosophical perspectives, qualitative research methods, techniques, modes of analysis and qualitative data interpretation. A contribution to IS theory that has had a far-reaching impact is Gregor (2006). She offers a taxonomy of five types of theory in IS with understanding as an important goal for theorising (Rowe, 2012). Gregor (2006, p. 613) puts forth that "theories are practical because they allow knowledge to be accumulated in a systematic manner and this accumulated knowledge enlightens professional practice". Another critical focus is design work and design knowledge in IS, both crucial to research and practice (Jones and Gregor, 2007). However, little attention is given to the specification of design theory, a matter that IS scholars (Hevner, 2007; Jones & Gregor, 2007 p. 312; Ploesser, 2012; Walls, Widmeyer, & El Sawy, 1992) seek to address.

It appears IS scholars have shown determination to establish theories for the field while they continue to "debate on the nature, identity, and legitimacy of the IS field" (Sarker, Chatterjee and Xiao, 2013, p.3). The scholarly research on the issue of a single-core model for IS calls



attention to the interdisciplinary openness and flexibility of IS and argues for continued multiple viewpoints in IS research and practice (Hevner and Chatterjee, 2010; Myers, 2003; Hassan, 2011; Walsham, 2012). However, in response to the changes experienced in the computing world, IS research has struggled to reconcile its simultaneous social and technological nature (Orlikowski, 2002; Paul, 2007; Lee, 2010; Alter, 2008; Orlikowski, 2000, 1992; Hirschheim and Klein, 2003). IS scholars question the identity of the field with some calling for the IT artefact as the core (Benbasat and Zmud, 2003), and others who want IS to consider its socio-technical nature (Agrawal and Lucas Jr, 2005; El Sawy, 2003; Robey, 2003; Robey, Anderson and Raymond, 2013; DeSanctis, 2003; Beynon-Davies, 2009; Boland and Lyytinen, 2004; Carlsson, 2007).

Next, I turn my attention to the socio-technical nature of IS because that is the focus of this research (Section 1.3). Though Webster and Watson (2002) consider the interdisciplinary nature of the field, one of the reasons for the difficulties to establish theories seems to be that there are differing and thought-provoking viewpoints on the matter. Walsham (2012), Hassan (2011), Hirschheim and Klein (2012) and Lee (2010) drew on their years of experience to propose a structure for the field using reviews of trends in IS research as a starting point. Hassan (2011) questions if IS has the right to be called a discipline, or if the field is simply a sub-discipline of management or computer science. He proposes that the plurality and diversity of the field be the priority to establish its intellectual core. Hirschheim and Klein (2012) propose a structure that gives IS a shared history. After 40 years of reviewing the IS discipline to establish the identity of the field, scholars agree that the diversity of the field is a strength. Walsham (2012) proposed an agenda for IS that has the vision 'Are we making a better world with ICTs?'. He wants genuine interdisciplinary thought to thrive in IS through the development of a wide range of settings, ethical and critical goals, and openness to multiple methodologies. It may perhaps be of interest to note that Walsham's question 'Are we making a better world with ICTs?' is similar to the value-rational question in Phronesis "Is this desirable?" (Section 3.2.2). The developments he calls for aligns with the phronetic perspective. I mention this to emphasise that once one grasps the concept of Phronesis, it becomes difficult not to see how Phronesis permeates one's world. Lee (2010) examined IS research of the past 25 and offers thoughts for direction on the next 25 years. Lee (2010) is of the opinion that neither the natural nor social sciences are useful as models for IS. His view is that professions such as engineering,



architecture and law are better disciplines to use as models for IS.. I call attention to literature that considers the social and the technological nature of IS, as this has been brought to the fore as a matter to interrogate in the first sub-research question namely *How can Phronesis enact D-E in a performativity-oriented research context?* Also, the first contribution claim seeks to rebalance social and technological aspects.

I argue for the term socio-technical to mean the research of interactions between the social (individuals, their actions, information) and the technological (systems, devices) rather than the fit between the technical and the social subsystems (Galliers, 2003 cited by Sarker, Chatterjee and Xiao, 2013; Beynon-Davies, 2009; Steven Alter, 2008). Therefore, this research endeavoured to respond to the call of Sarker, Chatterjee and Xiao (2013) who foreground challenges of the socio-technical approach, which could be factored in the positioning of the IS field. They express concern over the inherent idealism of the approach; its inability to influence IS innovation during design, use, and implementation; as well as its neglect of power dynamics (McGrath, 2005; Avgerou and Mcgrath, 2007; Avgerou, 2002 cited by Sarker, Chatterjee and Xiao 2013). Incorporated into the research sub-questions are the concerns raised, which I will address in Section 6.4.1 as part of the problem and contribution claims. The mentioned IS scholars, along with Agrawal and Lucas Jr (2005); El Sawy (2003); Robey (2003); Robey, Anderson and Raymond (2013); DeSanctis (2003); Beynon-Davies (2009); Boland and Lyytinen (2004); and Lee, Thomas and Baskerville (2015) call for IS researchers to reflect on the socio-technical nature of the field. I attempted to do so through the use of the Phronesis lens and ethnographic research.

How I anticipated the Phronesis lens to advance the socio-technical approach of IS practice was also to challenge the idea that social science should be modelled on natural science (Flyvbjerg, 2001; Lee, 1989). Flyvbjerg argues that the social sciences study human interactions and involves all that Phronesis represents; reflexivity, value-judgement, intuition, practical wisdom and virtues (Flyvbjerg, Landman and Schram, 2012). Thus, the effort to emulate natural science research with the express intent of generalised research outcomes are ineffectual (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012) because context matters (Flyvbjerg, 2001). In my research, I focused on the balance between the social and the technological and leveraged context-dependent work practices rather than natural science models. My findings



and contributions are not meant to be generalised. In the next section, I discuss why this research is interpretive.

2.4 Why is this research Interpretive?

To understand why this is interpretive research, I need to unpack what interpretivism is and my reason for choosing the paradigm as the most appropriate. The underlying philosophical assumptions of the research guided the selection of a paradigm and appropriate methodology to conduct research (Mckay and Marshall, 2005; Myers and Avison, 2002). The methodological approach is part of the ethnographic research tradition. Ontologically, the nature of studied reality needs consideration. While epistemologically, I consider the performativity of the communication practitioners' work practices (see Section 1.2.2). As an immersed researcher, the focus was experiential knowledge which was made known in a particular reality – "knowledge used in action" and "knowing as part of action" (Cook and Brown, 1999, p.383).

The three research paradigms that have a particular emphasis in the field of Information Systems are positivism, interpretivism and critical (Klein, 1999; Orlikowski and Baroudi, 1991; Stahl, 2008; Myers and Avison, 2002). Moreover, Walsham (2005) and (Stahl, 2008) caution that the three paradigms are not mutually exclusive and that there is overlap between individual aspects. This overlap has significance for this research, especially the interpretive and critical paradigms.

I set positivism aside for this research. Positivism usually requires an objective reality where the researcher is an observer and can describe the phenomena investigated with structured instrumentation, quantifiable outcomes, and hypothesis testing (Myers and Avison, 2002; Orlikowski and Baroudi, 1991; Venable, 2006). None of these activities was relevant to this research. In Section 2.2.2, I mentioned that Flyvbjerg emphasises that we fail to see the importance of human interactions when we focus on generalisation possibilities of the research (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012). Hence, I regard interpretivism and critical paradigms possible appropriate paradigms because generalisation of outcomes are not sought in the research. I must also mention that Flyvbjerg (2001) takes the stance that phronetic research is based on interpretation. Although, in respect of the validity of the research, he insists that interpretation must as with any social and political science, be built upon claims of rationality and use procedures to ensure such outcomes.



The socio-technical nature of the problem being interrogated required that I draw on social sciences because the use of social inquiry is subjective and deals with matters such as values, contexts and power (Nonaka and Toyama, 2007). Interpretivism starts from the assumption that "... the position that our knowledge of reality, including the domain of human action, is a social construction by human actors..." (Walsham, 1993, p.5). A significant assumption made in IS research is the focus on "producing and understanding of the context of the information system, and the process whereby the information system influences and is influenced by its context" (Walsham, 1993, pp.4–5). Interpretivism also assumes that individuals "develop and use their subjective understandings of themselves, their setting and their history" (Lee and Baskerville, 2003, p.230). Thus, interpretivism attempts to understand the phenomena examined (rebalance the socio-technical nature of IS) through the meanings that the participants assign to the situation (Walsham, 1993).

It is argued that a potential weakness of interpretive research is possibly its narrow focus. Interpretivism deals with particular situations and does not contribute to the broader disciplines of the research (Hirschheim and Klein, 2003). It is further argued that the particular strengths of interpretive research are its ability to improve communicative rationality in human sensemaking and understanding (Hirschheim and Klein, 2003; Klein and Huynh, 2004a). Weick, Sutcliffe and Obstfeld (2005, p.409) characterise sensemaking as being involved in "turning circumstances into a situation that is comprehended explicitly in words, and that serves as a springboard into action". I call attention to the problem discovery discussion in Section 1.3 where I stated that the problem started abductively and that I need to develop an explanation from close examination of the particular situation (Hammersley, 2005). The reason is twofold. First, Klein and Myers (1999) consider the hermeneutic circle the meta-principle for interpretive research. Second, is the particular meaning hermeneutics hold for Phronesis, which is its support for the concept of valuing a polyphony of voices and the dialogical nature of both (see Section 2.6).

The third paradigm is critical research which is usually selected when the research has at its core the aim to change the status quo of the social reality and the aim to advance emancipatory social change (Niehaves and Stahl, 2006; McGrath, 2005; Čečez-Kecmanović, 2001; Klein and Myers, 1999). As was alluded to previously, interpretive and critical paradigms



have an interdependency (Stahl, 2008). For instance, to be unreflective or uncritical in interpretive research means the research is simply an interpretation (Doolin, 1998). This notion is supported by several IS researchers who refer to the need for some level of critique, even if it is limited (Orlikowski and Baroudi, 1991; Walsham, 1995; McGrath, 2005). There is, of course, also an interpretive aspect involved when doing critical research (Walsham, 2005, 2006). Because critical research is typically concerned with change or emancipation of a particular empirical setting, a necessary starting point would be a 'description of' or 'understanding of the social reality' – a preliminary interpretation (Pozzebon, 2004).

I opted to position this theoretical research stance as interpretivistic for various reasons. First, I did not focus on oppressive power; instead, rather, the role of power in the particular context of HE and CUT was interrogated (see Table 3-3 in Section 3.2.3.1 for the role of power). Second, I did not question the status quo of social reality, nor did I have emancipatory ambitions. Third, critical research, for the most part, focuses on what is wrong with the world. Walsham (2005, p.113) states "It tends to focus on issues such as asymmetries of power, alienation, disadvantaged groups or structural inequity. This is not to everyone's taste and, indeed, I would argue that we also need individuals who focus on what is right with the world, and how to make things work in the short-term". My philosophical stance was to focus and build forth on what is right, but not to the point of being naïve about the context in which we work. To better understand how and why I amplified the practitioner's experience in the design of CMS could improve corporate communication for the University, the CM practices of communication practitioners was interrogated. This did not require a change in the status quo or emancipation. This interdependency between the interpretive and critical paradigms calls for criticality and reflexivity in interpretive research. The risk of the research being an interpretation exists without criticality and reflexivity. I will discuss what being critical in this interpretive research means in the next section.

2.5 Being critical in this interpretive research

I heed the warning of Klein (1999) that a certain reluctance in interpretivism to address norm and value issues renders IS research incomplete as normative knowledge for practice and the betterment of the conditions is essential. Value-rationality and ethics form part of all research, whether it is made explicit or not (Mingers and Walsham, 2010; Avgerou and McGrath, 2007;



Flyvbjerg, 2006b). I used hermeneutics as the mode of analysis because it is understood that individuals create meaning which they attach to the world around them (Lee and Baskerville, 2003). Further to that, hermeneutics assisted me as I researched to make sense of the relationship between the individuals, the organisation and technology (Myers and Avison, 2002). I discuss the significance of hermeneutics and the principle of suspicion as a particular principle in Section 2.6. I shall now explore what it means to be critical in this interpretive research, and how I see the role of Phronesis in that particular respect.

The contemporary Phronesis attributes (Section 3.2.1) ethics and values, reflection, intuition, value-judgement, virtues form the base elements with which we can describe the characteristics of an individual. Individuals with these characteristics may possess the experience and wisdom to deliberate about a particular situation (Costello, 2018). There are different perspectives on whether the application of Phronesis as a way of knowing is more aligned with the critical tradition or interpretive research. For example, Ngwenyama and Klein (2018) are explicit that IS research methods for IS technologies will benefit from systematic critical research enquiry into the social-value dilemmas. Jansson (2014) who support the viewpoint that Phronesis is of a critical nature, examine discursive practices involved in organisational change. Tsoukas and Cummings (1997) examine the marginalisation and recovery of the Aristotelian theme in organisation studies. Shotter and Tsoukas (2014b; a) recommend that practical wisdom and judgement should develop within an unceasing flow of activities. Their viewpoint is that practitioners are inextricably immersed rather than seen as 'things' hidden inside the mind. However, this research considers the Flyvbjergian (2001) viewpoint that "the principal objective for social science with a phronetic approach is to carry out analyses and interpretations of the status of values and interests in society aimed at social commentary and social action, i.e. praxis." (Flyvbjerg, 2001). In Aristotle's concept of Phronesis, he emphasises both the collective and individual social well-being (Flyvbjerg, 2001). His viewpoint of collective is political science, which in today's world may also include organisational science as they are both purposefully and thoughtfully instituted (Adler, 1997). Ngwenyama and Klein, (2018) extend this to include the social science fields of public management and teaching. Evidently, a division has occurred in the philosophy of political/organisational and the social sciences since Aristotle's time. However, Aristotle insists that for social well-being and praxis, the intersection of the fields are the point of appropriate



phronetic activity and power, therefore, praxis is intrinsically part of social inquiry (Flyvbjerg, 2001).

Accordingly, contemporary Phronesis enacted as a lens in the interpretivism paradigm starts from the position that our knowledge of reality is a social construction (Walsham, 1993). This viewpoint is essential to this research because I was immersed in the empirical setting (Sections 1.3 and 1.4). This research interrogated the work practices of individuals – actions undertaken for the good of the University (organisation), i.e. praxis. To align with this position, I asked questions focused on 'How', 'What' (D-E) and 'Why' (see Section 1.4). This research was concerned with understanding and explanation (Flyvbjerg 2001, 2008b, 2006b). Moreover, Flyvbjerg asked the three value-rational questions *Where we are*, *Where we want to go*, *What is desirable*, and he added a fourth question to counter the "view from nowhere" notion making context as well as to value of experience a priority (Jansson, 2014; Costello, 2017; Kinsella and Pitman, 2012). The question asks 'Who' and considers the role of power (Flyvbjerg, 2001).

In choosing a style of involvement for my research, I reflected on Walsham (2006) who explains that being immersed in the field allows for in-depth access to participants, issues and data that are not accessible when doing interviews whilst standing outside the social reality. He implores that when the choice is made for style of involvement, IS researchers consider their contribution to practice and its relevance to the IS field. D-E supports such immersion and acknowledges that engagement with participants by the IS researcher, could actively intervene and change the social reality (Baskerville and Myers, 2015). However, such involvement in interpretive research required me to approach the empirical situation with critical reflection on the historicity and social reality and my role in it (Walsham, 2006; Bentz and Shapiro, 1998). I consider the reflection and history to be relevant to the research positioning. I have thus already begun the reflection in Chapter 1 with the inclusion of the contextual discussions. I discussed the #FeesMustFall and other aspects of the HE sector in SA (Section 1.2.3), as well as the CMS Projects at CUT (Section 1.3). A necessary safeguard is for me to acknowledge that my experience in life may have led to certain prejudgements and potential biases (Gadamer, 1984; Myers, 2004). I have acknowledged my history as a South African in Section 4.3.1.2. In the next section, I discuss hermeneutics as a mode of analysis for this research.



2.6 Significance of hermeneutics and the principle of suspicion

Historically hermeneutics was concerned with the interpretation of the Bible and other sacred texts (Myers, 2004; Bentz and Shapiro, 1998). It was social philosophers Gadamer, Habermas, Heidegger and Ricoeur who saw the potential to apply hermeneutic techniques in social sciences (Myers, 2004; Klein and Myers, 1999). Though there are different forms of hermeneutic analysis, the primary task is to understand the meaning of text or text-analogue (Myers, 2004). An example of text-analogue is an organisation, which the researcher comes to understand through written or oral text (Myers, 1997, 2004; Harvey and Myers, 1995). This is in line with my research focus, which is to understand the work practices and how it contributes to the corporate communication of the organisation (University). The University predominantly distributes corporate communication as text. Examples are the e-newsletter distributed via e-mail, websites, all mails, print publications, and social networks. The question of how to use hermeneutics, as previously mentioned, is best described as iterative or cyclic and the use of context to gain perspective (Bentz and Shapiro, 1998; Myers and Avison, 2002; Klein and Myers, 1999). The researcher moves cyclically in interpretation between the whole and part of the text/text-analogue using said context to get a better understanding of the parts until the shared meaning of the whole becomes clear (Bentz and Shapiro, 1998; Myers and Avison, 2002).

In using the hermeneutic circle as the mode of analysis in this ethnographic research, the intent was to understand what the practitioners say or do and why, and also to accept that meaning is inscribed in documents, social rules and actions (Myers, 2004; Ngwenyama and Lee, 1997). However, as a immersed researcher, I required a safeguard for what Gadamer calls "self-interpretation of our doings" (Gadamer, 1984). I, therefore, employed the hermeneutic of suspicion. The hermeneutic principle of suspicion prompts the researcher first to acknowledge, and then reconstruct and move beyond prejudices (Bentz and Shapiro, 1998). Sensitive to the fact that I am immersed in the context and needed to prioritise self-reflexivity, the hermeneutic principle of suspicion required that I recognise and acknowledge my prejudgements (Bentz and Shapiro, 1998; Myers, 2004) which, as mentioned, I will do in Section 3.3.2.2.

Two aspects are significant in terms of hermeneutics and Phronesis. First, there exists an improbability one participant would have all the perspectives to problems, possibilities, and



risks. Therefore, the research added partial answers from participants to the dialogue, and thus possible actions for doing and understanding things differently may transpire (Flyvbjerg, 2006b; Flyvbjerg, Landman and Schram, 2012). The second aspect is the dialogical nature of both hermeneutics and Phronesis. The dialogical nature of the hermeneutic process is essential to answer the question *Where are we coming from* (Pozzebon, 2004). The dialogical nature of Phronesis, and a clear understanding of the context, as well as the ability to connect the interpretations, requires that this research included a polyphony of voices, a Phronesis methodological guideline (Section 3.2.2).

2.7 The approach to theory explained

In Section 2.4, I disclose the theoretical position of this research as interpretivistic. However, I have not, as yet, explained the approach to theory in this thesis. I will endeavour to do so now. I will first call attention to some of the stances on theory that aligns with this research. I will then explain how these stances have influenced my view of theory and what I understand as theory in this research.

I begin by delving deeper into the research of Gregor, (2006), which I touched upon in Section 2.3. Of note is that this research emphasises its theoretical contribution as a theory of description (of the social processes of design activities in particular) in line with the 'spirit' of doing ethnographies and not a design theory per se. Gregor, (2006, p.615) discusses theory in IS from the interpretivist tradition and states that "the interpretivist tradition steers researchers toward a different outlook, where the primary goal is not to develop theory that is testable in a narrow sense (although its validity or credibility may still be assessed), but in understanding the complex world of lived experience from the point of view of those who live it". Gregor brings forth the research of Schwandt, (1994 cited in Gregor, 2006, p.615) who is of the view that the world of lived reality is constructed by social actors and that to understand their world you should find meaning by describing the social reality through internal elements - for *Verstehen*. Baskerville and Myers, (2015) support this view and takes care to emphasise that immersion in social reality are, at times, necessary and expected. The authors mentioned above state that D-E theory is reflective and an ideographically based explanation for how and why social actors create and adapt (Ingold, 2008 cited in Baskerville and Myers, 2015), i.e. a descriptive contribution.



I found that the viewpoint of Ingold, (2008) on the matter of theory aligns with my experience as a practitioner. He remarks that theory could be a way of knowing rather than a framework for knowledge (Ingold, 2008). Of note is that the research emphasises the notion that for practitioners "there is no division between method and theory" (Ingold, 2008, p.85). The reason being that practice continually draws on experience; the practitioner is forming himself as he works, "what he fashions, through his work, is a way of being" (Ingold, 2008, p.85). If I then return to Gregor, (2006, p.613) to consider theory in IS, she states that "theories are practical because they allow knowledge to be accumulated in a systematic manner and this accumulated knowledge enlightens professional practice". In Section 1.4, I mentioned that Nader, 2011 asserts that ethnography is a theory of description because ethnography is not merely description, but is in fact "theoretical in its mode of description". Nader, (2011, p.211), furthermore defines theory as "the analysis of a set of facts in their relation to one another, or the general or abstract principles of any body of facts". If that is the case, then ethnography is a theoretical endeavour with significance as both description and explanation (Nader, 2011).

Reflecting on whether my contribution is perhaps a theory of design, I rather conclude as follows. Firstly; Baskerville and Pries-Heje, (2010, p.271) put forth that the design theories of Walls, Widmeyer and El Sawy, (1992); Walls, Widmeyer and Sawy, (2004) as well as Jones and Gregor, (2007) are perhaps "rather elaborate and overly complicated" with seven and eight components in the design theories respectively. Also, Walls et al. (2004) critically assess their 1992 research paper to determine if their design theory had been successful because they themselves expected the theory to be more popular and find its "fairly limited use" puzzling (Walls, Widmeyer and Sawy, 2004, p.44). The authors then divide the theory into four levels of use and add four strategies to enhance their design theory. Walls et al., (2004) emphasise that design theory have two aspects which must be considered; the product of the design and the process of design. After some careful consideration, I will not use design theory - since my research does not fit the theory. In my case, I observe the social processes of design for CMS in context. Therefore, a way of knowing rather than focusing on the product of the design.

Also, should I opt to use design theory, I will potentially perpetuate the imbalance between the social and the technological. Both the product of the design and the process of design (without the social) aspect focus on the technological. This research does not seek to create



the product but rather to balance the socio-technical nature of performativity in CMS and observe the social processes of design. Thus, I argue that I describe a social process of practitioners' engagement with work practices in a particular context. If I explicate design theory principles and demonstrate that they are effective, it will, in this instance, be a falseness and an incorrect emphasis of what I really do – which is a demonstration of a way of knowing. Also, it will possibly fly in the face of all I am trying to achieve with the enactment of contemporary Phronesis. Flyvbjergian Phronesis centres on how to focus on the importance of human interaction in research – the focus is not generalisation or modelling social science on natural science principles (Section 4.3.3). This can be achieved by moving away from the "think global" idea and rather describing the practical inputs of individuals in their setting. In this, a focus on minute details assists (Section 2.2.2). Consideration is also given to the role of power (Section 3.2.3.1).

These views have influenced my view of theory in that I believe theory is a way of knowing rather than a framework for knowledge, and that for practitioners there is no divide between theory and method (Ingold, 2008). Gregor, (2006) remarks that theory in the interpretivist stance understands the complex world of lived experience from the point of view of those who live it and mentions the hermeneutic tradition in doing so. Thus, to support my view, I will do a self-evaluation throughout the research using the contemporary Phronesis methodological guidelines (Section 4.5), and as discussed in the previous section, I use hermeneutics as the mode of analysis. I understand theory as a way of knowing in which questions are asked constantly because theory and method are not necessarily separate. I mentioned the use of 'how', 'what' and 'why' questions (see Sections 1.3.2, and 1.4). Thus, to represent both IS and ethnography with D-E, it cannot be a theory from either but should be able to support both. Thus, in the next chapter I explain why and how I have constructed a lens with which to accumulate knowledge. I have endeavoured to do so in a systematic manner (Gregor, 2006a).

2.8 Summary

In the first section, I presented Phronesis from the viewpoints of Aristotle and Bent Flyvbjerg. I discussed how Flyvbjerg expanded Phronesis as a way of knowing and considered the role of power, as well as the value of collaborative work in our contemporary world. There is a view that the social sciences and studies of technology tend to use outdated lenses to investigate



contemporary phenomena (Scott and Orlikowski, 2014). Thus, the Phronesis lens had the contemporary research focus of Bent Flyvbjerg who placed power at the core of analysis (see Section 3.2.3) and insisted that organisational inquiry can only be complete if it deals with the role of power (Flyvbjerg, 2002, 2003, 2006b).

I articulated the field of IS and called attention to the debates on the nature, identity and legitimacy of the field. I examined the IS research field as socio-technical. Rather than to follow the techno-centric viewpoint found to be prevalent in the literature, I sought to balance both social and technological aspects in line with the research questions. I then unpacked what interpretivism is and my reason for the choice in paradigm as the most appropriate. Interpretivism attempts to understand the phenomena examined (the socio-technical nature of IS) through the meanings that the participants assign to the situation (Walsham, 1993). I, therefore, took the view that in this interpretive research, I do not focus on oppressive power, but rather implications thereof. I do not question the status quo of the social reality nor do I have emancipatory ambitions, and I do not focus on what is wrong with the world, instead perhaps what is right (Section 2.4). Positivism was set aside because it requires an objective reality where the researcher is an observer and can describe the phenomena investigated with structured instrumentation, quantifiable outcomes and hypothesis testing (Myers and Avison, 2002; Orlikowski and Baroudi, 1991; Venable, 2006). Flyvbjerg emphasises that we fail to see the importance of human interactions when we focus on generalisation possibilities of the research (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012).

In the final three sections, I first heeded the warning of Klein (1999) that a certain reluctance in interpretivism to address norm and value issues render the IS research incomplete. I, therefore, discussed the aspect of criticality in interpretive research. I then discussed the use of hermeneutics as the mode of analysis with the intent to understand what practitioners say or do and why. I addressed my state of immersion and the hermeneutic principle of suspicion. I committed to acknowledge, reconstruct and move beyond my prejudices (Bentz and Shapiro, 1998). Finally, I called attention to some of the stances on theory that aligns with this research. I then explained how these stances have influenced my view of theory and what I understand as theory in this research.



CHAPTER 3

3 CONSTRUCTION OF THE PHRONESIS LENS

3.1 Introduction

This chapter explores contemporary Phronesis and responds to the 'How' questions of the approach. I build forth on Chapter 2, where I positioned the research as socio-technical through the articulation of debates found in the IS field. I thereby attempt to counter the techno-centric viewpoint found to be prevalent in the literature (Section 1.2.2). In Chapter 2, I positioned the research as interpretivistic and explained how I plan to ensure that the aspect of criticality is addressed in the research. I also discussed hermeneutics that was a safeguard for me as an immersed researcher. In this chapter, I elaborate and explain the research design phases and focus on the approaches of Flyvbjergian Phronesis and D-E. As mentioned in Chapter 1, the contemporary Phronesis used is to enact D-E and not an all-encompassing guide for doing Phronesis research.

To operationalise Phronesis as a lens, I take advantage of the published research about Phronesis which offers deep insight from the experiences of the researchers. I draw on their experiential knowledge. The phronetic research of Bent Flyvbjerg included (Section 2.2.2), Flyvbjerg's co-authors Flyvbjerg, Landman and Schram, (2012), the professional knowledge research of Birmingham, (2004), Kinsella and Pitman, (2012); and from the field of IS, Costello, (2017, 2018), as well as Ngwenyama and Klein, (2018). I then construct the Phronesis lens by particularising the four value-rational questions to the performative perspective in the different phases of this research. Offered next, is a breakdown of the research in phases where the lens will be deployed to examine the data collection, analysis and interpretation as a graphical representation in each part of the lens. A key tenet of Phronesis is to focus on the minute details rather than the 'big idea' (Flyvbjerg, 2001). This focus is to make explicit the implicit understanding and norms in work practices (Ngwenyama and Klein, 2018).

3.2 Phronesis as a particularised lens

Outlined in Section 1.1 is why Phronesis is an appropriate approach to the research problem of CMS performativity. First, I made mention of the fact that Phronesis focuses on the 'How?'



questions, in addition to the more structural 'Why?' questions. This means that Phronesis is concerned with both understanding and explanation (Flyvbjerg 2001, 2008b, 2006b). Furthermore, mentioned was the knowledge assumptions for a research problem that requires Phronesis. Importantly, reflection, judgement and praxis are key to develop comprehensive insight about the situation (Kinsella and Pitman, 2012; Flyvbjerg, 2008b, 2001). Next, the appropriateness of D-E as method was outlined, when consideration is given to the Phronesis assumptions. Two ethnographical assumptions play a role in performativity, the first is that individuals attach meaning to things that result from the action, and what individuals do may differ, from what they say they do in their practices (Baskerville and Myers, 2015). The ethnographic knowledge assumption that context is treated as a socially constructed reality (Myers and Avison, 2002) is also pivotal to the appropriateness of D-E as a method. To make sense of the alignment between Phronesis and D-E and explored whether the approaches were appropriate to examine performativity in CMS, I employed mind maps. The mind map in Appendix I has the methodological principles of ethnography, D-E, and Phronesis. Purple lines were used to gauge the alignment of the methodological principles between D-E and Phronesis, and grey lines for ethnography and Phronesis.

While the result may seem somewhat tangled, the mind map allowed associations to emerge. For instance, the Phronesis methodological principle "getting close to reality" (Flyvbjerg, 2001) could be associated with the D-E methodological principle "insight gained and used to reflect across cultural boundaries" (Baskerville and Myers, 2015). Continuing the example, the Phronesis methodological principle "getting close to reality" (Flyvbjerg, 2001) could be associated with the ethnographic methodological principle "researcher immerses himself/herself in the life of the social group under study" (Myers, 1999, p.4). Thus, I found the approaches appropriate to address the research phenomena of interest, which was to rebalance the socio-technical nature of IS.

Throughout the chapters thus far, and the title of the research a clear focal point was performativity in CMS and corporate communication practices (the work practices of this research). Concerning performativity in CMS, it was postulated in this thesis that there is an expectation of influence on practices from different viewpoints. I will briefly state these influences again. Following this will be the reason I opted to construct the approach of



Phronesis to this research as a lens and how I viewed the use thereof in the phases of the research.

There is an expectation that power in practices and in communication is influenced by and on behalf of the University, as well as the HE sector (see Section 1.3.1 where I articulated the research problem). Another expected influence is the process whereby the information system (the CMS or 'the technology') influences and is influenced by its context. As an immersed researcher, I have already influenced the social reality of the research context (example in the narration of the CMS Projects in Section 1.3). Hence, the chosen approach of D-E as it supports a certain level of immersion, which I discuss in Section 4.2. It is important to emphasise that I expected the lens to assist me in reflecting on and judging my praxis as well as that of the participants in the research. Consequently, the influences were expected and accepted as part of the situatedness of interpretive research (Walsham, 1993). Also, bear in mind that the strategy of inquiry began abductively (Section 1.2).

If consideration is then given to the assumptions mentioned above, to these influences, to interpretivism (Section 2.4), and performativity as the epistemology (Section 1.2.2), the metaphor of sight (Corradi, Gherardi and Verzelloni, 2010), seeing the social world around us came to the fore for me (Neuman, 2014). Since epistemologically, practice is a way to see the context (Corradi, Gherardi and Verzelloni, 2010), the researcher part of me asked the practitioner part of me, what had gone unseen in the previous CMS Projects? How was I to make explicit the taken-for-granted assumptions, as well as the implicit understanding and norms in work practices? (Ngwenyama and Klein, 2018). The consideration of a lens to examine research was not unique. Corradi, Gherardi and Verzelloni (2010, p.268) assert that a good deal of scholars adopts the sight metaphor as a lens for "understanding the situatedness of practical reasoning and the contingent nature of organisational rationality". Similar to the practice lens of Orlikowski, (2000) that examine how individuals shape their situated use of technology whilst interacting with the technology I suggested that Phronesis as a lens could rebalance the social and the technological in the IS field (Section 2.3). Linked to this rationalisation and the particular unique viewpoint of Phronesis to focus on the minute details is my reason for why I suggested the lens could assist in the rebalance. Simply, Phronesis advocates for a focus on the details rather than the 'big idea' (Flyvbjerg, 2001). Also, in Sections 4.2 and 4.3 I will put



forth that ethnography is a theory of description and that I, as a practitioner, agree with the viewpoint of Ingold (2008) that there is no division between theory and method for practitioners. Therefore, I postulated that the Phronesis lens deployed effectively in various phases of the research could keep the focus on details; making explicit the implicit understanding and norms in work practices (Ngwenyama and Klein, 2018). I now turn my attention to how the Phronesis lens was constructed and utilised in the different phases of the research.

Unlike Orlikowski's (1996, 2000, 2002) practice lens with its beginning in Giddens' structuration theory (Orlikowski, 1992), the Phronesis lens does not exist. In the remainder of this section, I illustrate how I constructed the lens, and explain its use in the different phases of the research. This was a significant methodological contribution made in this research. Discussed in Section 2.2.2 is how Flyvbjerg resuscitated an invaluable source for bettering our understanding of context. His Aalborg case applied Phronesis to the urban politics of planning the city where he uncovered that the local business community were in power rather than the democratically elected city council. At the surface, all seemed well; it was when Flyvbjerg applied Phronesis that the true nature of the situation in the setting was brought forth (Flyvbjerg, 2006a). Flyvbjerg (2012, p.33) asserts that "the principal objective for social research with a phronetic approach is to perform analyses and derive interpretations of the status of values and interests in societies or social organisations aimed at social change." Thus, he employs the four value-rational questions: (1) *Where are we going?*, (2) *Is this desirable?*, (3) *What should be done?*, and (4) *Who gains, and who loses and by which mechanisms of power?* (Flyvbjerg, 2001, 2005, 2008b, 2002, 2009). I, therefore, constructed the Phronesis lens by particularising the four value-rational questions to the performative perspective in the different phases of this research. Then, a brief breakdown of the research phases where the lens was deployed to examine the data collection, analysis or interpretation is provided. This is followed by a full discussion of each part of the lens in Sections 3.2.1 to 3.2.4.

1. **The first value-rational question (1): Where are we going?** Particularising the question to this research problem claim and research questions, individuated the question as *Where are we going with **CM practices?*** Consequently, I focused on the individual's attributes first (see Section 3.2.1). This part of the lens played a role in the



data collection methods of doing fieldwork, reciprocity, the setup of interview questions, as well as conducting interviews. Discussed in Section 3.3.3 are the data collection methods.

2. **The second value-rational question (2): Is this desirable?** When particularised to the research, the question became *Is this **development** desirable?* Operationalised during the short interventional fieldwork sessions (data collection method), I drew on the Phronesis attributes (Section 3.2.1) as well as the Flyvbjergian Phronesis methodological guidelines (Section 3.2.2). The fieldwork sessions included archival research, design workshops and design thinking (discussed in Section 4.3.2.2). I considered the Phronesis methodological guidelines and the role thereof in Section 3.2.2.
3. **The fourth value-rational question (4): Who gains, and who loses and by which mechanisms of power?** I particularise the fourth value-rational question as to the third part in the Phronesis lens. The question is relevant to the research as *Who gains, and who loses and by which mechanisms of power?* The switch in the order of the questions was to accommodate the natural flow of the research design phases — first, the data collection, then analysis followed by interpretation. The focus of the third part of the Phronesis lens was predominantly the research participants (who are practitioners) and the organisation (University) in their social reality. The third part of the lens was used during the analysis of data. In Section 3.2.3, I unpack the role of power and Phronesis as professional knowledge (performativity).
4. **The third value-rational question (3): What should be done?** Particularised the question to the research foregrounds the value-rational question as *What, **if anything**, should **we do about it**?* During the interpretation of data, following the data collection and analysis phase, the final part of the Phronesis lens was deployed. In Section 3.2.4, I call attention to two matters which were the focus during the interpretation of findings, namely how to value the experience of the communication practitioners and collaborative work.

I implemented the value-rational questions during the research phases as a lens to examine the three definitive priorities, namely technology (CMS), individuals (communication



practitioners) and the context (the University). As I undertook to answer the research questions, it was crucial to call attention to the way Phronesis evolved as a lens appropriate for this study. The value-rational questions were not relegated to a particular phase in the research with no function elsewhere. In order to construct the lens, structure was necessary but not in a rigid form by any means. Instead, I drew on the value-rational questions as exploratory questions at any given point in the research. The reason being that, I was not necessarily capable of answering the value-rational questions fully, and it was not expected of me to do so (Flyvbjerg, 2012; Flyvbjerg, Landman and Schram, 2012). "It should be stressed that no one has enough wisdom and experience to give complete answers to the four questions, whatever those answers might be." (Flyvbjerg, 2012, p.33). Rather, partial answers to problems, possibilities and risks contributed to the dialogue (see Section 3.2.3 where I discuss collaborative work). The value-rational questions were exploratory questions in this research, to support the research problem claims and the answers I sought for the research questions. Hence, as discussed above, D-E emerged as an appropriate methodology (see Section 4.2). The intention of the exploratory questions throughout this research was not necessarily getting a response; rather, it was to serve as a guide for phronetic actions when a situation is closely examined (again, the sight metaphor i.e. lens).

In each part of the lens in Sections 3.2.1 to 3.2.4 I linked the exploration question that is the value-rational question of Phronesis particularised to the research to the relevant research questions. This was done graphically due to the repetition in each of the sections. The focus in each section was to support a particular research problem and contribution claims (Section 1.5.2) and not to answer the research question. See Chapters 5 and 6 for answers as they actualise and are brought to fruition. The reason for the focus on the research problem and contribution claims is that I posited that if the Phronesis lens was used to view the various phases of the research in a specified way, it could keep the focus on details.

3.2.1 Where are we going with CM practices?

Earlier in Section 3.2, I underlined expectations of influence when I discussed why I decided to construct the Phronesis lens. Concerning CMS performativity, the expectation of influence on practices from different viewpoints came to the fore. The expected influence when the exploratory question *Where are we going with CM practices?* was given prominence and was

the process whereby the information system (CMS) influences and was influenced by its context. This is in alignment with the sub-research question where it is asked how Phronesis can enact D-E in a performativity-oriented research context. The first research contribution claim valued experiential knowledge, and thus rebalanced the social and the technological. The second research contribution claim included practitioners in system design processes. In both contribution claims, the focus was the practitioner, specifically their experiential knowledge, and practices. This is in alignment with the exploratory question considering CM practices and contributed to the more structural overarching and phronetic 'why' question that is the explanation. Consequently, this part of the Phronesis lens focused on the individual's attributes. Figure 3.1 depicts the exploratory question *Where are we going with CM practices?* In alignment with research sub-question 1, the problem and contributions claims (1 and 2), as well as the research phases where the lens was used.

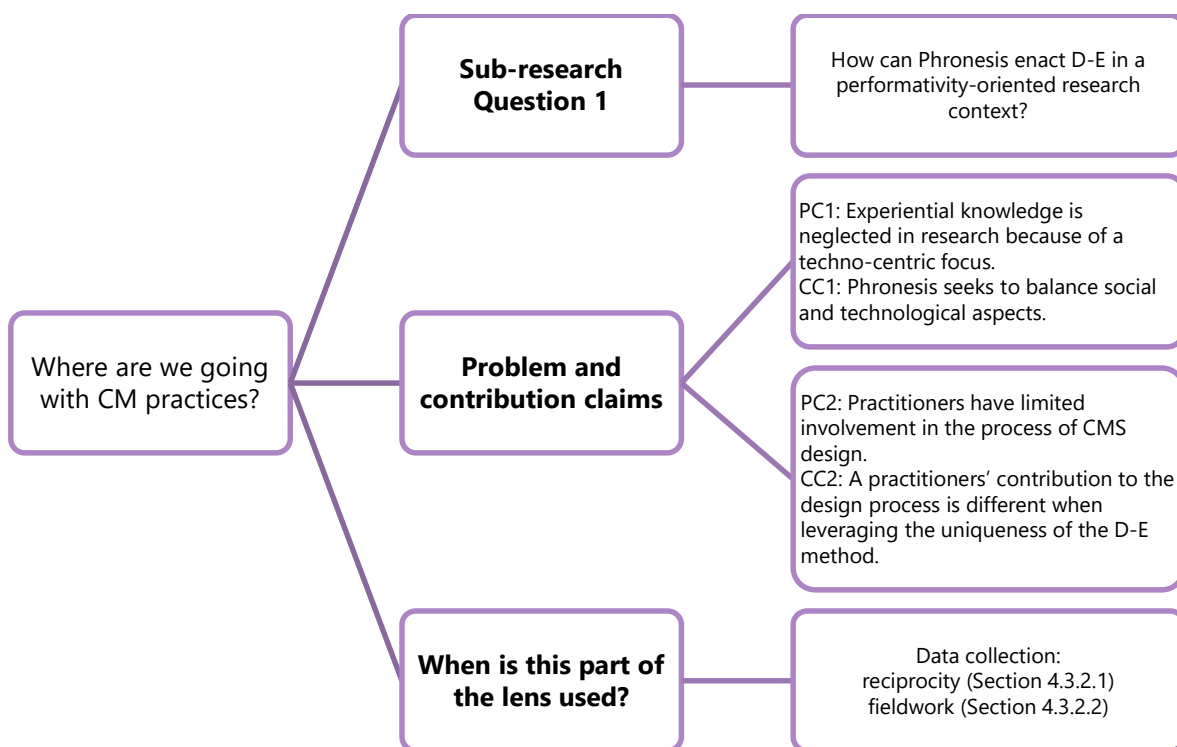


Figure 3-1: Exploratory question: Where are we going with CM Practices?

An individual's Phronesis allows for good deliberation capabilities, the ability to weigh factors and to make decisions that will see her/him achieve objectives (Costello, 2018). These traits of Phronesis are discernible through the following attributes: *ethics* and *values*, *reflection*, *intuition*, *value-judgement*, and *virtues*. These attributes have been mentioned or discussed in



various phronetic papers as well as other research outputs, and I hasten to add that not all authors focus on Phronesis per se (Schwartz and Sharpe, 2010; Flyvbjerg, Landman and Schram, 2012; Kinsella and Pitman, 2012; Birmingham, 2004; Mezirow, 1990; Ulrich, 2001; Baskerville and Myers, 2015; Atkinson and Hammersley, 2007; LeCompte and Schensul, 1999; Bentz and Shapiro, 1998; Flyvbjerg, 2001; Hevner et al., 2004; Shotter and Tsoukas, 2014a). During my research process, as I began to make sense of the capabilities and abilities in each implementation of Phronesis, I inferred that no single source captured a comprehensive overview of Phronesis attributes; I had to refer to several sources. Researchers opted to focus on a particular set of attributes relevant to the research topic, which is understandable. Thus, the amalgamation of the attributes in Table 3-1 is a contribution made to the field from this research and is a summary extracted from The Phronesis overview (Appendix D¹), Phronesis as social science (Appendix D²) and Phronesis applied in a profession (Appendix D⁴). To fulfil the research contribution claims, which called for valuing experiential knowledge and including practitioners in system design, I examined practitioner's capabilities and abilities in their CM practices using the Phronesis attributes in Table 3-1.

ETHICS AND VALUES
Ethics is not only about establishing moral rules to follow but also about how to perform a social practice well as an individual.
Ethics of care and answerability recognise the dialogical nature of identity and an individual's responsibility to others.
Ethics implies figuring out the right way to do the right thing.
Values consider the question: <i>what kind of responsibility do you have to the community?</i>
The Phronesis value-rational questions suggest that phronetic social science is concentrated on producing research that helps make a difference in people's lives by focusing on what it would really take to make that difference on the issues that matter to them most and which most crucially affect them.
(Schwartz and Sharpe, 2010; Flyvbjerg, Landman and Schram, 2012; Kinsella and Pitman, 2012)
REFLECTION
Reflection is enhanced by the depth of content knowledge.
Reflection is enhanced by the breadth of understanding of what is happening.



Reflection emancipates us from the impulsive and merely routine activity.

In an organisation, critical reflection could support efforts to do problem-solving or find a more effective way to make sense of the meaning of experience, even or especially, when it becomes clear that explanation contradicts the purpose of the study. The process of reflection is characterised by reflection-in-action, reflection-on-action, knowing-in-action and conversation with the situation. In conversation with the situation, using imagination to mentally produce and compare possibilities identify the particulars of real situations. Remain open-minded to the possibilities of imagination.

(Birmingham, 2004; Mezirow, 1990; Ulrich, 2001; Baskerville and Myers, 2015; Atkinson and Hammersley, 2007; Kinsella and Pitman, 2012)

INTUITION

Should knowledge be lacking, limiting one's ability to gain rich insight into the logical practice to follow, one could revert to intuition.

Pursuing intuition in qualitative research is based on strategies for playing with ideas using previous knowledge and creativity to find patterns. These skills develop through practice using trial-and-error methods.

Rule-based rational ways of thinking cause disciplines to become blind to context, experience and intuition, even though these are at least as important as rules, analytical rationality and analysis for producing good results.

(LeCompte and Schensul, 1999; Bentz and Shapiro, 1998; Flyvbjerg, 2001; Hevner et al., 2004)

VALUE-JUDGEMENT

Link judgement not to problem-solving but rather to the practice of "sizing up" a situation and balancing competing priorities.

Practitioners should assess what the circumstances demand, and do so by engaging emotions and reason, intuition and intellect.

The action of value-judgement aims to support doing the right thing by drawing upon one's knowledge of the context; thus, making judgement central to the inquiry.

Judgement evolves and operates primarily by virtue of in-depth case experiences.

Value-judgement is important when the values of different groups conflict.

(Birmingham, 2004; Flyvbjerg, Landman and Schram, 2012; Shotter and Tsoukas, 2014a)

VIRTUES

Virtues are central to the principles of fairness and compassion, actions (conduct, habit), character (attitudes) and moral virtues.



A situation may have some features that call for fairness and others that call for compassion. Phronesis is necessary to choose between the two principles or in some instances combine the two virtues.

Not only does virtue give birth to action, in turn, but also builds virtue. Actions join together to form conduct; thus, no action stands alone. Conduct is also what forms the habits of character.

In terms of character, conduct leaves an “enduring impress” on the character. More important than the action itself is the lasting impression it leaves on character, for actions bound together into conduct are what form the habits of character. Virtues of character ensure that the ends to which actions are directed are good (generosity and bravery are two virtues of character). Along with character, the principle of attitude encourages open-mindedness, wholeheartedness and responsibility.

Moral virtues are initially learned through habits that are inculcated by education and through feelings of pleasure and pain. Moral virtues enable one to perform reasonable action to achieve one’s ends. Moral virtues are realised through actions, courage, generosity, justice, gentleness, temperance, hope, faith and love of the good. Virtue-centred ethics holds that moral value is centred within an individual who is performing moral actions rather than within the actions themselves.

(Flyvbjerg, Landman and Schram, 2012; Birmingham, 2004; Kinsella and Pitman, 2012)

Table 3-1: Amalgamation of the Phronesis attributes.

To deliberate on the exploratory question that asks *Where we are going with the CM practices*, the influence on practices from different viewpoints, in particular, the CMS in the context was held in consideration. This part of the lens played a role in the data collection methods of doing fieldwork (Section 4.3.2.2) and reciprocity (Section 4.3.2.1). In Section 4.3.2 I discuss the data collection methods. Find in Sections 6.3 and 6.4. examples of the enactment of this part of the lens. These are methodological contributions to the research.

3.2.2 Is this development desirable?

Concerning CMS performativity, I refer again to earlier in Section 3.2 where the expectations of influence were underlined. The expected influence gave prominence when the exploratory question *Is this development desirable?* was asked is whether power in practices and in communication are influenced by and on behalf of the University and the HE sector. This is in alignment with the sub-research question *What should the D-E method interrogate for performativity in corporate communication in a HE SA context to emphasise content management practices?* The third research contribution claim was that corporate

communication practices support the task of relationship building with stakeholders. The fourth research contribution claim was that the time-consuming task of searching for information performed by communication practitioners was not justifiable. These research questions and contribution claims did not consider the role of power in the research (see Section 3.2.3 for the power focus). The focus was whether power or the capability to act was influenced. Placing power at the core of analysis was one of the guidelines (Table 3-2). This meant that power had to be a focus during the data collection phases - in this case, it was fieldwork, and interviews in order for power to be at the core of the analysis. Table 3-2 illustrates the exploratory question, *Is this development desirable?* aligns with research sub-question 2, the problem and contribution claims (3 and 4), as well as the research phases where the lens is to be used.

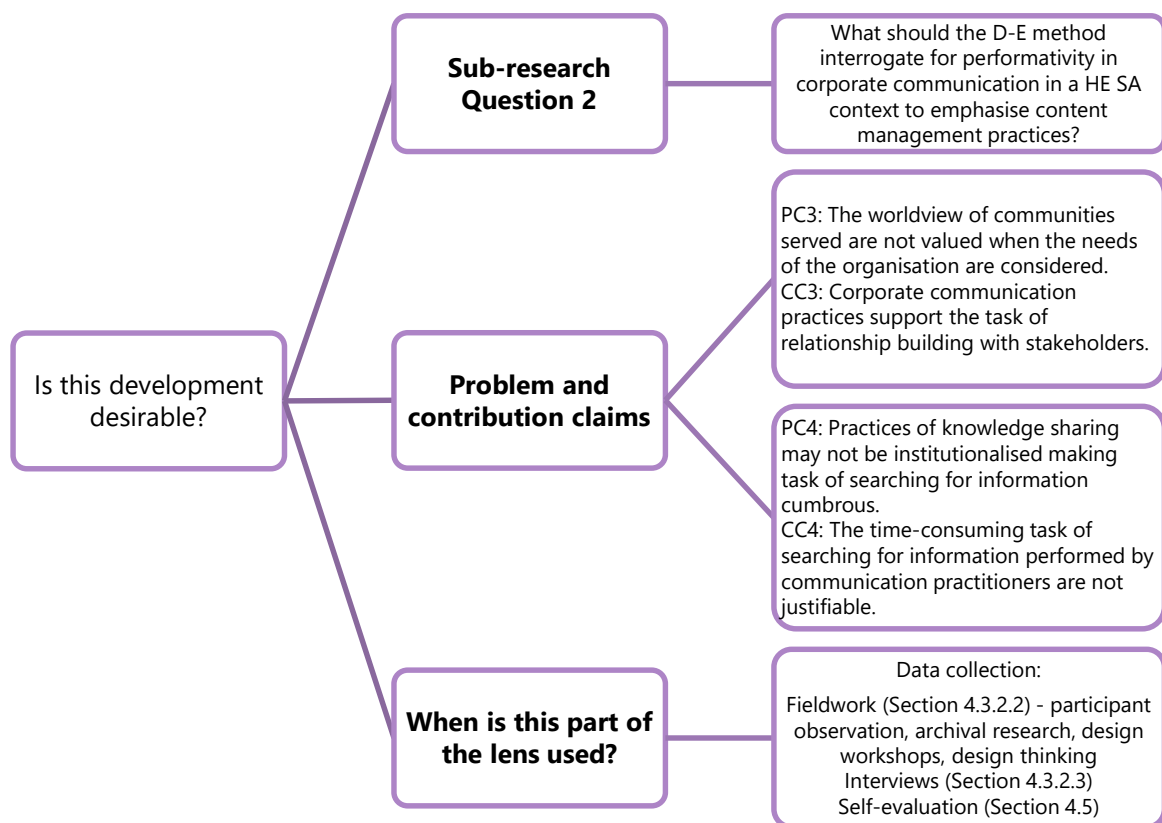


Figure 3-2: Exploratory question: Is this development desirable?

Flyvbjerg, (2001) proposes the Phronesis methodological guidelines as a way to progress in the focus on performativity. I discussed the use of the Phronesis methodological guidelines as valuable indicators of direction for my conduct (Section 1.4). Furthermore, the guidelines, in



part, assisted in the evaluation of interpretive research (Section 4.5). Due to the consideration of the influence of power in practices and power in communication, I heeded to the stipulation that stakeholder engagement is necessary to utilise the methodological guidelines (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012). Thus, this part of the lens interrogated how individuals interact within the organisation and with technology through engagement with the participants during fieldwork. In this instance, D-E asked the descriptive 'What' questions (Section 4.3), whilst this part of the Phronesis lens again brought focus to the 'Why' questions. Table 3-2 provides a breakdown of the guidelines. By using the guidelines during the engagement, I kept the focus on a phronetic style of engagement. I have already given an example of the use of a guideline in Section 3.2) when I explained the alignment between Phronesis and D-E and explored whether the approaches are appropriate to examine performativity in CMS (Appendix I).

FOCUSING ON VALUES
By definition, phronetic social scientists focus on values and, especially, evaluative judgements. They do so by taking their point of departure in the classic value-rational questions 'Where are we going?', 'Is it desirable?' and 'What should be done?' The objective is to balance instrumental rationality with value-rationality and increase the capacity of a variety of human actors to think and act in value-rational terms.
PLACING POWER AT THE CORE OF ANALYSIS
Placing power at the core of analysis is seen as productive and positive, and not only as restrictive and negative. The concept of power is seen as ultra-dynamic, changing as it is appropriated, reappropriated and exercised. The central question is how power is exercised, and not merely who has power, and why they have it. Power produces knowledge, and knowledge produces power. Power is studied with a point of departure in small questions. See, Role of power in Section 3.2.3.1.
GETTING CLOSE TO REALITY
Phronetic scientists seek to transcend this problem of relevance by anchoring their research in the context studied. For contemporary studies, researchers get close to the social organisation, phenomenon or group that they study during data collection, and remain closed during the phases of data analysis, feedback and publication of results.



EMPHASISING THE LITTLE THINGS
The focus on minutiae, which directly opposes much conventional wisdom about the need to focus on 'important problems' and 'big questions', has its background in the fundamental phenomenological experience of small questions often leading to big answers. Searching for 'the Great' within 'the Small' and vice versa.
STUDYING CASES AND CONTEXTS
Phronetic social science focuses on practical activity and experiential knowledge in everyday situations in society. What it always means, however, is a focus on the actual daily practices.
ASKING 'HOW' DOING NARRATIVE
Phronetic research focuses on the dynamic question, 'How?' in addition to the more structural 'Why?'. It is concerned with both understanding and explanation. Narrative inquiries do not – indeed, cannot – start from explicit theoretical assumptions. Instead, they begin with an interest in a particular phenomenon that is best understood narratively. Narrative inquiries then develop descriptions and interpretations of the phenomenon from the perspective of participants, researchers, and others.
JOINING AGENCY AND STRUCTURE
Actors and their practices are analysed in relation to structures and structures in terms of agency, not so that the two stands in an external relation to each other, but so that structures are found as part of actors and actors as part of structures. Understanding from "within" and from "without" are both accorded emphasis. Those who join structure and actor in empirical work most often do so by theoretical inference: data at one level of analysis are coupled with theoretical speculation about the other.
DIALOGUING WITH A POLYPHONY OF VOICES
Phronetic research is dialogical in the sense that it includes, and, if successful, is itself included in, a polyphony of voices, with no one voice, including that of the researcher, claiming final authority. Thus, the goal of phronetic research is to produce input to the narrative and practices in a society, rather than to generate ultimate, unequivocally verified knowledge.

Table 3-2: Phronetic methodological guidelines (Flyvbjerg, 2001, 2008b, 2006b).

The lens used the methodological guidelines when doing fieldwork which included participant-observation during engagements that were not interviews, e.g. meetings, archival



research, design workshops, and design thinking (Section 4.3.2.2). Find in Sections 5.4 and 6.4. examples of the enactment of this part of the lens. These were practical contributions to the research.

3.2.3 Who gains, and who loses and by which mechanisms of power?

Concerning CMS performativity, I refer again to earlier in Section 3.2 where the expectations of influence were underlined. The expected influence being given prominence when the exploratory question *Who gains, and who loses and by which mechanisms of power?* Is posed is whether I influence the social reality, and of course, as a practitioner, I already have influenced the social reality (Section 1.3). I discussed how I plan to safeguard against this influence a little later in this section. However, I, of course, am not the only participant in the research, and other factors outside of the research such as management of the University, and the HE sector also influence the role of power. This is brought to the fore in contribution claim 5 (Section 6.5). This influence aligns to the sub-research question where it is asked *How is the role of power supported in this research about the practitioner's work practices, given the phronetic perspective?* The research contribution claim is that there are significant implications for power in practitioners' work practices when the focus is not on limitation and exclusion. In Figure 3-3 the exploratory question *Who gains, and who loses and by which mechanisms of power?* is alignment with research sub-question 3, the single contribution claim (5) and the research phase where the lens is to be used.

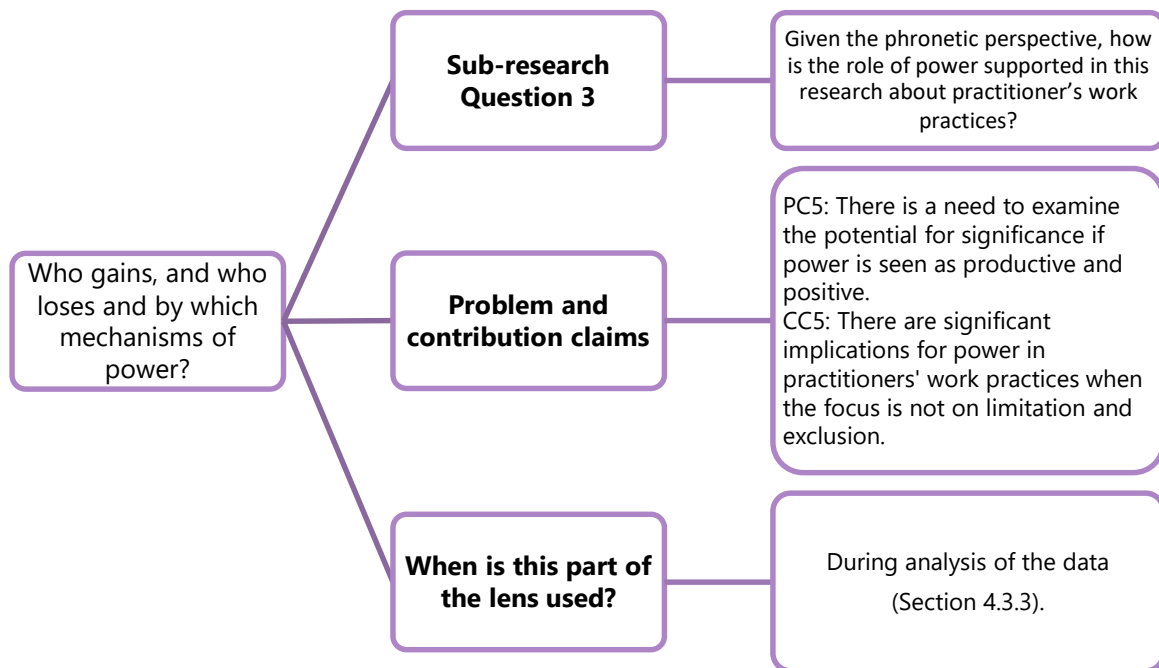


Figure 3-3: Exploratory question: Who gains, and who loses and by which mechanisms of power?

The consideration of power is what distinguishes contemporary Phronesis from classical Aristotelian Phronesis (Costello, 2018). As discussed in Section 2.2, Flyvbjergian Phronesis places power at the core of analysis and insists that organisational inquiry can only be complete if it deals with the issue of power (Flyvbjerg, 2002, 2003, 2006b). However, the theoretical stance of this research was interpretivistic (Section 2.4). The focus was not on the potentially oppressive nature of power, but rather on the role thereof during the act of interpretation. The interest in power was not one of whether power is good or bad, and the intent was not whether to confront power but how well we use power (Flyvbjerg, Landman and Schram, 2012; Flyvbjerg, 2001). In this research, as discussed in Chapter 1, corporate communication practices were influenced by organisational communication of the University (Section 1.2.2). Power, therefore, played a role in influence (Jansson, 2014; Ngwenyama and Klein, 2018). Discussed in Section 3.2.3.1 is the Flyvbjergian conception of power that is composed of six features.



There is another rationale for the use of the Flyvbjergian Phronesis., As mentioned, the fact that I was immersed in the context. I required a safeguard for what Gadamer calls “self-interpretation of our doings” (Gadamer, 1984), and thus I employed the hermeneutic principle of suspicion (Section 2.6). The hermeneutic principle of suspicion prompts the researcher first to acknowledge, reconstruct and move beyond prejudices (Bentz and Shapiro, 1998). I acknowledge my preconceptions and prejudgements in Section 4.3.1.2. In using the hermeneutic circle as part of the mode of analysis in this ethnographic research, the objective is to understand what the practitioners say or do and why, and also accept that meaning is inscribed in documents, social rules and actions (Myers, 2004; Ngwenyama and Lee, 1997). In this instance, D-E asked the prescriptive ‘How’ questions (Section 4.3), whilst this part of the Phronesis lens brought focus to the ‘Why’ questions. This part of the lens assisted in the act of analysis, needed because the research was itself a practice of power and a reason to reflect on the role of power (Flyvbjerg, Landman and Schram, 2012). I give examples and explain why the research is itself a practice of power in Section 6.5.1, and I discuss power dynamics in IS as part of the methodological contribution in Section 6.4.1.3.

3.2.3.1 Role of power

Mentioned in this research is the importance of knowledge. Specifically, knowledge used in action or as part of the action in this performative approach (Cook and Brown, 1999). I refer to this as experiential knowledge. When consideration is given to the role of power, a connection should be made to questions of knowledge and value (Flyvbjerg, Landman and Schram, 2012). More specifically, the connection should be made during the actual application of power to a course or courses of action (Flyvbjerg, Landman and Schram, 2012). I propose that the focus on a course of action links to the context. For instance, a focus on knowledge is demonstrated in the proposed Phronesis methodological guidelines (see Table 3-2 in Section 3.2.2). Knowledge is mentioned in various situational instances which need context to be understood, namely, power **produces knowledge**, and **knowledge** produces power; phronetic social science focuses on practical activity and **experiential knowledge** in everyday situations in society. The goal of phronetic research is to produce input to the narrative and practices in a society, rather than to generate ultimate, unequivocally **verified knowledge**. As previously mentioned, in a knowledge-driven organisation such as the University, CM practice is a type of conduct that brings about value in its ability to create and share information (Hart-Davidson



et al., 2007). Therefore, I briefly touched on the connection to value. Connecting value when considering the role of power means the focus is on the specific context and from a particular point of view (Flyvbjerg, Landman and Schram, 2012). To this end, the performativity of the practitioners and their experiential knowledge when doing the activities were the focal point. I subsequently unpacked the role of power using a mind map (Appendix D³) with consideration for the activities (creation of messages, images, stories), the performativity thereof (create and maintain an identity) in a way that matters to the stakeholder groups and also in a way that matters to the University (context), see Section 1.2.2. Thus, Flyvbjerg, Landman and Schram, (2012) place attention on two forms of social knowledge (practical and discursive consciousness), power being part of the context, and the ways that relations of power unfold. Whilst Flyvbjerg, (2012), emphasised viewpoints of power in situational ethics (view among participants in a specific context), and the relationship that could develop. Details are illustrated on the mind map in Appendix D³. The connection when consideration is given to the role of power is knowledge and value rather than an entity of "possession, sovereignty, and control" (Flyvbjerg, Landman and Schram, 2012, p.170). Table 3-3 below (also part of the mind map) contains the six features that may characterise power (Flyvbjerg, 1998, 2006b, 2012). These features deliver a conception of power within which potentially lies the answer of how to analyse power (Flyvbjerg, 2006b).

1	Power is seen as productive and positive , and not only as restrictive and negative.
2	Power is viewed as a dense net of omnipresent relations , and not only as being localised in 'centres', organisations and institutions, or as an entity one can 'possess'.
3	The concept of power is seen as ultra-dynamic ; power is not merely something one appropriates, it is also something one reappropriates and exercises in a constant back-and-forth movement within the relationships of strength, tactics and strategies inside of which one exists.
4	Knowledge and power, truth and power, rationality and power are analytically inseparable from each other; power produces knowledge, and knowledge produces power.
5	The central question is how power is exercised , and not merely who has power, and why they have it; the focus is on the process in addition to the structure.
6	Power is studied with a point of departure in small questions , 'flat and empirical', not only, nor even primarily, with a point of departure in 'big questions' (cited by Flyvbjerg 2001, 2006b, 2012 Foucault, 1982, p. 217).

Table 3-3: The role of power: six features that characterise power (Flyvbjerg, 1998, 2001, 2006b; Flyvbjerg and Ed., 2012).

3.2.3.2 Phronesis as professional knowledge

The previous two Phronesis value-rational questions devised parts of the lens through which to deal with reflection, judgement and praxis in relation to the Phronesis attributes (Flyvbjerg, 2004; Kinsella and Pitman, 2012). The phronetic professional knowledge interrogates how individuals interact within the organisation and with technology in performativity. In other words, how the participants use their experiential or professional knowledge. The professional knowledge criteria discussed here, and the role of power discussed previously are the lens during the analysis phase of the research. First, I had to better my understanding of Phronesis as professional knowledge, and I did so by reviewing literature where Phronesis was applied. Carrie Birmingham (2004) applies Phronesis to the education field as a model for pedagogical reflection. Her research played a critical role in developing my understanding of the application of Phronesis in a profession (see the Mind Map, Appendix D⁴). Birmingham (2004) incorporated reflections in teaching with philosophical work on Phronesis. In the mind map, her research underlines Phronesis as a unifying virtue (mediator, motivations, dispositions, also power) the specific principles linked to Phronesis (moral, justice), as well as actions (see Virtues in Table



3-1) that are linked to Phronesis. Importantly, she defines Phronesis as a “virtue of the mind”, unlike *episteme* and *techne*, which are states of the mind (Birmingham, 2004).

To demonstrate the versatility of Aristotle’s master virtue, herewith follows other research undertakings that have, in one way or another, considered Phronesis. Organisational research in video game development (Zackariasson et al., 2006); the teaching of holistic care in nursing (Leathard & Cook, 2009); European Union fisheries governance (Linke & Jentoft, 2014) and the art of judgement in the leadership of organisation when driven by the pursuit of the notion of the common good (Shotter and Tsoukas, 2014a). The field of education pursued Phronesis for its practical reasoning in courses of philosophy, communication and English (Toulmin, Rieke and Janik, 1984). Whilst the dissimilarity of each of the mentioned research undertakings in the interpretation of Phronesis is striking; two Phronesis principles are present in each of them; context matters and experience has value in social science.

It has been argued that Phronesis emphasises reflection (Kinsella, 2012). Kinsella’s work is an extension of the theory of reflective practice in which Donald Schön (1983, 1987) identifies implicit criteria for practitioner judgement. Kinsella states; “I argue that in the interest of phronesis, Schön’s conception of reflection is important, but that it does not go far enough. I propose an elaboration of ways of thinking about reflection as a means of thinking about how reflection might be thought about in the interests of phronesis” (Kinsella, 2012, p.37). More particularly, she puts forth that reflection may be deliberative (when action or situation is considered) and revealed through action (based on experience). Thus, it is suggested that in the emphasis of reflection, Phronesis may inform better action, and direct the practitioner in a change of practice (Kinsella, 2012). Considering processes for practice to take action, you may ask the question, what would Phronesis as professional knowledge mean?

Subsequently, Kinsella and Pitman, (2012) assert that if Phronesis is used as a framework to organise professional knowledge, the implications for professional education and practice need to be explored. Accordingly, Kinsella and Pitman (2012) invited a diverse group of interdisciplinary scholars to contribute their understanding of Phronesis. What transpired from the engagements are directions and juxtapositions that contribute to an understanding of Phronesis in contemporary professional practice. Table 3-4 is a compilation of six criteria from



the engagements that may guide practitioners towards phronetic judgements in their work practices.

PRAGMATIC USEFULNESS
▪ The first criterion that Schön (1987 cited in Kinsella, 2012, p.48) highlights by which practitioners make judgements in practice are the criterion of pragmatic appeal. His notion of pragmatic usefulness refers to the idea of practice fit or viability within the practitioner's experiential world. ▪ Furthermore, Schön (1987 cited in Kinsella, 2012, p.48) draws on a pragmatic philosophical tradition: his works are grounded in the pragmatic philosophy of John Dewey, and the assumptions implicit within that tradition are evident in his perspective.
PERSUASIVENESS
▪ I assume here that Schön (1987 cited in Kinsella, 2012, p.48) refers to persuasiveness concerning the course of action a practitioner chooses in light of his/her reflections within a particular practice context and within a particular disciplinary community. ▪ In practice, persuasiveness within the disciplinary community and the practice context is a criterion by which practitioners make judgements.
AESTHETIC APPEAL
▪ An aesthetic vision of experience views work practice as an art and the appreciation of that art as the aesthetic. Such a conception recognises more than instrumentalist and efficiency-based views of practice (Stein, 2001 cited in Kinsella, 2012, p.48) and includes realms that fall outside of traditional epistemic lines. ▪ The aesthetic serves as a way of considering the experience of practice itself, in the sense that successful practice may be conceived of as an art form.
ETHICAL IMPERATIVES
▪ Many decisions that fall within the indeterminate or grey zones of practice are infused with ethical concerns. ▪ In an increasingly complex world, in which the infiltration of corporate values is frequently a reality (Stein, 2001 cited in Kinsella, 2012, p.49), the time and opportunity for reflection on ethical issues can easily become displaced, or simply silenced amid the vast cacophony of other voices. ▪ When considering the criteria by which practitioners might make phronetic judgements in practice, consideration of ethical concerns appears to lie at the centre.
DIALOGICAL INTERSUBJECTIVITY

- Phronetic judgements should recognise the sociality of consciousness, such that reflection is viewed as an individual and a social process, considered in light of both individual and collective thought.
- Dialogic intersubjectivity recognises both the negotiation of meaning within practice settings and the role of discourse in this process.
- The recognition of dialogic intersubjectivity: the extent to which the dialogic nature of interpretation is acknowledged and the extent to which 'others' versions of 'reality' are given a hearing.
- The practitioner-oriented towards Phronesis is aware of and concerned with not only his or her interpretations in practice but also the dialogic possibilities implicit in recognition of the interpretations of clients, co-workers and others.

TRANSFORMATIVE POTENTIAL

- Rather than looking solely for pragmatic fit within the traditions of practice, one might also consider the power of imagination and the transformative potential of a situation.
- Rather than accepting received views, the practitioner-oriented towards practical wisdom critically considers why things are as they are, examines the taken-for-granted, and engages with possibilities for transforming the situation at hand, in the interest of justice.

Table 3-4: Phronesis as professional knowledge (Kinsella and Pitman, 2012).

This part of the lens uses the role of power (Section 3.2.3.1) and the Phronesis as professional knowledge (Section 3.2.3.2) during the analysis of the data (Section 4.3.3). Find in Sections 5.3.1 and 6.5. examples of the enactment of this part of the lens. There are both practical (professional knowledge) and methodological (role of power) contributions to the research.

3.2.4 What, if anything, should we do about it?

Earlier, in Section 3.2, it was indicated that the Phronesis lens would interrogate CMS performativity, which needs to consider then work practices, praxis, and the practitioner within the social reality. The expected influence when the exploratory question *What, if anything, should we do about it?* was given prominence as there was an expectation of influence on practices from different viewpoints. This is alignment to the overarching research question which asks how content management practices should be examined when performativity, and the value of practitioners' experience in corporate communication are considered. All five the research contribution claims were relevant (Section 1.3.2). Figure 3-4 depicts the exploratory question *What, if anything, should we do about it?* in alignment with the overarching research

question, all the problem and contribution claims of the research and the research phase where the lens is to be used.

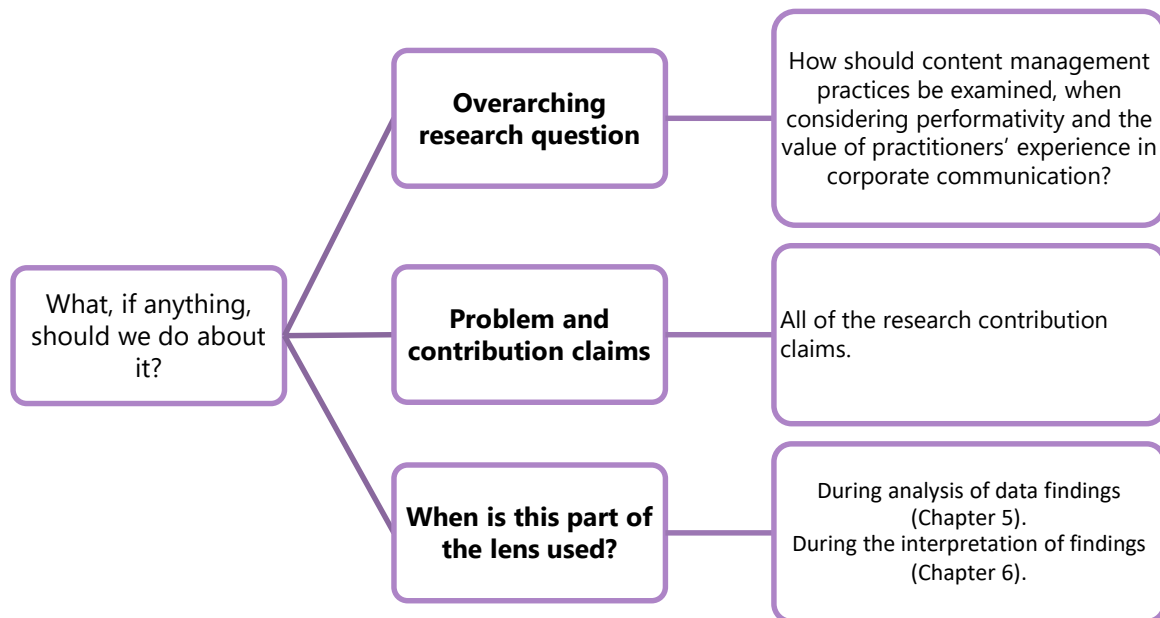


Figure 3-4: Exploratory question: What, if anything, should we do about it?

The final part of the Phronesis lens was used during the interpretation of data. The exploratory question attempts to rebalance the phenomena of interest, which is the socio-technical nature of the research. This research approached the artefact, not as an IT outcome but rather as documents that contained contributions of the practitioners to a CMS project. This was done to rebalance the social and technological aspects. These were threefold, CM practices framework (Appendix A), guidelines for design (Appendix B), and CM strategy (Appendix C). In turn, these representational documents contributed to the design and development of the IT or IS artefact (Appendix S). To do so, I focused on two matters during the interpretation of findings, namely valuing the experience of the communication practitioners, and collaborative work. I discuss these as part of the Phronesis lens in Section 3.2.4.1.



3.2.4.1 *Valuing experience*

First, to value experience using the lens relies on the characteristics of an individual who possesses the experience and wisdom to deliberate in a particular situation (Costello, 2018). The Phronesis attributes were discussed in Section 3.2.1. By valuing the communication practitioners experience, I planned to interrogate how individuals interact with technology in their performativity, advancing the socio-technical aspects of IS practice. This part of the lens was discussed in Section 3.2.2. It was conducted by using the methodological guideline asking 'How' doing narrative description. D-E also refers to the narrative in the future-oriented nature, which aims to deliver knowledge about social practices and values (Baskerville and Myers, 2015). I already used the ability of narrative description to incorporate my experience as a practitioner in the HE sector. I drew on the example of the #FeesMustFall movement to emphasise the role of power and the impact on corporate communication practices (Section 1.2.3) and used narrative description to contextualise the research problem during the research problem discovery (Section 1.3). After that, I underlined the successes and failures we had to meet the expected outcomes for the two CMS Projects (A and B).

3.2.4.2 *Collaborative work*

Second is collaborative work, which was the final part of the lens used during the interpretation of the data. The Flyvbjergian approach of placing power at the core of analysis made knowledge production particularly well suited to collaborative work (Flyvbjerg, Landman and Schram, 2012). When doing fieldwork, network mapping, archival research, the setup of interview questions, and during interviews, as well as co-planning and co-designing of D-E, it is improbable that a single participant would have all the answers to problems, possibilities, and risks (Flyvbjerg, 2012, Flyvbjerg, Landman and Schram, 2012). Therefore, this research had the intention to add partial answers from participants to the hermeneutic descriptions and other representational documents (see appendices). In doing so, the position taken was to put forth possible actions for doing things differently from a polyphony of voices (Flyvbjerg, 2006b; Flyvbjerg, Landman and Schram, 2012).

Discussed at the beginning of Section 3.2 were the appropriateness of D-E as method and its alignment with Phronesis. I postulated that the Phronesis lens deployed effectively – discussed in Sections 3.2.1 to 3.2.4 - at the various phases of the research could keep the focus on details.



Examples of the enactment of this part of the lens can be found in Chapters 5 and 6. A key tenet of Phronesis is to focus on the minute details rather than the 'big idea' (Flyvbjerg, 2001). This focus is to make explicit the implicit understanding and norms in work practices (Ngwenyama and Klein, 2018). Discussed in Chapter 4 are the D-E method phases of the research.

3.3 Summary

This chapter explored and explained Flyvbjerg's contemporary Phronesis. Addressing the 'How' questions of the approach. A key tenet of Phronesis is to focus on the minute details rather than the 'big idea' (Flyvbjerg, 2001). This was put forth during the discussion as to why I constructed the Phronesis lens (Section 3.2). To operationalise Phronesis as a lens, I took advantage of the published research about Phronesis which offers deep insight from the experiences of the researchers. I drew on their experiential knowledge. I included the phronetic research of Bent Flyvbjerg (Section 2.2.2), Flyvbjerg's co-authors Landman and Schram, the professional knowledge research of Birmingham, Kinsella and Pitman; and from the field of IS, Costello, as well as Ngwenyama and Klein. I particularised the four value-rational questions to the performative perspective in the different phases of this research and thereby constructed the contemporary Phronesis lens. Particularised in each part of the lens (Sections 3.2.1 to 3.2.4), I devised and then linked the exploratory question for this research. In order to construct the lens, the structure was necessary but not a rigid form by any means. Rather, I drew on the value-rational questions as exploratory questions at any given point in the research. I mentioned in Section 3.2 that the intent is not the answer the exploratory questions. Flyvbjerg, 2012 (p.33) pointed out that "It should be stressed that no one has enough wisdom and experience to give complete answers to the four questions, whatever those answers might be." Thus, it was expected for partial answers to problems, possibilities and risks contribute to the dialogue and added to the representational documents.



CHAPTER 4

4 DESIGN-ETHNOGRAPHY AS METHOD

4.1 Introduction

In Chapter 2, I positioned the research as socio-technical through the articulation of debates found in the IS field. I also positioned the research as interpretivistic. In Chapter 3, I operationalised Flyvbjergian Phronesis as a lens. The research phases where the lens will be deployed to examine the data collection, analysis and interpretation were depicted in each part of the lens. In this chapter, I elaborate and explain the research design and phases. This chapter explores D-E and responds to the 'How' questions of the approach. I build forth on previous chapters.

Discussed at the beginning of Section 3.2 was the appropriateness of D-E as method and its alignment with Phronesis. To discover whether the methodological principles of ethnography, D-E, and Phronesis align I used a mind map (Appendix I). In Chapter 1, I expressed that my interest in social reality, as well as socio-technical aspects, have led ethnography to emerge as the most suitable and most appropriate approach to the research (Section 1.4). The need to inquire about the social reality of the University became apparent when the research problems and performativity of the practices were established (Sections 1.2 and 1.3). I explicate why ethnography is my chosen methodology in Section 4.2; and then the particular choice of D-E (Section 4.3), the research participants (Section 4.3.1), the research design and the data collection methods (Section 4.3.2). I also discuss the unfolding of data analysis in interpretive research (Section 4.3.3).

The ethical clearance for the research (Section 4.4) and my proposition that the Phronesis lens will play a role in the evaluation of the research are discussed (Section 4.5). Importantly, I explain the continuous self-evaluation of the ethnographical research and how the Phronesis methodological guidelines assisted in my immersive state (Section 4.5).

4.2 Ethnographic research methodology

In Chapter 1, I expressed that my interest in social reality, as well as socio-technical aspects, have led ethnography to emerge as the most suitable and most appropriate approach to the



research (Section 1.4). The need to inquire about the social reality of the University became apparent when the research problems and performativity of the practices were established (Sections 1.2 and 1.3). Section 1.4 articulated how the puzzling research problem, the phenomena of interest (performativity) and Phronesis suggest that D-E is the most appropriate approach. Thus, the discussion of what ethnography is, which I briefly discussed as part of the approaches to the research (Section 1.4). I continue the discussion of why ethnography is my chosen methodology here. How I plan to use ethnography is discussed as part of D-E (Section 4.3).

Ethnography found its origin in anthropology and is an approach that traditionally requires the ethnographer to spend a significant amount of time in the field instead of relying on knowledge from theory (Mingers, 2003; Myers and Avison, 2002; Atkinson et al., 2001). Anthropologist Laura Nader states that “ethnography has commonly been summarised as description, albeit description in context, but not exactly theory. Yet, theory is defined as the analysis of a set of facts in their relation to one another, or the general or abstract principles of any body of facts, which to my mind makes ethnography most definitely a theoretical endeavour, one that has had and still has worldly significance, as description and explanation” (Nader, 2011, p.211). Nader continues and declare that ethnography is not “mere description” but that it is “theoretical in its mode of description” and thus is a theory of description (Nader, 2011, p.211). She also remarks that ethnography has remained open to innovation in both its role as a discipline and research practice (Nader, 2011). The ethnographer immerses “themselves in the language, practices, and values of a particular (sub)organisation” (Mingers, 2003, p.239). Therefore, the immersion in social reality to improve understanding of language, practices and values result in an expectation of mutuality and reciprocity (Atkinson et al., 2001; LeCompte and Schensul, 1999). Atkinson and Hammersley (2007) argue that ethnography is best understood as a reflexive process, and in this, the Phronesis lens could be used to draw on as I try to improve my understanding and make sense of participants’ reflexive processes (Section 3.2).

I chose ethnography as the methodology because ethnography is the work of discovery (Salvador, Bell and Anderson, 1999), and the aim thereof is to gain acceptance or to improve one’s understanding (Atkinson et al., 2001; LeCompte and Schensul, 1999; Lareau and Shultz,



1996; Hammersley, 2006). The research problem I interrogated and my immersion in the empirical setting required that I be open to discovery. Researchers Atkinson and Hammersley (2007) describe what ethnographers do as getting involved in individuals' lives. They put forth that the process involves using your senses by watching what happens, listening, asking questions, and collecting documents/artefacts (Atkinson and Hammersley, 2007), following the collection of data its analysis and interpretation thereof. Another significant reason for using the ethnographic research methodology when conducting research that considers practices is the opportunity it presents for rigour in the research (Myers and Avison, 2002). Myers and Avison (2002) purport that ethnography can bridge the gap between scholarly and practical knowledge. Two particular types of ethnography emerged to be most suitable to this study, namely, critical ethnography and D-E. In section 2.4, I discussed critical research. However, I found critical research unsuited as it is usually selected when the research has at its core the aim to change the status quo of the social reality or to advance emancipatory social change (Niehaves and Stahl, 2006; McGrath, 2005; Čečez-Kecmanović, 2001; Klein and Myers, 1999). Perhaps the key matter for considering critical research unsuited to this research is stated by Walsham (2005, p.113) who argue that critical research tends to focus on "issues such as asymmetries of power, alienation, disadvantaged groups or structural inequity". He notes that such a focus is not to everyone's taste and that there is a need for individuals who focus on what is right with the world. The choice not to pursue critical research removed critical ethnography as an ethnography to pursue. Thus, D-E was the chosen ethnographic research methodology (Section 4.3). Two other methods that were considered in earnest were Design Science Research (DSR) and case study which I discuss next.

4.2.1 Exploring the design science research and case study methods

Alan Hevner and his co-researchers (Hevner et al., 2004) use the research paper of March and Smith (1995) as one of the building blocks for their contributions to DSR. Notably, March and Smith (1995) identify the importance of practitioners to face real problems and emphasise two dimensions to this, behavioural and design science. Behavioural science tries to explain or predict human or organisational behaviour, whilst design science tries to extend capability boundaries by creating new or innovative artefacts (Hevner, 2007; Bider et al., 2012; Johannesson, Perjons and Bider, 2013). In his 2007 paper (Hevner, 2007), he amplifies the pragmatic nature of DSR with the three cycles of activity. The relevance cycle inputs



requirements from the contextual setting, the rigour cycle provides grounding theories and methods along with domain experience and expertise from the foundations' knowledge base (Hevner, 2007). The central design cycle supports a tighter loop of research activity for the construction and evaluation of design artefacts and processes (Hevner, 2007). In 2013, Gregor and Hevner further contributed to DSR when they clarify and positioned the concepts and methods of DSR after identifying gaps in understanding and application (Gregor and Hevner, 2013). Though the Hevner, March, Park and Ram 2004 viewpoint of DSR is the most widely accepted in IS, Vaishnavi and Kuechler (2009), note that there are many excellent descriptions of the process of design research. McKay, Marshall and Hirschheim (2012) offer an alternative viewpoint – which they call a more pluralistic community approach. The researchers argue that to make the best use of technology and individuals within the organisational context, IS emerges from interactions and interdependencies. When the use of IS could potentially impact on worldviews in a context, the problem or situation may benefit from the recognition, clarification of practices, and understanding (Lee, Thomas and Baskerville, 2015). By not splitting design science and behavioural science (as is the case with the Hevner et al. DSR viewpoint), experiential knowledge can contribute to design (McKay, Marshall and Hirschheim, 2012; Carlsson, 2007).

DSR was found to be a great fit-for-purpose able to assist in some of the research contribution claims. Specifically, the fact that DSR develops knowledge for IT/IS professionals to build or improve previously implemented systems (Carlsson, 2007). The intent to create a practical space to partner with communication practitioners in the design of CMS could be supported. It should be mentioned that to understand the customer/user needs; mainstream DSR evolved to include ethnography as a practice, embedded in the main focus of design (Hevner and Chatterjee, 2010). However, the question was what type of knowledge the embeddedness of ethnography would produce when the focal point is geared strongly towards IT/IS professionals? I assessed the pluralistic community DSR for its ability to answer all the intents I have identified for the research; however, there were some matters of concern.

Though the pluralistic community DSR made better provision for performance research, the concern was that the methodological guidelines for the Phronesis lens needed a narrative description to ask the 'How' and 'Why' questions. Placed at the core of analysis



is power (Section 6.5.1). This required the constructed social reality to be at the core of the methods – a traditional stronghold for the ethnographies but not necessarily for DSR (Baskerville and Myers, 2015). Another concern of the use of purely DSR as a method was the fact that I was part of the social reality. As a practitioner, I am a participant in the research as well. The mind map in Appendix G contributed to my understanding of DSR by considering its characteristics, benefits and limitations. Though DSR remained a strong contender; the issues brought to the fore needed consideration as I sought to find an appropriate research methodology.

The case study research method and the ethnographic method have close ties. They are regarded as context-dependent, and in both, the goals of the research may at first be unclear, unknown or unexplored (Flyvbjerg, 2001, 2006a; LeCompte and Schensul, 1999). As qualitative methods, both offer data collection tools such as participant-observation, fieldwork, interviews, and even the researcher's observations and reactions to help deliver narrative description. The difference, however, is that the ethnography method always has a focus on culture or the social reality (LeCompte and Schensul, 1999), whilst the case study method may be used to test a theory, hypothesis and generalisability of outcomes (Flyvbjerg, 2001, 2006a; Ruddin, 2006). The rich textual data delivered in both methods offer valuable insight into the participants' viewpoint (Myers, 1997; Flyvbjerg, 2001). In a paper, Flyvbjerg (2006a) contributes his viewpoint of a case study and its potential for social science. He examines five common misunderstandings about case study research. The five misunderstandings are: (1) theoretical knowledge is more valuable than practical knowledge; (2) one cannot generalise from a single case; therefore, the single case study cannot contribute to scientific development; (3) the case study is most useful for generating hypotheses, whereas other methods are more suitable for hypotheses testing and theory building; (4) the case study contains a bias towards verification; and (5) it is often difficult to summarise specific case studies (Flyvbjerg, 2006a). This paper offers a unique viewpoint on the case study method. In the consideration of case study as a method, two distinct matters came to the fore, which make ethnography a better fit-for-purpose. First is the matter of centring on social reality – which is prioritised in ethnography (Myers, 1999). The other matter is that case study does not necessarily encourage the immersion of the researcher in the context (Myers, 1999). After careful consideration of the methods that could assist in answering the research questions, D-E was chosen as the best fit



for the research context. In Section 4.3 I discuss D-E in terms of the research participants (Section 4.3.1), the research design and the data collection methods (Section 4.3.2), and the analysis of data in the interpretive research (Section 4.3.3).

4.3 Design-Ethnography

D-E is where systems design and the inquiry of the constructed social reality meet. D-E is "...a very different enterprise from ethnography in social science: the accountabilities are different, the needs [are] different, the results and their uses [are] different" (Crabtree, Rouncefield and Tolmie, 2012, p.3). D-E places particular emphasis on betterment of the interaction and synergy between research conducted and practice (Baskerville and Myers, 2015; Salvador, Bell and Anderson, 1999). A reason for this occurrence in D-E is that practice continually draws on past experience, the practitioner is forming himself as he works, "what he fashions, through his work, is a way of being" (Ingold, 2008, p.85). Ingold also asserts that "theory could be a way of knowing rather than a framework for knowledge" (Ingold, 2008, p.83). Importantly, the research place emphasis on the notion that for practitioners, there is conceivably no division between method and theory (p. 85). I agree with this viewpoint and will expand on the roll-out in this research in Section 3.2.

The method originated as an IS specific methodology in Baskerville and Myers (2015), and as a result, I referenced the paper extensively in the thesis. Discussed in Section 4.2. is D-E and its uniqueness as an ethnography which I have mentioned throughout the thesis. I use a mind map, Appendix F, to make sense of what makes D-E a unique approach compared to other ethnographic methodologies. I discussed the uniqueness of D-E in Section 1.4, but I provide a summary in the next paragraph. First, let me point out that at the beginning of Section 3.2, I discussed the appropriateness of D-E as method when consideration is given to the Phronesis assumptions. I also mentioned the ethnographical assumptions that play a role in performativity, and that context is treated as a socially constructed reality (Myers and Avison, 2002). This is a crucial ethnographic knowledge assumption that gives D-E a strong foothold as an ethnography, and thus as an appropriate method. I discovered the alignment between Phronesis and D-E and whether the approaches are appropriate to examine performativity in CMS by using the mind map tool (Appendix I). I found the approaches appropriate to address the phenomena of interest, which was to rebalance the socio-technical nature of IS. From this



point forward, I explained and constructed the Phronesis lens, which had the focus to support the research problem and contribution claims, but not to answer the research questions as such. The reason being that the Phronesis lens was used to view the various phases of the research in a specific way; Phronesis keeps the focus on minute details rather than the 'big idea' (Flyvbjerg, 2001). The focus of D-E, on the other hand, was to attempt to answer the research questions with the support of the Flyvbjergian Phronesis lens. Using its uniqueness as well as traditional ethnographic methodology tools, I collected data, completed an analysis and interpreted the findings with the D-E method.

Already discussed in Section 1.4, I now briefly summarise the uniqueness of D-E characteristics which came to the fore in the mind map (Appendix F). Unlike traditional ethnographies, in D-E "the researcher goes beyond observation and actively engages with people in the field" (Baskerville and Myers, 2015). Another unique characteristic of D-E is the short interventional fieldwork which is considered part of the method's approach (Baskerville and Myers, 2015; Crabtree, Rouncefield and Tolmie, 2012). The long-term fieldwork approach of traditional ethnographies were challenging to implement in my empirical setting as I am also a practitioner immersed in work practices. I required the freedom to move from my profession to research focus at a moment's notice. The final unique characteristic of D-E is its future-oriented engagement rather than the traditional historical, descriptive (what has happened) engagement for ethnographies. In other words, the outcomes will, in some instances, be used in the future design and development of a system or other projects depending on the research focus. In the next paragraph, I focus on the D-E in IS toolkit. Baskerville and Myers (2015) suggest useful tools for researchers who conduct D-E in IS, where intervention takes place. Intervention includes active engagement and shorter fieldwork period. Baskerville and Myers (2015) responded to the difference in ethnographical practices (generative and descriptive vs only descriptive), temporality (future-oriented research process vs historical account), and materiality (reflect social and cultural values for design vs observing but not actively intervening) by putting forth the D-E in IS toolkit. The ethnographer may choose the most relevant tools for their research from the toolkit (Baskerville and Myers, 2015). Thus, this research utilised co-planning and co-designing during fieldwork (Section 4.3.2.2), as well as experience juxtaposing during interviews (Section 4.3.2.3) in conjunction with other more traditional ethnographic tools. I elaborate on all the data collection methods in Section 4.3.2.

Toolkit	Description
Co-planning and co-designing	Co-planning and co-designing involve the designers and users working together in design.
Perceptual synthesis	Perceptual synthesis involves the use of visual, embodied and non-textual means (e.g. pictures) in a group. Insights from each individual's perceptual observations are combined and used to generate themes in a group (Kilbourn, 2013 cited in Baskerville and Myers, 2015, p.46).
Experience juxtaposing	Experience juxtaposing involves exploring potential future experiences and comparing these with present-day experiences (Kilbourn, 2013 cited in Baskerville and Myers, 2015, p.46) e.g. imagining how a new product might improve one's health.
Potential relationing	Potential relationing involves exposing current practices and relationships and then exploring how individuals wish them to change. Drama and acting are useful ways to explore the social embeddedness of possible future practices (Kilbourn, 2013 cited in Baskerville and Myers, 2015, p.46).

Table 4-1: The toolkit support intervention as a way of studying settings with D-E in IS (Baskerville and Myers, 2015).

A unique aspect that sets D-E apart are the potential of the outcomes from the research and their uses. There is a view that D-E in IS has three types of relationships when it comes to ethnography and design. Table 4-2 is a summary of each relationship with the design; which one is relevant depends on the required results.

Conceptualising ways in which ethnography can be engaged in design	
Ethnography for design (E4D)	E4D involves using ethnographic techniques to tease out what the design goals or user requirements might be from the minds and behaviour of the individuals concerned. E4D results are what individuals do, not what they say they do.
Ethnography to study design (E2D)	The design process itself is the subject of ethnographic analysis. E2D focuses on how designers go about their work. E2D results yield participatory design, the ethnography is used to better understand designers and the design process.
Design-Ethnography (D-E)	D-E builds on E4D and E2D. The researcher is no longer so tentative, but rather actively engages with the individuals in

	the field. They are designing, producing or introducing artefacts into the social or cultural context. The ethnographic research techniques are fully integrated with design science techniques. For example, as well as ethnographic techniques being used to find out user requirements, the design task itself can be used as a vehicle to better understand the everyday lives of the individuals. The result is that the researcher actively intervenes and changes the context where he/she is engaged by creating, innovating and improvising artefacts in a participatory way.
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Table 4-2: Types of relationships between ethnography and design (Baskerville and Myers, 2015, pp.27–29).

Figure 4-1 explains D-E relationships, unique characteristics, and the toolkit. The figure is a graphical depiction of D-E in IS. Baskerville and Myers (2015) emphasise that ethnography is the descriptive element in D-E, and that design is an intervention. In doing D-E, there are four unique D-E experiences on which the seminal authors of the framework for D-E in IS focus attention. The experiences are immersion in design, practical action, result interpretation data and information, as well as freedom for the ethnographer to participate. First, rather than to begin with a problem, D-E begins with immersion in design practices of the matter at hand [moving in] (see Figure 4-1). Second, D-E uses practical action, which may include questionnaires, observation, and physical performance in the design of the planned artefacts [data gathering and analysing]. By participating in the collection (see Section 4.3.2) and analysis of information needed (Section 4.3.3), the ethnographic researcher brings insight into the social reality to assist in the determination of what information is essential for design. Third, further interpretation of data and information results [frameworking] brings meaning to the individuals, organisation and technology when design concepts are made. It also brings to the fore that my immersive state required that I declare my preconceptions and judgements (see Section 4.3.1.2). The fourth experience is the freedom for the ethnographer to participate in practical acts of creation, innovation and improvisation of designs, whether working in private or participating in sessions [generating design concepts].

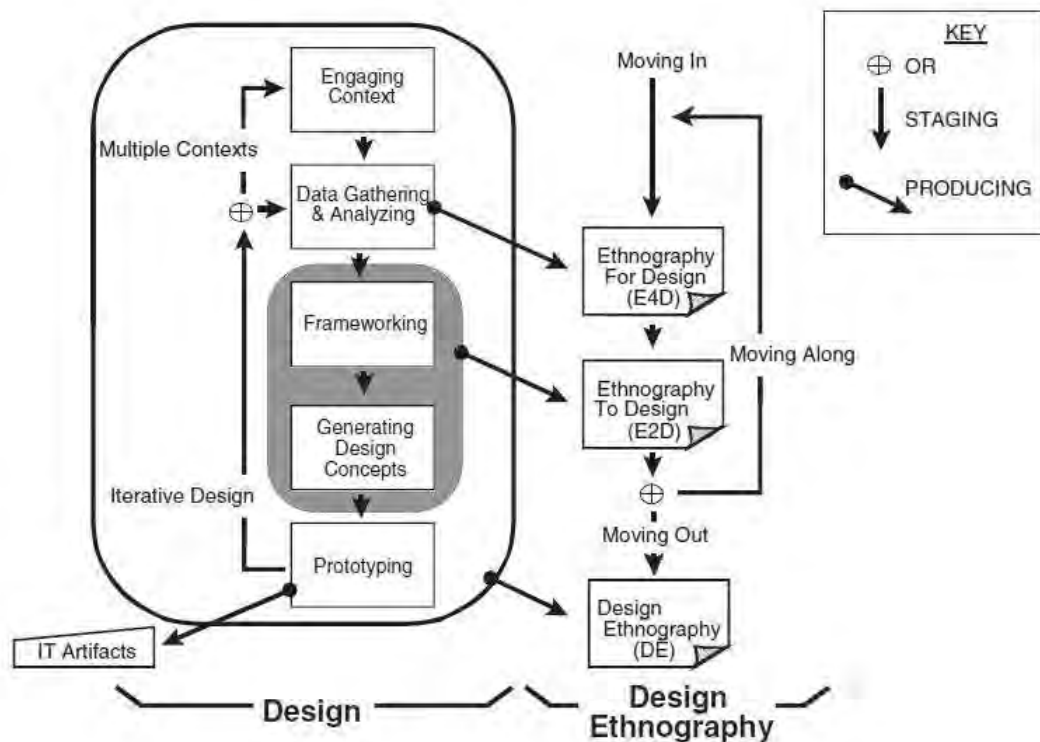


Figure 4-1: Framework for Design-Ethnography in IS (Baskerville and Myers, 2015, p.32).

As previously mentioned, Atkinson and Hammersley (2007) argue for ethnography to be understood as a reflexive process; which implemented with the Phronesis lens (see Section 3.2). In the sections that follow, I particularise the chosen research method D-E to the research. The sections are the research participants (Section 4.3.1), the research design and the data collection methods (Section 4.3.2). I also discuss the unfolding of data analysis in interpretive research (Section 4.3.3).

4.3.1 The research participants

As already stated, this research was an abductive process that had three foci, namely organisation, individuals and technology. The problems that this research interrogated drew on my involvement in two CMS Projects (the technology) at CUT (the organisation). Whilst the initial understanding of the puzzling problem started abductively, my reading of literature on content creation, content management, content strategy, content practices, CMS and socio-technical aspects of IS, assisted to better articulate the problem of not meeting the outcomes set for the custom development of a system project (see Section 1.3). Whilst the problem situation offered several issues to focus on; my interest was the viewpoint of communication



practitioners within a specific team situated in the HE sector. The practitioners created content and used the system in their work practices. The research problem, its context-dependent focus, and the research questions led to a single university community, the Central University of Technology, Free State (CUT) being chosen for the research. All ethnographic research by nature is focused on a particular social reality or culture and is therefore contextually varied (van Maanen, 2011). I mentioned previously that the performative nature of the research brought forth the focus on corporate communication practices. As literature proposed that we can understand practices of the communication practitioners through what they do, and how they do it (Salvador, Bell and Anderson, 1999; Flyvbjerg, 2001), I elected to focus my attention on research participants who are communication practitioners with a vested interest in the CM practices of CUT.

The research participants were full-time employees at CUT and were all situated and working from the Bloemfontein campus. Also located in the Free State province, CUT has another campus in the mining town called Welkom. The Bloemfontein campus was the focus because none of the communication practitioners were at the Welkom campus. The Welkom campus was a merger of one of the old Vista University campuses (Welkom) and the Free State Technikon (Bloemfontein) to become CUT in 2004. The campus is much smaller ($\pm$ 250 employees, $\pm$ 3 500 students) and specialises in specific programmes that offer value to the CUT community in that region of the Free State. As mentioned in Section 1.2.3, institutions with very different approaches to information practices and disparate campuses had to be unified, employees and students had to be incorporated into new situational environments, campuses had to be assessed, upgraded and supported to become one institution with shared values and outlooks (Symes et al., 2004; Auf der Heyde et al., 2007). This was an ongoing process between the two campuses, which added to the dynamics of the phenomenon of interest.

I chose to focus my research on the C&M section for reasons I discussed in Sections 1.2 and 1.3. . As such, the performative nature of the research focused on the teams work processes because they are regarded as the custodians of corporate communication for the University. The aim was to explore the CM practices of the team ethnographically. Corporate communication was the primary activity of the participants whose work practices and the



problems experienced therein became the focal point of this research (Section 1.2.2). Participants were content creators, managers, users, editors, and information disseminators for the University. Their work practices comprised of strategies, tools, processes, and skills, which related to the management of these content assets for information processes and functions (Grahlmann, et al., 2012; Munkvold, Päivärinta, & Kristine, 2006; O'Callaghan & Smits, 2005). As a team, the group of individuals had various levels of education — three or four-year degrees through to postgraduate degrees. The group had roots in communities across South Africa (I use a question from the interview process to express SA's cultural oneness). In this research, I focused attention on how participants who are practitioners interact within the University and with technology (Orlikowski, 2000). I also examined the team's comfort with technology. Following this, I explain what criterion I used to include participants in the research.

Five practitioners were participants in the research, three males and two females. If you then include my experience as a practitioner, it was a balanced equation between male and female participants. There are three participants per gender group. The team had a good balance between gender groups across the different post levels. Participants were from South Africa's Xhosa, Tswana, SeSotho, Zulu, and Afrikaner groups. There were no foreign nationals on the team. Therefore, I focused on SA exclusively without the risk of exclusion. The participants were different post levels, age groups (the mid-30s to 50s), culture groups (already listed) and have various levels of education (most team members have a postgraduate degree, all members have post-school education). There were many differences in the team. Nevertheless, my interest in this research was to find similarities that could assist us in our worldviews during collaborative work (Section 3.2.4.2). My interest in this also emanated from being immersed and being the only team member from the Afrikaner group with perhaps a more Eurocentric perspective. I was concerned that, at times, I was too far removed from the rest of the team who were African. An exploratory reflexive question for me was *Does my culture and worldviews put me on the outside of the team dynamic? Also, is my culture truly different?* To this end, during the first interview, I asked a question that seeks to understand how each participant's phronetic attributes developed. According to Aristotle, Phronesis is the master virtue that should inculcate all that we do in this life (Flyvbjerg, 2001). The Phronesis attributes are ethics and values, reflection, intuition, value-judgement and virtues, which I discussed in some detail



in Section 3.2.1. The amalgamation of the Phronesis attributes is also a contribution to the field from this research. The interview question was:

When we were young, you were taught right from wrong by adults guiding your actions (*don't hit your sister/brother*), your conduct (*say 'thank you'*). These actions build your character and contribute to your habits. Whom do you feel played the biggest role in building up who you are today?

South Africa is a “deep-rooted patriarchal society” where both Eurocentric and Afrocentric cultures subscribe to the idea of male dominance (Coetzee, 2001, p.300). Walker (2018) argue that this form of sexism is, in fact, pervasive and accepted by both men and women in SA. Though I expected some of the participants to have matriarchs as their primary influence, I did not expect it to be all the participants, and here I include myself. I reflected on the patriarchal society of SA, and it seemed an unlikely outcome, and yet, it came to be so. Across all the cultural groups, and without fail, every participant indicated that women (mothers, grandmothers, and aunts respectively) were the more significant influence in their life when it comes to character building, habits and conduct (see Phronesis attributes in Section 3.2.1). The males were working away from home, or had sadly passed on. On the other hand, some participants' families had gone through a divorce. Therefore, there was a similarity, and for this research, that was more important than all the differences. As individuals in a patriarchal society, our mothers, grandmothers, and aunts play a pivotal role in the development of ethics and values, virtues, value-judgement, intuition and reflection. In this, I came to know what connected us as a team of practitioners. Rather than a focus on what separated individuals, this research seemed to connect participants. The attributes (as discussed above) were a focus on work practices, to value the experience of the team, collaborative work, the role of power seen as positive and productive (Flyvbjerg, 2001).

I then turned to the team's comfort with technology. The participants were asked to indicate their level of comfort with technology. Technology included laptop and desktop computers, handheld and mobile devices, print and scan machines. This again was not a criterion for inclusion or exclusion as a participant in the research. Instead, the question was a self-reflective assessment. Each participant was given the opportunity to assess and then scale their comfort with technology. The participants were encouraged to include both work and personal



viewpoints, so a more holistic perspective of self with technology came to the fore. The scale was a simple 1 to 5 model with 1 is not comfortable at all, 2 as the basic level of comfort (would rather be doing something else), 3 as average comfort (no preference for or dislike of technology), 4 as very comfortable (values technology), and 5 as exceptionally comfort with technology. Table 4-3 indicates the comfort levels of the participants grouped into the level of their choice. Deduced from this may be that the participants have a level of comfort with technology that is neither high nor low. Considering that the team consisted of communication practitioners, it was not unexpected that they have no strong preference for or against technology. What the information revealed as an IS researcher, was that I should be sensitive in my approach during the ethnographic engagements not to discuss technology on too technical a level. It may cause discomfort for the participants. Again, it is a similarity that came to the fore in the team.

Comfort levels	Participants' comfort level with technology
Exceptional comfort: 5	1 participant
Very comfortable: 4	2 participants
Average comfort: 3	2 participants
Basic comfort: 2	1 participant
Not comfortable: 1	0

Table 4-3: Participants' comfort level self-assessment of their comfort with technology.

Used as a criterion for including participants was the years of experience as a communication practitioner. The years of experience for each participant was the significant consideration because of the performative perspective in the research. A certain level of experience in corporate communication contributes to the insights of performativity. Subsequently, team members included as research participants should have had at least five years of total work experience, and a minimum of three years in the field of communication. I used university levels of experience as a guide which define one to three years as early career and developing, three to five years is intermediate, and require that experienced and management positions usually have at least eight years of experience. The years of experience did not necessarily have to be in the Higher Education sector, but at least in fields related to corporate communication.

Figure 4-2 depicts the total years of work experience, the years of experience in HE, and the years of work experience in the field of corporate communication for each participant. I include myself as a practitioner as well.

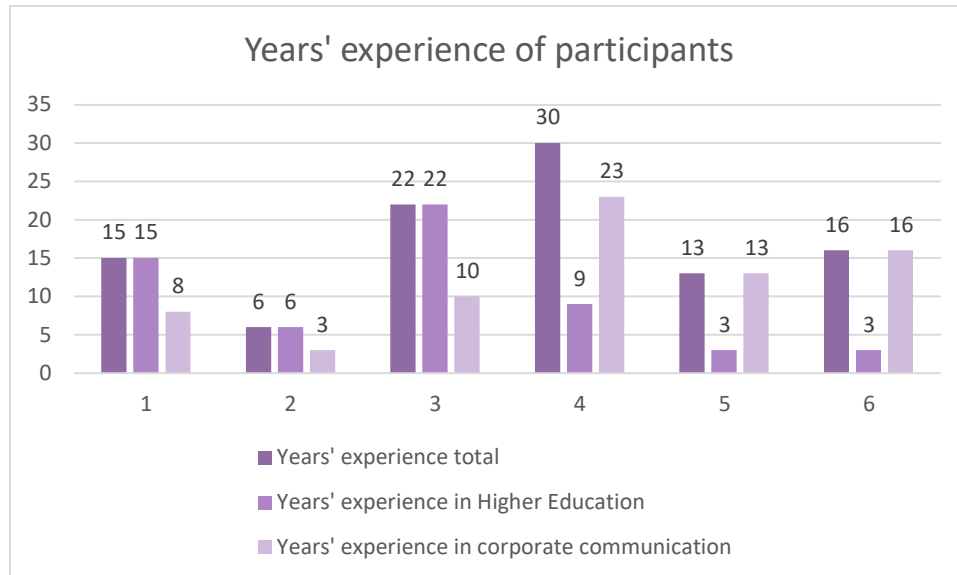


Figure 4-2: Six participants work experience depicted in years.

Half of the participants had spent their entire careers in HE, whilst the other half had spent the larger part of their careers in the private and other public sectors. This included national or provincial government and state-owned enterprises. I identify a particular participant (Pt) and the number on Figure 4-2, i.e. Pt4. This refers to the participant with 30 years total work experience, 9 of the years in HE and 23 years in fields related to corporate communication. I interviewed each of the participants using the semi-structured Interview Guide (see Appendix L). My immersive state in the context foreground fieldwork as the primary data collection method discuss in more detail in Section 4.3.2. The previous paragraphs underline the team's similarities rather than differences and this method continued during data collection, analysis and interpretation. Not to say that differences were not valued; in valuing the experience of participants different ways of doing came to the fore (Section 5.3). It is important to highlight that no 'one voice' claimed final authority (Flyvbjerg, Landman and Schram, 2012). It was about collaborative work (Section 3.2.4).

Walsham (2006) stated that the issues and data are not accessible when doing interviews whilst standing outside the social reality. My immersion in the field allowed for in-depth access to



participants. The research method D-E, as discussed in the previous section, also supports such immersion and acknowledges that an IS researcher who engages with participants actively intervenes and change the social reality (Baskerville and Myers, 2015). I am sensitive to the fact that I was immersed in the context and needed to prioritise self-reflexivity. To this end, I recognised and acknowledged my preconceptions and prejudgements in the next section. The acknowledgement was a starting point of my potential impairment and preconceived ideas, and by being cognizant of my initial position, I attempted to utilise the valuable potential of hermeneutics to reach constructive interpretations (Myers, 2004; Chughtai and Myers, 2014). In recognising and acknowledging my influences in life in Section 4.3.1.2, I am taking care not to be a 'one voice' standing out but amalgamating my participant status as a team member. I discussed the use of the Phronesis methodological guidelines as valuable indicators of direction for my conduct (see Section 1.4). In this section, the guideline dialoguing with a polyphony of voices was implemented as an example of what this entails. I discuss the enactment in more detail in Section 4.5 and the experience thereof as well as outcomes in Section 7.5.

4.3.1.1 The physical space the team occupies at the University

The engagements with participants took place in our office space at the University. Thus, I consider it appropriate to give a brief overview of the physical space the team occupied in order to contextualise the setting of the research. The team occupied office space in the University's main building on the Bloemfontein campus. This was not always the case. The team was located in a building on the opposite side of campus and rather far removed from the other administrative functions of the University. The decision was taken to move the team closer to senior management. However, the space in the building was limited. The majority of the C&M team was located on the ground floor, and some team members were on the first floor. I was on the first floor. Constructed in the 1980s the building design is closed corridors, with individual offices on each side. Though the building was neat, the décor for the most part dated from the time the building was erected. There were no communal coffee/tea rooms in the building. The setup was such that you had to make a special effort to engage with others. There were a few boardrooms and other meeting spaces in the building, mostly for larger groups. However, the offices were sized well, and nearly all contained a round meeting table (4 seaters) for engagement. We, therefore, usually opted to meet in someone's office when



the group of individuals did not exceed four to five individuals. Interviews and most of the other fieldwork engagements took place in the building. As with most main buildings at universities, it was a quiet space. There were usually important meetings taking place in some of the venues, and the employees adopted a culture of quiet respectfulness.

4.3.1.2 My preconceptions and prejudgements declared

I had a happy childhood though not a traditional one. My parents divorced when I was 6, and my outspokenly gay uncle stepped in to assist my mother in raising my younger sister and me. At the time, and in the community we lived in, both "divorce" and "gay" were issues still frowned upon. We thrived though there was a considerable amount of judgement about our family life. The adults kept us in ignorance, for which I am now thankful. Years went by, and we became 'normal' to other families, in fact, our house became the neighbourhood home where kids and teenagers preferred to be. I should mention that being a child of divorce in a family where both adults worked long hours in client service industries, created circumstances in which our sense of responsibility was perhaps overdeveloped. As adults ourselves, we took charge, even when we did not have too. I may need to acknowledge that this could have been a contributing factor to my choice of Phronesis as a lens in this research – doing the right thing for the right reasons (Shotter and Tsoukas, 2014a; Schwartz and Sharpe, 2010; Bentz and Shapiro, 1998).

I was born into the Afrikaner culture group in South Africa's apartheid years. I was nine years old in 1990 when the late former President Nelson Mandela was released from prison. This was a fear-filled time for the white Afrikaner community in SA. The adults were suddenly talking about the potential of a civil war of which, as a child, I only understood snippets. Children of Afrikaner families were privileged but also unaware of it. I did not know that the school I attended was better, or that the buses, benches and bathrooms I used were being denied to other cultural groups. This information would now begin to filter through, especially from 1992, when public spaces in SA began to open up to all. In 1995, I was 13, and it was my first year of high school. It was also the first year that the school (one of the first in the city to do so) would accept black pupils, following the democratic election in April of 1994. By now, I had gained a particular understanding of the barriers between the cultural groups. Under heavy Police presence, I attended my first day of high school. It soon became apparent that



even as teenagers, the racial divide was problematic, and it was not long before violence erupted in the hallways of the school. This was my first encounter with violence. I remember the fear, and I remember the hate on black and white faces. Matters took a few weeks to settle, and we continued our schooling; side by side but segregated through language.

Black pupils attended classes in English whilst white pupils were taught in Afrikaans, a structure that continued into my University years. Later, it became the new normal. We co-existed, but the interaction was limited. We chose to make friends in our cultural group and would share the school space but not much of anything else. Thinking back, I can only imagine what it must have been for the black pupils to attend school in a white neighbourhood, away from friends, teachers and their community. In Section 4.3.1, I discussed being immersed and the only team member from the Afrikaner group with perhaps a more Eurocentric perspective. I mention the concern that I may be too far removed from the rest of the team who is African. I completed two years at the school before we moved across the city and I had to change schools. I was now in a white Afrikaner school with almost no students of colour.

Though I was exposed to other cultural groups and different ways of living a life, my predominant educational history and cultural exposure was white Afrikaner. My formal educational history has a strong tendency towards positivism. I studied Information Technology (IT) in an engineering environment, starting in the year 2000. I enrolled for my National Diploma in IT at the CUT. In 2003 I enrolled for my BTech – honours (IT), followed by Masters (IT) in 2007. I mention the positivistic nature of my formal education to foreground my training viewpoint but more importantly, the prejudgements that may have perhaps unconsciously been the core of my approaches to work practices. Positivism is more objective of the reality requiring structure, evidence, and testing (Myers and Avison, 2002). My approach to this research was to make a shift in my thought processes. I wanted to make sense of the worldviews and be open and willing to explore the interpretations of various viewpoints. I wanted to accept the unknown and find a certain comfort in the process of exploration. Uncertainty, until you have a better understanding of the situation you are immersed in, is part and parcel for the ethnographic and Phronesis approaches (Flyvbjerg, 2001, 2006a; LeCompte and Schensul, 1999).



My work practices, however, contrary to my formal educational viewpoint, have always brought forth a social aspect. The HE sector itself is a merging point for the different individuals from all walks of life to converge, and thus a transformation focus in South Africa (discussion in Section 1.2.3). Fields I work or worked in include language practice, indigenous knowledge, communication and marketing. The social science aspect in all of the fields slowly eroded my positivism stance which has led to my openness to abductive reasoning and Phronesis in this research. I began to experience discomfort when the social was ignored in favour of prioritising the technological aspect, and consequently, I slowly sought a better understanding, not necessarily aware of the fact that I was doing so. The principle of reflexivity acknowledges that the researcher is part of the setting but capable of change and that ignoring self would be self-deception (Atkinson and Hammersley, 2007; Lareau and Shultz, 1996). The moment to engage reflexivity is described as glimpses into an alternate reality when the assumptions and ideas are disturbed, leading to learning, questioning and re-evaluating of your stance (Flyvbjerg, Landman and Schram, 2012). Phronesis appealed to me subjectively from the very first text I read. I had found a better understanding of the importance of the social aspect; awakened my awareness (Chughtai and Myers, 2014) as I continued the search and explored avenues of theory, methodology and philosophy. I did not waver in my conviction that Phronesis should be the cornerstone of my research.

In my Master's research, I became involved in the field of Indigenous Knowledge (IK) through colleagues. At first, it was minor IT matters that brought me into the projects. However, slowly a project to conceptualise a database template for capturing IK in South Africa, as well as a knowledge management framework started to take shape. I decided to pursue the research as my Master's dissertation. This was an experience that I will carry with me through life. The SA government's national Department of Science and Technology (DST) was working on an IK project to safeguard the knowledge and more importantly, the communities to whom the knowledge belongs. I spent time in rural areas of the North-West province and northern KwaZulu-Natal as part of a project team. Slowly, over the next few years, I became part of the DST IK project team. Rural communities would welcome us wholeheartedly, inviting the entire community to engage with the project team. The project team was of substantial size and always in flux. Several government departments, four to six universities and other key stakeholders, took part in the project. The group meetings could be fifty people or ten,



depending on availability and interest in the topic that was being discussed. They would take the team on tours of the village, even the respected space of the traditional healer hut. We spent time at the homes of community leaders as well. We were welcomed everywhere we went, which was a truly humbling experience. I consider the DST IK project as my first point of exposure to ethnographic research. I was not aware of the methodological nature of the work we were doing at the time. The engagements sensitised me to recognise multiple worldviews in social reality. It is perhaps due to the DST IK project that I have questioned and began to recognise the problem this research seeks to address in CMS practices.

I think it is important that I acknowledged that I have specific strengths and weaknesses which have emerged from my background (Schultze, 2000). I came to realise that I value my experiences. Hence, I leveraged these strengths and weaknesses as I ventured into the research. For one, I created discomfort for myself in the choice to approach the research qualitatively. I knew it was necessary, but I would have been far more comfortable with a mixed-method approach. In recognising the weakness, I set out (with some difficulty and struggle) to change it. I do believe that there are other ways to approach this research, and someone with a different background would probably perceive and interrogate the problem differently. I am reminded of a quote by our beloved Madiba in his book *Long Walk to Freedom*, "The brave man is not he who does not feel afraid, but he who conquers that fear".

4.3.2 Data collection methods

I called attention to the data collection methods, treatment, analysis, and interpretation of the information as I progressed through the thesis. In this section, I discuss each of these topics in detail. Table 4-4 tabulates the research plan to give an overview of the process. First, I begin by making sense of the collection methods and the practicalities thereof. I refer back to Section 4.3 wherein I mentioned that the D-E in IS paper by Baskerville and Myers (2015) was seminal, and I did not find applications of the method until later in my research. Thus, I set out to source information from papers that focus on applied research. In doing so, I considered work practices (Leijten et al., 2014; Leonardi, 2009), papers that focus on ethnographic methods (Atkinson et al., 2001; Schultze, 2000) and a D-E source – though the focus was system design not IS (Crabtree, Rouncefield and Tolmie, 2012). Incorporating the applied research from the experiences of ethnographers and other researchers into a visualisation such as a mind map



tool brought a richness to the data collection methods. I again used the experiential knowledge of others articulated in papers to better my understanding. Appendix H contains the mind map.

Schultze (2000) divulged her experience of ethnography and doing confessional writing. Schultze acknowledged that, at times, researchers are knowledge workers studying other knowledge workers, her stance stimulated my interest in her work. The perspective appealed to my researcher-practitioner position. Crabtree, Rouncefield and Tolmie (2012) foreground their combined experience of doing fieldwork to offer a comprehensive overview of the process. In my research, fieldwork rather than interviews were the primary source for data collection. Therefore, I found this to be an invaluable resource in guidance. The reason for fieldwork rather than interviews being the primary source of data collection had to do with my immersion in social reality. I discuss fieldwork in more depth in Section 4.3.2.2.

Table 4-4 is a summary of the research plan. It serves to gather aspects of the research in a quick reference format. It begins by stating the overarching research question and the three research sub-questions. The approaches to the research, the research design, the data collection methods and the data analysis follow. Immediately after the summary table is a graphic depiction of the actual research activities during 2016, 2017, 2018, and 2019. Figure 4-3 gives an overview of the data collection, analysis, interpretation and write-up phases. In the sections that follow, I discuss each of the data collection methods, and lastly, the data analysis.



OVERARCHING RESEARCH QUESTION	How should content management practices be examined, when considering performativity and the value of practitioners' experience in corporate communication?
SUB-QUESTIONS AND THE RELEVANT PROBLEM AND CONTRIBUTION CLAIMS OF EACH	1. How can Phronesis enact D-E in a performativity-oriented research context? <i>I outlined the experience of the problems this research interrogates. I drew on my involvement with the two projects – CMS Project A and B – (CMS) that did not meet the expected outcomes.</i> It highlights that the practitioner perspective and by extension their experiential knowledge is neglected in research because of a techno-centric focus, which is the first claim of this research; applies a methodology that seeks to balance the social and technological aspects. Following that, the second claim centres on D-E and its unique characteristics, which may improve practitioner involvement in system design, as they seem to also have limited involvement in the process of design. The research question asks 'How', and thus a methodological or methodological contribution that is prescriptive is expected (Chapter 6). 2. What should the D-E method interrogate for performativity in corporate communication in a HE SA context to emphasise content management practices? <i>The intent of the research in terms of individuals (communication practitioners) is to value the stakeholders (prospective students, current students, employees, alumni, partners in government, business and industry) who are considered representative of the worldviews of the community whilst consideration is given to the needs of the publicly-funded institution.</i> The third claim is that the worldview of communities served are not valued when the needs of the organisation are considered. Therefore, corporate communication practices support the task of relationship building with stakeholders. The fourth claim is that the time-consuming task of searching for information performed by communication practitioners is not justifiable. The problem claim pays attention to practices of knowledge sharing which may not be institutionalised, and thus makes the task of searching for information cumbrous. As a crucial organisational asset, the information should be reliable,



	timely and organised for employees to access and use to the benefit of the UoT. The research question asks 'What', and thus a practical contribution that is descriptive is expected (Chapter 5). 3. Given the phronetic perspective, how is the role of power supported in this research about practitioner's work practices? <i>The intent of the research in terms of organisation (the University and its contexts) is to prioritise the success of communication undertaken by the University.</i> Thus, the fifth claim is that there are significant implications for power in practitioners' work practices when the focus is not on limitation and exclusion. Further to that, the problem claim examines the potential for significance if power is seen as productive and positive. The research question asks 'How', and thus a methodological contribution that is prescriptive is expected (Chapter 6).
APPROACHES TO THE RESEARCH	Interpretive research (Section 2.4) Hermeneutics (Section 2.6) Phronesis (Section 3.2) Ethnography: Design-Ethnography (Section 4.2)
RESEARCH DESIGN	A literature review (Section 1.2) was conducted to support my abductive argument for the puzzling research problem (Section 1.3). Empirical research: reciprocity, fieldwork and interviews (Sections 4.3.2.1 to 4.3.2.3). Phronesis lens has four parts that make up the whole and is used during the research planning, data collection, data analysis and data interpretation phases (Section 3.2). 1. <i>Where are we going with CM practices?</i> Phronesis attributes are considered in two data treatment phases; reciprocity (Section 4.3.2.1), fieldwork (Section 4.3.2.2). Examples of the implementation of this part of the lens can be found in Sections 6.3 and 6.4. These are methodological contributions to the research (Chapter 6). 2. <i>Is this development desirable?</i> The Phronesis methodological guidelines when doing fieldwork (Section 4.3.2.2), interviews (4.3.2.3) and a self-assessment of conduct (Section 7.5). Examples of the implementation of this part of



	the lens can be found in Sections 5.3 and 5.4. These are practical contributions to the research (Chapter 5). 3. <i>Who gains, and who loses and by which mechanisms of power?</i> Phronesis positions power at the core of analysis and insists that organisational inquiry can only be complete if it deals with the issue of power. The role of power is composed of six features (Section 3.2.3.1), and the professional knowledge criteria (Section 3.2.3.2) also contribute to the positioning of power. Examples of the implementation of this part of the lens can be found in Sections 6.5. This is a practical contribution to the research (Chapter 6). 4. <i>What, if anything, should we do about it?</i> The focus is on two matters during the interpretation of findings, valuing the experience of the communication practitioners, and collaborative work (Section 3.2.4). The final part of the Phronesis lens is used during the interpretation of data. Examples of the implementation can be found in Chapters 5 and 6 as well as the findings (Chapter 7).
PARTICIPANTS	The Central University of Technology, Free State – Communications and Marketing department in particular corporate communication practitioners with the relevant years of experience (see Section 4.3.1).
DATA ANALYSIS	Hermeneutics and the principle of suspicion (Section 2.6), assisted by the Phronesis lens (Section 3.2).
CRITERIA FOR EVALUATING THE RESEARCH	The Phronesis value-rational questions (Section 3.2), and for self-evaluation of my conduct guided by the Phronesis methodological guidelines (Section 3.2.2) as well as evaluation of the ethnographic research (Section 4.5). The discussion of the evaluation is in Section 7.5.

Table 4-4: Summary of research planning.

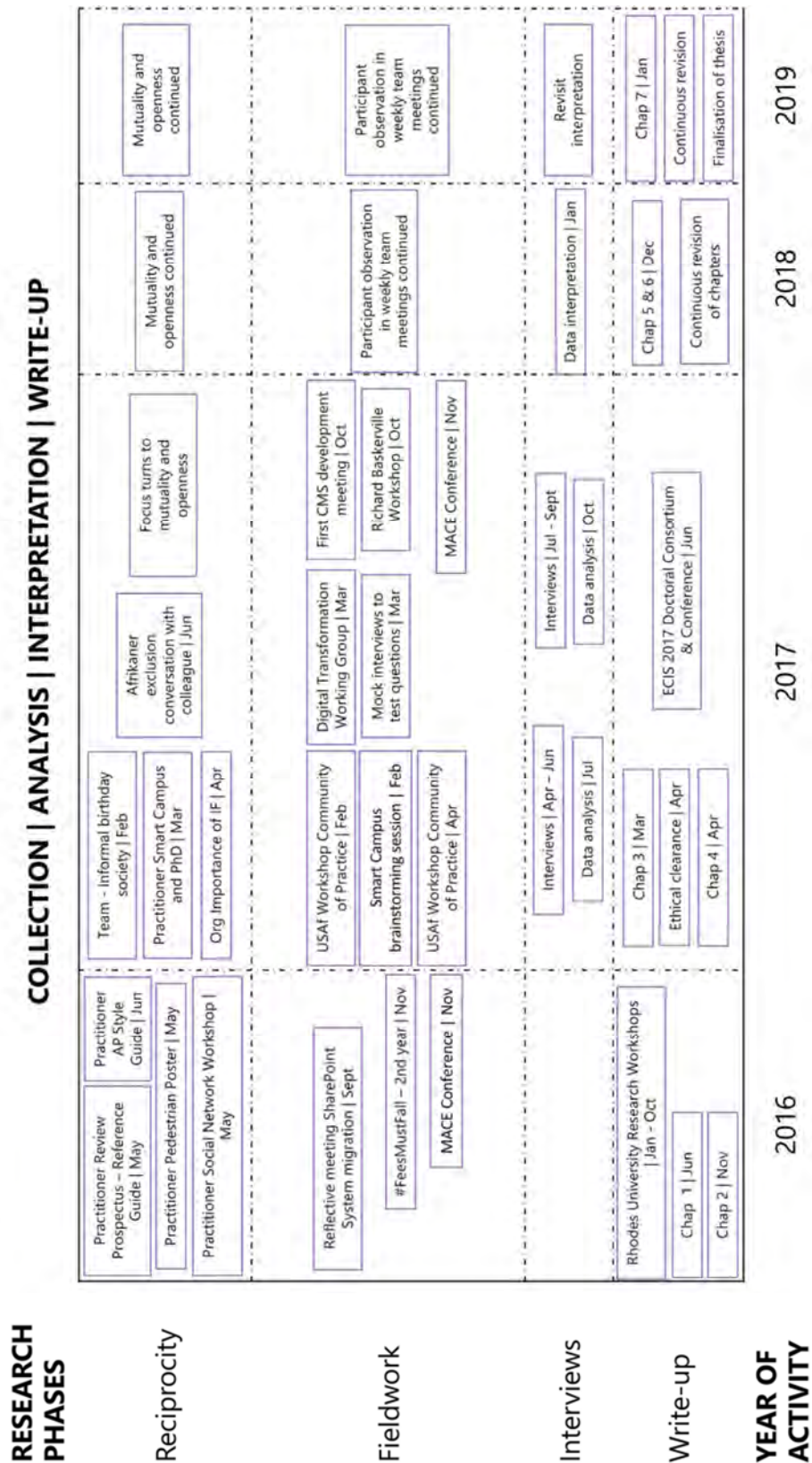


Figure 4-3: Actual research activities: collection, analysis, interpretation and write-up.



Denzin and Lincoln (2005) draw attention to co-constructed meaning with participants being reflexive. In their paper, they argue that rather than specific phases (access, data gathering, analysis) the research plan and the sensemaking processes should be continually revisited (Denzin and Lincoln, 2005). Therefore, the following sections, listed as data collection phases with particular tools for clarity was moved in to, and out of, as required during the research process. This is supported by the D-E method (Baskerville and Myers, 2015), and the hermeneutic circle (Hirschheim and Klein, 2003). The framework for D-E in IS (Section 4.3) depicts the movement possibility during the phases.

4.3.2.1 *Reciprocity*

Due to its importance, I foreground reciprocity as a data collection method rather than as part of fieldwork. In the initial documentation for this research (a proposal, ethics submission, ECIS doctoral consortium 2017), I made mention that reciprocity is a critical tool. I stated early on that reciprocity is a tool to prepare myself, the participants and other university stakeholders. I needed reciprocity to strengthen existing relationships, as a researcher-practitioner. A particular focus was on the participants. I endeavoured to improve relations in some aspect or to resolve issues that may arise from the working relationship. Early self-reflection on my relationships with colleagues brought this to the fore. Reciprocity for me was a done with a certain openness to mutuality. It was a personal choice to begin dialogue sessions with colleagues, but reciprocity is also phronetically aligned. The first exploratory question, *Where are going with CM practices?* has reciprocity as a data collection method and holds the Phronesis attributes (Section 3.2.1). The Phronesis attributes of ethics and values, led the way to the importance of creating a context of trust and taking accountability were necessary (Flyvbjerg, Landman and Schram, 2012). An example of how attributes guide the phronetic nature in reciprocity, was found in the question “what kind of responsibility do you have to the community?”. The question considered my values in consideration of the community (see Section 3.2.1), and phronetically led me to ask myself “am I doing the right thing for the right reason?”. The questions were again, exploratory. As with the Phronesis lens in Section 3.2, the questions served as phronetic guides, not necessarily needing a response. Reciprocity, in this instance, was a process of dialogue taking place and was captured as field notes and incorporated into the data analysis and interpretations in Chapters 5 and 6. In the following section, I discuss the fact that I considered reciprocity to be a starting point when I was, as



ethnographer, immersed in the organisational context. I also called attention to two other immersions to give clarity to my reasoning. The three states of immersion was a key methodological contribution from this research (Section 7.4.1).

Three states of immersion

Literature refers to immersion when doing ethnography mostly from the viewpoint of an ethnographer working their way in from the outside (van Maanen, 2011; Baskerville and Myers, 2015; Lareau and Shultz, 1996; Alvarez and Urla, 2002; Stern, 2015; Crabtree, Rouncefield and Tolmie, 2012; Gunn, Otto and Smith, 2013). Further to that, I suggest that there are, in fact, three states of immersion when doing ethnography. The traditional fieldwork immersion, and then two immersions for an organisational setting. To accommodate the ethnographers initial positioning in the empirical setting, I propose that the starting point of the research design may be different in each instance.

1. Immersion through the traditional concept of fieldwork

The relationship of the ethnographer with the research was as an external member who would gain access with the assistance of a gatekeeper (van Maanen, 2011; Atkinson and Hammersley, 2007; LeCompte and Schensul, 1999; Crabtree, Rouncefield and Tolmie, 2012; Schwartz and Sharpe, 2010; Neuman, 2014; Myers and Newman, 2007; Schultze, 2000).

2. Immersion in the organisational context

The relationship of the ethnographer with the research was as an internal stakeholder employed by the organisation. The starting point of knowing was more than in the previous state; there may have been a basic working knowledge of some practices (Crabtree, Rouncefield and Tolmie, 2012; Gunn, Otto and Smith, 2013). The access was also through a gatekeeper – another internal stakeholder of the organisation.

3. Immersion in a core team context

The third immersion was not found in literature, but it was from my experience conducting this research as an immersed researcher. The relationship of the ethnographer with the research was as an internal stakeholder employed by the organisation. A practitioner who is part of the core team, and a participant in the research (Section 3.3.2). Therefore, the



traditional ethnographic research starting point of access through a gatekeeper seemed to be an unlikely (but not necessarily impossible) route to follow. In this instance, it was not the starting point. Instead, reciprocity was the starting point (discussed above). The active engagement characteristic of D-E assisted in this state of immersion (Baskerville and Myers, 2015).

My experience in this ethnographic research brought to light the three states of immersion. The literature predominantly presents access to the empirical setting being through a gatekeeper. I put forward for consideration that there is more than one approach from which an ethnographer may begin their process of access to the empirical setting. Importantly, I identified that in the first two, the starting point of access to the empirical setting was indeed through a gatekeeper but with different levels of knowledge. However, in the third state of immersion, there was existing involvement within the context and so access to the empirical setting is a given. Thus, reciprocity was the starting point. The three states of immersion are relevant for ethnographies and D-E; in particular for ethnographers that have an organisation as their empirical setting.

4.3.2.2 Fieldwork

Fieldwork is the underlying support of interpretive research and is, of course, highly context-dependent (Walsham, 2006). It is described as a method that sees the researcher actively engaging and recording (gathering qualitative data) the social reality being studied in the naturally occurring environment not for example in a laboratory setting (Beynon-Davies, 1997; Baskerville and Myers, 2015). Myers (1999, p.12) holds the view that in doing ethnographic research fieldwork, participant-observation is one of the essential tools and labels it a "distinguishing feature" of the research methodology. In this research, fieldwork was the primary strategy for data collection. I mentioned this in Section 4.3.1, when the participants in the research were discussed. In Section 4.3.2.1 I disclosed that reciprocity was the starting point for data collection and the states of immersion were brought to the fore.

Similarly, I found that my involvement in the context foregrounded fieldwork as the primary strategy because I belong. My situatedness saw fieldwork such as participant-observation during weekly meetings as a rich source for the collection of data. I equated the meetings with group interviews of ethnography (Atkinson and Hammersley, 2007). The setting was more



conducive for participants to elaborate on work practices. Through topical discussions, the team focused attention on problems, possibilities and risks and contribute to the dialogue (see Section 3.2.3 where I discuss collaborative work in this research). This was a phronetically aligned approach. For a more extended period overview than the short-term focus meetings, I planned to conduct fieldwork using archival research, design workshops, design thinking and search conferences capturing the qualitative data collected as field notes. I discuss each collection method in more detail below. In some instances, voice notes were the tool used, and that would later be transcribed for inclusion in field notes. Included in the hermeneutic analysis are field notes that were part of the research core data. . As an immersed researcher, who is also a practitioner, my knowledge and experience contributed to the data collected. A custom template assisted in identifying my knowledge and thoughts during the process. The design of the template aided in consciously separating my observations, and opinions in an effort to identify my experience of the event during the data analysis. The Phronesis methodological guidelines that assist in informing my conduct calls for a focus on power, getting close to reality, emphasising the little things, asking 'How', etc. (see Section 3.2.2). Consequently, in the design of the template, I included space to capture thoughts, mistakes I had made, reflections, as well as questions that may have emerged during the process. Figure 4-4 is a screenshot of the template for field notes (Appendix N). The template captured field notes and the reciprocity process.

Write-up Date(s):	
Date of happening/event(s):	
Location:	
Project Phase:	
Main Event(s):	
Small/Odd Event(s):	
Main Player(s):	
What I Learned :	
Calendar of Today's Events:	
About My Research	
People:	
Process:	
Academic Thoughts:	
Mistakes I Made:	

Detailed Description of Activity {
My thoughts/Reflections [I
Emerging Questions/Analysis \{

TO DO's:	
Plans for tomorrow:	

Figure 4-4: Screenshot of the template for field notes, see Appendix N.

Archival research is used to obtain historical documents that can shed light on the social reality of the participants (Baskerville and Myers, 2015). For this research, it included documents with historical importance to this project that pertained to the CUT include policies and procedures, strategic plans, and other potentially relevant working documents such as projects plans. I have already discussed some historicity with the hermeneutic description on HE in South Africa (see Section 1.2.3). To do this narration, I used reports from the Council of Higher Education (CHE) and the then Department of Education (Department of Higher Education and Training), as well experiences of HE by South African education experts. **Design workshops** are creative sessions to “engage in various design activities such as expressing their thoughts or feelings about a new process or artefact” (Emery and Devane, 2007a cited by Baskerville and Myers, 2015). **Design thinking** is a systematic way of thinking and acting



creatively to understand and solve user requirements in a technologically feasible way, sharing insights and ideas (Lugmayr et al., 2014 cited by Baskerville and Myers, 2015). **Co-planning and co-designing** involve the designers and users working together in design (Baskerville and Myers, 2015). These creative sessions were captured as field notes. The last tool in fieldwork that I utilised is **search conferences**. In this tool, the focus was the grouping of opinions on a particular issue and the potential action put forward by the group (Emery and Devane, 2007b cited by Baskerville and Myers, 2015). However, I used the Phronesis collaborative work phrasing which is the same principle of grouping opinions and putting forward actions, with the added clarity of adding partial answers to problems, possibilities, and risks (Flyvbjerg, 2012, Flyvbjerg, Landman and Schram, 2012). I discussed collaborative work in Section 3.2.4.2.

Industry engagement took place through two particular practitioners' focus affiliations in SA HE sector. I have already outlined some details in Section 1.2.3 about Marketing, Advancement and Communication in Education (MACE), the HE community of practice which is an example of the search conferences (henceforth collaborative work) tool. MACE who, as already mentioned, hosts regional group engagements for practitioners of all levels and an annual conference. MACE fulfils a leadership role for practitioners and is administered by a board that consists of representatives from the member institutions rather than full-time employees. Another membership organisation that represents South African Universities, is Universities South Africa (USAf). USAf hosts community of practice workshops for senior communication practitioners in HE. The exploratory questions *Where are we going with CM practices?* and *Is this development desirable?* in Sections 3.2.1 and 3.2.2 have fieldwork as a collection tool.

4.3.2.3 Interviews

The primary aim of an interview is for the participant to describe their world in their words (Myers and Newman, 2007, cited by Baskerville and Myers, 2015). In this research, the ethnographer (interviewer – me) and research participants (Section 4.3.1) were colleagues and were known to each other. Thus, I used semi-structured interviews to allow for a conversation rather than a formal structured interview setting. This was done to make space for improvisation, should it be needed (Myers and Newman, 2007). The conversation or dialogical style I used to conduct interviews encouraged more participation (Denzin and Lincoln, 2005). I conducted the interviews in closed office spaces (Section 4.3.1.1). I recorded the interviews



to remove the need for taking too many notes. This improved my ability to engage in dialogue. See Appendix L for the Interview Guide. I did make provision for shorthand notes during interviews on the guide. Included as Appendix L are two examples of the notes from interviews. In the appendix, I highlight the alignment between the Phronesis exploratory questions, the relevant research questions, and the interview questions. I opted to conduct preliminary interviews with two colleagues who were in related fields but not part of the team. I intended to determine whether the interview questions were open-ended and would create the space for the dialogue I hoped to encourage. Both colleagues were busy with or had an understanding of qualitative research, and more importantly, were willing to give constructive feedback. After the interviews, the guide was adapted to incorporate feedback from the preliminary interviews.

Social mapping is a way of mapping the dimensions of an individual or community to understand the relationships within a social network (Baskerville and Myers, 2015). Mapping the professional network of each member within the team delivered a social structure of support given and received within the teams empirical setting. Captured in Appendix K, is the professional network of the participants in this research. I devised a field note template design that had an overview of the University's divisions and sections as a guide on the left, with space to capture the individual participants' network during interviews on the right. A completed example from an interview is included in Appendix K as well. In knowing who supports the team, the team could, in turn, value the individuals in various ways including workshops, privileges such as exclusive offers, as well as input on projects. In Section 5.3.1, I explain the value of the individual participants' professional network. Already mentioned as a D-E tool (Section 4.3) is co-planning and co-designing, which involved the designers and users working together in design (Baskerville and Myers, 2015). Additionally, **experience juxtaposing** assisted in the process because it involved exploring possible future experiences and comparing these with present-day experiences (Kilbourn, 2013 cited by Baskerville and Myers, 2015). The Phronesis lens referred to data collection methods to be used. The exploratory question *Is this development desirable?* in Section 3.2.2 had interviews as a collection tool.



4.3.3 Data analysis and interpretation

As mentioned in Section 2.3, in the field of Information Systems some researchers hold the view that interpretive research can improve communicative rationality in sensemaking and understanding (Hirschheim and Klein, 2003; Klein and Huynh, 2004a). This process of sensemaking and understanding may develop participants' subjective comprehension and the meaning they attach to themselves and their history, the organisation or the technology (Lee and Baskerville, 2003). I unpack the process of data analysis and focus on the role of the Phronesis lens in this section. I continue the discussion of interpretation from Chapter 2 and consider the practicality of inferring interpretation. In Chapter 2, I discussed interpretive research (Section 2.4), criticality in interpretive research (Section 2.5), hermeneutic principle of suspicion (Section 2.6). First, there was a process of sensemaking which Dey (2003) viewed as the telling of the story, and which I applied to better my understanding. Next was the classification of data from which meaningful interpretation was possible (Dey, 2005). Finally, the interpretation which meant connecting the data in a way that it brought out the understanding for others, and allowed for a research contribution that could be of significant value (Dey, 2005).

As discussed in the previous section, the data relied on the participants' viewpoint of the matter at hand, who did, at times, only have partial answers when reliant on their experiential knowledge (Flyvbjerg, Landman and Schram, 2012). The phenomena of interest were the performativity of corporate communication practices. Abductive reasoning – the strategy of inquiry – is dialogical, and it interrogates different kinds of thinking about the data (Ngwenyama and Klein, 2018; Neuman, 2014). Therefore, I explored different viewpoints. The dialogical strategy focused on experiential knowledge and used parts of the Phronesis lens at different intersections to arrange the data for interpretation. Thus, the use of abductive reasoning and Phronesis as professional knowledge (Section 3.2.3) enabled the partial answers in their experiential knowledge to become a collaborative work. Since Phronesis is concerned with both understanding and explanation as a mode of knowing, it was uniquely well suited to this type of situation (Flyvbjerg, 2001). I call attention to the previously mentioned strength in the iterative nature of hermeneutics (Section 1.3.1). When the approach to the research is ethnographical, and the research analysis focuses on experiential knowledge, the iterative nature of hermeneutics is considered invaluable (Hirschheim and Klein, 2003).



One of the many advantages of an ethnography is the rich insights into the social reality, which in this research was individuals, organisation and technology. The ethnographic data collection methods discussed in the previous section delivered quantities of textual, and audio data of communication practices for analysis. The use of narrative description provided hermeneutic descriptions of the situation within the professional environment of the university and delivered current practices as well as discussions on potential changes to practices using the experiential knowledge of the participants (Dey, 2005; Flyvbjerg, 2001). Using the power of the iterative processes found in hermeneutics, and the qualitative data analysis tool Atlas.TI to support the iteration, I intended to analyse field notes, reciprocity notes, and the recorded audio material from interviews. Atlas.TI is a qualitative data analysis and research software with a graphical interface designed to offer insight capabilities. Data relationships, statistics about the data, categorisation and mapping tools are just some of the useful capabilities of Atlas.TI, (<https://atlasti.com/>). The voice recordings were not transcribed before analysis as I planned to leverage the ability to listen to the actual interview clips when analysing data. In doing so, I intended to stay closer to the reality of the interview moment as the participants were known to me, and their voice rather than a transcription thereof offered first-level engagement with data (LeCompte and Schensul, 1999). Another reason for the decision to forego transcription is that in listening to the recorded interviews, I iteratively experienced the interviews, thus making the conscious decision to mitigate the risk of prioritising my knowledge (Flyvbjerg, 2001, 2006b, 2008b).

The analysis plan is by no means a rigid formulation followed at all cost. As with the data collection, I used the Phronesis lens to guide me in the analysis. This initial data treatment phase was free tagging of the data collected using the Phronesis attributes (Section 3.2.1) and the Phronesis methodological guidelines (Section 3.2). The intent was not to rigidly structure this moment in analysis, the attributes were phronetic guides, and my experiential knowledge also played a role. I expected the initial phase of analysis to be iterative. It also provided the option to return to the free tagging phase after the second data treatment phase had already begun. While analysing the role of power I categorised the free tagged data into Phronesis as professional knowledge (Section 3.2.3). This intertwining of the phases and processes during ethnographic research is mentioned as a regular occurrence when doing D-E (Crabtree, Rouncefield and Tolmie, 2012; Baskerville and Myers, 2015), and thus I was cognizant of the



need for research moments to intertwine. The Phronesis lens referred to when the particular part of the lens had to be used. In Section 3.2.3 the exploratory question *Who gains, and who loses and by which mechanisms of power?* indicates data analysis as the research phase during which the particular part of the lens is to be used. The exploratory question *What, if anything, should we do about it?* in Section 3.2.4 also indicated that it is during data analysis.

The final phase was the connection of the data which had to become “meaningful dialogue in context” (Flyvbjerg, 2001). First, there was the deconstruction of the data and then the reconstruction (Bentz and Shapiro, 1998). This would be the act of interpretation. According to Dey (2003), I began to examine variations, regularities, and unique outlying connections in the connection of the data. Flyvbjerg (2001) emphasised the particularity, prioritisation of the context focus rather than the generalisation of findings and therefore, an attempt to make progress towards praxis. The Phronesis lens referred to when the particular part of the lens had to be used. The exploratory question, *What, if anything, should we do about it?* in Section 3.2.4 listed data interpretation and considered work practices, praxis, and the practitioner within the social reality. The matter of ethical clearance by Rhodes University and CUT to conduct the research is discussed next in Section 4.4. In the final section of the chapter, I explain how evaluation of the ethnographic research and my self-evaluation is to be conducted (Section 4.5).

4.4 Ethical clearance for the empirical research

Ethical clearance is a well-structured and guided process at Rhodes University. Since the inception of the research, I have repeatedly been reminded and assisted to reflect. I applied for approval to the Ethical Standards Committee and received approval to conduct the research (see Appendix R). Following the approval by Rhodes University, I approached the Institutional Planning and Quality Enhancement (IPQE) Section at the Central University of Technology for permission to engage with employees on their work practices and was granted permission (see Appendix Q). The senior management of CUT was apprised of the research and its intent and supported the endeavour. Atkinson and Hammersley (2007) suggested the following ethical issues as beacons to conduct ethnographical research:

Informed consent: All participants were taken through the informed consent form before their interviews (see Appendix O). The research did not require covert participant-observation.



Privacy: The nature of the research focused on practices for the management, creation and delivering of content, which was not a privacy issue. The research attempted a better understanding and sensemaking. I conducted interviews in a private office, which afforded not only privacy but continuous engagement (Section 4.3.1.1). The participants were, therefore, able to engage in the conversation without fear or intimidation (Section 4.3.1).

Harm, exploitation and consequences for future research: The research data was anonymised. Though it cannot be guaranteed, no one can be recognised because it was a small team with niche areas of expertise, the topic was not driven by a cause or the emancipatory ideals of critical research. This research was trying to discover how we manage content to better support practitioners who write and in so doing, improve the systems used. The research will give back to the University and in so doing the risk of exploitation was not an issue of concern.

I invited the participants to partake in the research verbally followed by a formal meeting request with an individualised invitation letter to participate. The letter contained details of the research, interview process, the type of data that will be collected, the time that the participant would spend on the process, and a “no questions asked” guarantee that a participant was free to withdraw at any time during the process (Appendix P). The position of ethnographic research methodologies was to have a strong emphasis on ethics in research due to its social nature. Atkinson et al., 2001 mention that ethical issues are seldom a matter of principle but instead of practice. In Chapter 3, I constructed the Phronesis lens and then continued to refer to the lens in the following sections and this chapter to explain its purpose. The Phronesis lens in its aim to direct, examine, view and focus the research play an essential role in the evaluation of the research; likewise, in the self-evaluation of the ethnographical research. In the final section of this chapter, I discuss the details of the proposed evaluations for this research, and in Section 7.5, I discuss the experience and outcomes thereof.

4.5 Evaluation and self-evaluation of the ethnographic research

Addressed in the previous section are ethical concerns relevant to this ethnographical research. In addition to that, I put forth that the four Flyvbjergian Phronesis value-rational questions which I have used to structure the lens address some of the ethical concerns in social science research and IS. These matters of concern which include beneficence, autonomy and



justice for participants, are morals tied to culture or can they be universal, truth, rightness and sincerity, as well as fair compromises between competing interests (Atkinson et al., 2001; Mingers and Walsham, 2010). The value-rational questions, namely (1) *Where are we going?*, (2) *Is this desirable?*, (3) *What should be done?*, and (4) *Who gains, and who loses and by which mechanisms of power?* should allay the concerns (Section 3.2). Furthermore, the contemporary Phronesis attributes of values and ethics, reflection, intuition, value-judgement and virtues are an amalgamation of how research may perhaps view ethical conduct (Section 3.2.1). As mentioned previously, *Phronesis* is Aristotle's virtue that should ensure ethical behaviour in actions (Section 1.1). Thus, I was also guided by the Phronesis methodological guidelines as valuable indicators of direction for my conduct and for continuously evaluating the interpretive research (Section 3.2.2).

I have already given two examples of how the Flyvbjergian Phronesis methodological guidelines assisted me in my conduct. In Section 1.4, when I discussed the first-person writing approach taken in this research, I mention that the guide 'focus on values' calls for balancing instrumental rationality with value-rationality, and how these balance shifts focus on prioritising both the social and the technological. This view supported my involvement in the context, as I interrogated how individuals interact within the organisation and with technology. Section 3.3.2 discusses what the collaborative work entails (no 'one voice' will claim final authority) and the guideline dialoguing with a polyphony of voices which guided my conduct. As I continued my research journey, I was comfortable that Phronesis permeated the research from the planning phase and continued to be present as a lens that had a strong connection to value-judgement. I made every effort to ensure the Phronesis lens had a presence and, importantly, functioned in all the phases of the research. In Sections 3.2.1 to 3.2.4 a graphical representation underlined the presence of the particular Phronesis lens part (1 to 4) in the research phases. I also referred to the use of a particular part of the Phronesis lens as I explained the data collection methods (Section 4.3.2) and the data analysis and interpretation (Section 4.3.3) in this chapter.

I drew on the D-E requirements for evaluation proposed by Baskerville and Myers (2015) as part of the criteria in Chapters 5 and 6 because of the relative newness of the D-E in IS method. Furthermore, I added the four summarised questions proposed by Myers (1999) to conduct



ethnographical research from an interpretive stance in IS. I will answer the questions in Section 7.5. Myers (1999) draws attention to the Klein and Myers (1999) set of principles for the conduct and evaluation of interpretive field studies in IS. The summarised questions for ethnographical research from an interpretive stance are:

1. Is this a contribution to the field?
2. Does the author offer rich insights?
3. Has a significant amount of data been collected?
4. Is there sufficient information about the research method?

In Section 7.5, I discuss the evaluation of the research with the Phronesis methodological guidelines as valuable indicators of direction for my conduct (self-evaluation). I also refer to the D-E criterion I utilise in Chapter 5 and 6 (method). I answer the questions that aim to guide ethnographical research from an interpretive stance in IS (interpretive research).

4.6 Summary

This chapter explored and explained Design-Ethnography (D-E). The 'How' questions of the approach were addressed. I asserted the stance of Nader (2011) that ethnography is a theory of description. Discussed at the beginning of Section 3.2. is the appropriateness of D-E as method, and its alignment with Phronesis. I began to make sense of the collection methods and the practicalities thereof as they relate to some papers on work practices, ethnography and D-E. I used a mind map tool, see Appendix H. In Section 4.3, I mention that the D-E in IS paper by Baskerville and Myers (2015) was seminal, and I would not find applications of the method until later in my research. Thus, I set out to source information from papers that focus on applied research (Section 4.3.2). This was followed by my disclosure that fieldwork rather than interviews are the primary source for data collection based on my immersion in social reality (Section 4.3.2.2). Thereafter, I discussed reciprocity, fieldwork and interviews as the data collection methods. I foreground reciprocity as a data collection method rather than as part of fieldwork due to its importance to the research. Early self-reflection on my relationships with others brought this to the fore. Reciprocity for me was a done with a certain openness to mutuality. I discussed the fact that I consider reciprocity to be a starting point when the ethnographer is immersed in the organisational context, I put forth the three states of



immersion (Section 4.3.2.1). I discussed fieldwork as the underlying support of interpretive research. The research setting is more conducive for participants to elaborate on work practices. I disclosed that fieldwork would be conducted with the assistance of archival research, design workshops, design thinking, and search conferences captured as field notes (Section 4.3.2.2). I mentioned that the ethnographer (interviewer) and research participants (interviewees) are colleagues and are known to each other. In Section 4.3.1, I discussed the participants, the physical space the team occupies and my preconceptions and judgements (Section 4.3.1). Thus, I use semi-structured interviews to allow for a conversation rather than a formal structured interview setting, and also improvisation, should it be needed (Myers and Newman, 2007). Interviews were conducted to allow participants the space to describe their world in their words. D-E tools social mapping and experience juxtapose shall assist (Section 4.3.2.3). After that, I unpacked how data analysis unfolded in this interpretive research. I used the Phronesis lens to guide the initial data treatment phases (free tagging) and the Phronesis methodological guidelines. In the final sections of the chapter, I discussed the ethical clearance and the role of Phronesis in the evaluation of the research. Importantly, I discussed the continuous self-evaluation of the ethnographical research and how the Flyvbjergian Phronesis methodological guidelines assisted in my immersive state.

Chapter 5 will focus on the practical contributions from the research. In Chapter 6 the methodological contributions from the research are explained. In the final chapter, I summarise the thesis, give the findings that address the sub-research questions, as well as the key methodological contributions.



CHAPTER 5

5 PRACTICAL CONTRIBUTION: PERFORMATIVITY OF CORPORATE COMMUNICATION

5.1 Introduction

In the next two chapters, I will reflect on the practical work of doing the research as a researcher-practitioner. Initially, I had planned Chapters 5 and 6 as one chapter. After the conclusion of the write-up, the length of the chapter urged me to reconsider. Thus, I consider the problem and contribution claims in line with the thesis title *Using Phronesis to enact Design Ethnography: Methodological considerations for rebalancing socio-technical phenomena in CMS performativity*. The chapter split occurs on the practical contributions of this chapter and the methodological contributions in Chapter 6. In Sections 5.3 and 5.4. I address Practical Contribution Claims 3 and 4 I address the methodological and Theoretical Contribution Claims 1, 2 and 5 in Sections 6.3, 6.4 and 6.5. I cross-reference examples and outcomes from the claims discussed in Chapter 6; specifically, contributions to claims 1 and 2. The writing of the contribution claims occurred sequentially. Thus, there is the option also to read the claims in sequence. It is the reader's choice.

This chapter focuses on the two practical contributions to performative research in corporate communication. I describe the key data moments from the data analysis, and I interpret how I undertook the research. I also describe or explain the data moments using arguments and claims as evidence of inference made in the research. I seek to demonstrate that I have developed an understanding of the social reality given the research problem. I draw on the D-E requirements for evaluation proposed by Baskerville and Myers (2015) as part of the criteria to structure the section because of the relative newness of the D-E in IS method. The next section will discuss the D-E criterion and includes a table for guidance. I refer to the design phases that was explicated in the previous chapter (Section 4.3.2). Thereafter, I describe the intertwined nature of fieldwork, design and data analysis. I continue to draw on the dialogical strategy of abductive reasoning. This chapter's focus is on the D-E descriptive 'What' questions. The Phronesis lens focuses on the 'Why' questions and gives strength and reason to the potential effect on the empirical setting. This chapter's focus is the data collected from



reciprocity, fieldwork and interview methods (Section 4.3.2); the analysis thereof and interpretations made. I also explain my experience of using the Phronesis lens to enact D-E.

5.2 A reader's guide for the practical contributions

As mentioned in the previous chapter, Baskerville and Myers (2015) were cognizant of the fact that the ethnographer utilising D-E would require guidance in order to deliver high-quality research, and others (editors, reviewers, assessors) would need criteria to guide them in the as yet, unfamiliar method of D-E in IS. Thus, I drew on the proposed criteria for judging D-E in IS. There are six criteria. Included in this chapter are two, insight into design culture and research rigour (Baskerville and Myers, 2015). Table 5-1 below serves as a reading guide for the rest of the chapter. The two practical contribution claims (Section 1.3.2), the relevant D-E criterion (Baskerville and Myers, 2015) and its description as well as key themes that have emerged from the research to follow.

Contribution Claims	Relevant D-E criterion and the description of the requirement	Key themes that emerged from data
Corporate communication practices support the task of relationship building with stakeholders.	3 Insight into design culture The design ethnographer should explain why the artefact and design experience are important to the subjects in the field, providing rich insight into their culture.	Valuing the individual practitioner's professional network.
	6 Research rigour The design ethnographer should explain their active engagement throughout the design process. The design ethnographer should demonstrate authenticity.	Practitioners experience working with internal stakeholders.
The time-consuming task of searching for information performed by communication practitioners is not justifiable.	3 Insight into design culture The design ethnographer should explain why the artefact and design experience are important to the subjects in the field, providing rich insight into their culture.	Access to information.

Table 5-1: Chapter reading guide summary.



Each of the sections to follow (named for the contribution claim it is addressing) begin with a conceptual net diagram. Each figure underlines the problem claim to be addressed. The relevant D-E criterion(s), a breakdown that illustrates the particular part of the approach, method or other aspects that I describe in the section. I also include the type of contribution being made. In Section 3.2, I expressed that I enacted the Phronesis exploratory questions as a lens during the different research phases to examine the three definitive priorities, technology (CMS), individuals (communication practitioners) and the context (the University). I then proceeded to explain that the Phronesis exploratory questions were not relegated to a particular phase in the research with no function elsewhere. It was necessary to have a form of structure to construct the lens sensibly, but I underlined that the lens is flexible in its enactment. The intention of the exploratory questions throughout this research was not necessarily getting a response. Rather, it was to serve as a guide for phronetic actions when a situation is closely examined (see Section 3.2 for the full discussion). Thus, in the two practical contribution claims to follow, I let the data moments guide which data collection, data analysis, and interpretation of the data I discuss. I also describe what part of the lens and the enactment of the D-E method. Both are not necessarily described in each example. The conceptual net figures at the beginning of each contribution claim list which of the data collection, data analysis, and interpretation of the data aspects are addressed in the section. A checklist is presented as part of the evaluation in Section 7.5 to corroborate which aspects were addressed. I include at the end of each section, a summary of the practical contribution claim.

5.3 Contribution claim 3: Corporate communication practices support the task of relationship building with stakeholders

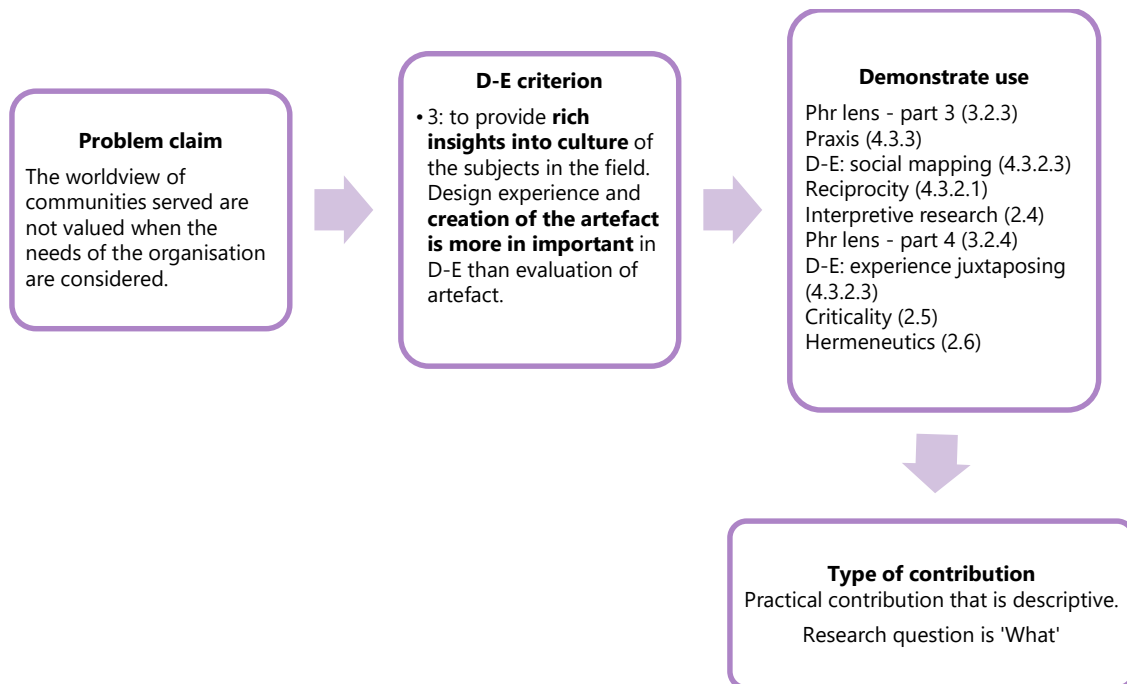


Figure 5-1: A conceptual net to describe the flow from the third problem claim.

In this section, I explain how the problem claim of the worldview of communities served are not valued when the needs of the organisation are considered. The third design criterion calls for rich insights into the social reality and prioritises the design experience in the creation of the IT/IS artefact above its evaluation. In both Sections 5.3.1 and 5.3.2 the stakeholder's worldviews are included. I examine the contribution claim 3 to explain my inference and what it means given sub-research question 2 which is *What should the D-E method interrogate for performativity in corporate communication in a HE SA context to emphasise content management practices?* The question is addressed in Section 7.3.2.

5.3.1 Valuing the individual practitioner's professional network

The necessity to interrogate the social reality of the University for communication practitioners was expressed when the research problem and performativity of the practices were established. In Sections 1.1 and 1.2.2, I mentioned that the team was responsible for internal and external communication on behalf of CUT. As content creators, managers, users, editors and disseminators for the University, their work practices comprised of strategies, tools, processes and skills related to managing these content assets for information processes and



functions (Grahlmann, et al., 2012; Munkvold, Päiväranta, & Kristine, 2006; O'Callaghan & Smits, 2005).

The data example from the interview in Section 6.4.1 explores the system wants of the participant that assisted in the management of event logistics for the university. Because event logistics do not align with work practices, the research focused on it was beyond the scope of CM practices. Nevertheless, the Phronesis exploratory questions had two outcomes. The focus in the interview response from the participant was managing logistics and sharing information with internal stakeholders and that the participant felt that the change to the particular way of communicating to internal teams would improve collaboration in practices. The team, therefore, considered the internal stakeholders as a key stakeholder group for providing services. In other words, of the six participants in the team, three underlined the importance of internal stakeholders in some way. The tag from Atlas.TI is 'Internal stakeholder most important community members'.

"If I share information with you, there is a 100% chance that you are going to share it with somebody else. If we share our content on the website, we can reach as many people as we want. But I think our internal stakeholders are the most important people. Because, say for instance, if they take a magazine here and take it home, somebody, a relative visiting from somewhere, reads that magazine and she knows something about CUT." (Pt6, Interview 1 06-04-2017)

"But in general, I like the VC's communicate. At least he is trying to put us in the light of what is happening. It helps. And it is important for people to know at least what is happening in their space, on the upper levels and stuff. He also gives some recognition to some activity that has happened in that particular period that he is writing about. So, it shows that they recognise, they see, and they are within [part of] us." (Pt3, Interview 1 05-04-2017)

A focus on the internal stakeholder group was a prominent theme during data collection. As a result, the tag 'Internal stakeholder most important community members' was taken forward in the data analysis (see Figure 5-2). In Section 4.3.3, I mentioned that first, there was the deconstruction of the data and then the reconstruction. In the connection of the data, variations, regularities and unique outlying connections were examined using the Phronesis



lens. Subsequently, during analysis, the third part of the Phronesis lens *Who gains, and who loses and by which mechanisms of power*, and in particular Phronesis as professional knowledge (Section 3.2.3.2) were used to examine the tag. The process of this analysis unfolded as follows. I used the six criteria that may guide phronetic judgements in work practices. This allowed reflection which is emphasised by Phronesis (Kinsella, 2012). As an example of the phronetic reflection, the tag 'Internal stakeholder most important community members' was sorted into the dialogical intersubjectivity code group (Atlas.TI) during the analysis. Table 5-2 is an excerpt from the table in Section 3.2.3.2 to describe what is meant by dialogical intersubjectivity, and I highlight the most relevant item for the tag.

DIALOGICAL INTERSUBJECTIVITY
▪ Phronetic judgements should recognise the sociality of consciousness, such that reflection is viewed as an individual and a social process, considered in light of both individual and collective thought. ▪ Dialogic intersubjectivity recognises both the negotiation of meaning within practice settings and the role of discourse in this process. ▪ The recognition of dialogic intersubjectivity: the extent to which the dialogic nature of interpretation is acknowledged and the extent to which 'others' versions of 'reality' are given a hearing. ▪ The practitioner-oriented towards phronesis is aware of and concerned with not only his or her interpretations in practice but also the dialogic possibilities implicit in recognition of the interpretations of clients, co-workers, and others.

Table 5-2: Excerpt from Phronesis as professional knowledge, part 4 of the lens.

On its own, the tag being identified to fit into dialogical intersubjectivity of professional knowledge seemed insignificant. However, when the tag connected with others during the phase of interpretation when variations, regularities, and unique outlying connections were examined progress was made towards praxis (Section 4.3.3). The progress, of course, made with the support of the Phronesis lens. I draw attention to the Phronesis exploratory questions which lead to continuous reflection. This also brought to the fore the praxis questions *Why is it good for the university?, How does it serve the community, teaching and learning, and/or research foci?, How does it fit the purpose of the CMS or what other existing systems?, and Who would be responsible or has influence in this matter (power)?*. Figure 5-2 depicts an excerpt from Atlas.TI to describe the tag surrounded by data tags sorted for dialogical intersubjectivity

during analysis, ready for the next phase, interpretation. The dialogical intersubjectivity code grouping consists of 116 related codes.

Show codes in group Dialogical intersubjectivity		
Name		Grounded
● ◇ Int HE has responsibility to present works to civic society		
● ◇ Int HE indiv have power to voice their opinion		
● ◇ Int Highlight importance of culture		
● ◇ Int Identify particulars of a real situation - interpretivism		
● ◇ Int Importance of gut feel linked to fast decision-making		
● ◇ Int Identify the expert of the content within org		
● ◇ Int Individuals have own plans		
● ◇ Int Indv plans should become unit plans		
● ◇ Int Internal stakeholder most important community members		
● ◇ Int Introducing structure through org doc may change position of power		
● ◇ Int Junior staff input also welcomed		
● ◇ Int Lack of resources in team		
● ◇ Int Lead community in technology		
● ◇ Int Lead people in the teams tasks		
● ◇ Int Leadership not pushing technology		
● ◇ Int Link gut feel to emotions		
● ◇ Int Link gut feel to potential manipulation of you		
● ◇ Int Links gut feel with communication as trusted source		
● ◇ Int Listen to understand		
● ◇ Int Listen when you meet their needs		
● ◇ Int More productive when happy at work		

Figure 5-2: Excerpt from Atlas.TI: the analysis of data with the tag.

The final data points extracted that related to the importance of internal stakeholders are from field notes taken during a brainstorming session to conduct a strengths, weaknesses, opportunities and threats (SWOT) analysis of CUT's readiness for a concept called Smart campus (see Figure 4-3 for an overview of actual research activities). The smart campus is an umbrella term CUT uses which refers to among other things a paperless environment, technologies to monitor electricity, room temperature, and water use (resource use), improved mobility and security (application on phone with live updates). The smart campus also includes integrated systems that are capable of bettering our data usage for statistics and thus improved decision-making capabilities.



During the session, the focus turned to the importance of 'Improved internal communication' should the university deploy such projects. The topic brought forth the following items during the discussion. That there is a need for action to be taken and acknowledgement should be given to the employees involved. The session members thought buy-in would be needed to have trust and support for the initiative from affected stakeholder groups. The discussion also touched on how the university identity would need to change. In the Atlas.TI tool I tagged this item with 'organisation in process of change', and 'role of communication' to trigger my thinking around how do we as a team support the action underlined that wants to see improved internal communication. (Field note Smart campus brainstorming session 25-02-17).

The reason I focused on this particular data point is to underline that it is not only the C&M team that considers internal stakeholder of key importance. Other engagements have also raised the matter. An extract of Appendix A follows which describes how the contributions on valuing of internal stakeholders have been included.

VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS

Good practice is that the owner of the content must first review the information before it is released. This is not to change edits to a preferred version, but to check for inaccuracies or critical information that may be missing. The editor of the content makes changes to fit the target audiences and this needs to be considered and explained to the owner in the process. Over time, this practice will instil confidence in the team's ability.

Relationship building with internal stakeholders can be used as a tool to allow power to be exercised in crisis communication.

An internal stakeholder is the most important: be sure to share relevant information with internal stakeholders, empowering them to communicate on behalf of the university.

Possible actions for doing things differently | What should be done?

Individuals will make their own assumptions if information is not shared timeously. Even simply acknowledging that a process is unfolding and there will be an update with clear guidelines on what to say if you are asked about the topic can improve the reputation of the University.

Not reporting or acknowledging a negative situation is perceived as hiding information.

Action: do not have to give full details but can simply mention and then give the actions that are being taken.



Manage rumours by telling your own story. Take responsibility of giving employee information that they can communicate in the form of Q and A or regular full but brief updates. This creates a knowledgeable communication channel during a crisis from any desk in the University.

Example: Remind employees not to listen to rumours (perhaps about retrenchments). Tell them what you are doing well in 1,2,3,4. We are working on 1,2,3. Then in the next workshop remind them that the rumour perhaps did not come to be (retrenchments) and update. This gives the internal stakeholders confidence in the information shared and belief in the system.

The served community can contribute positively to transformation if they are informed and have access to the goals and objectives of the University.

Example: A graduation booklet that contains achievements. Parents and prospective students can read about what CUT is doing and pay it forward for the University.

Events are a type of content that allows the community to have an experience of the University in the same manner as when reading a news story or watching a video.

Empower readers of content by using the right terminologies for the context in writing and doing so consistently – vocabulary lists can assist. Better the ability by reading more.

Where are we going?

Give internal stakeholders the responsibility of managing the reputation of the University. Be clear about the stakes should they choose to communicate information or give credence to rumours. "Reputation is everyone's job risk".

Can we encourage employees to read more? Or create content types that are easy to absorb and more accessible, takes less time and reading? Increased vocabulary comes from reading, which makes a better writer.

Table 5-3: Extract from Appendix A: collection of the CM practices framework.

Because I began the collection of data as reciprocity at an early phase (first in fact), I saw the priority being given to internal stakeholders before I knew what it would mean in the research. Keep in mind that the research began abductively with a puzzling problem (Section 1.2), and Phronesis foregrounds the 'Why' question (explanation). Thus, I inferred the importance of the internal stakeholder group, knowing I have an implicit understanding that would need to be explored, in order for it to become explicit. I, therefore, recognised the potential of the D-E **social mapping** tool as a way of mapping the dimensions of the individuals' professional connections in the University to understand the relationships within the social network (Baskerville and Myers, 2015). I included social mapping as a tool to be used during the interviews of the participants (Section 4.3.2.3). Though I would have what I term a professional



network map for each participant, I did not necessarily know what the value would be and relied on the engagement with participants to contribute to my abductive reasoning. One participant (Pt4) did not complete the social mapping fieldwork event. The professional network map is Appendix K, and in the paragraph that follows, I explain how my implicit understanding became explicit in the interpretive research.

The CUT C&M team had key individuals who were part of the internal stakeholder group that made contact when service was required. I refer to this group of individuals as the core network. Rather than trying – and most probably failing – to build relationships with all employees ($\pm 2\ 150$ both campuses), as a team, we relied on our professional network to support us, as we supported them through whichever service (setup event, media coverage). The professional network consisted of other practitioners who were part of the internal stakeholder group. There existed a submission of information processes from the different divisions. The process was usually linked to either a individual (with which the participants have built a relationship) or a position. The process was not formally documented. During the interviews, I used the social mapping tool of D-E to identify a core network of individuals from the internal stakeholder group. Appendix K includes the professional network of the participants as well as completed examples of the field note template I had devised. The designed template contains an overview of the University's divisions and sections as a guide on the left, with space where the individual participants' network was captured during interviews on the right. I mentioned that I could recognise the importance of mapping the professional network, but that I did not know what value, if any, it would or could contribute when I undertook to do the mapping. However, participants had several reasons and ideas that could see the team leveraging the information to the benefit of the University. During analysis, the fourth part of the Phronesis lens *What, if anything, should we do about it?* assisted in me to see the value of their experience (in some instances from other organisations). Through collaborative work, the team contributed to the reasoning (Section 3.2.4).

Experience juxtaposing is a D-E tool that assisted in this process (Section 4.3.2.3). Juxtaposing experiences lets you examine what the idea, task or opportunity seen could or should be. Also, the potential experience thereof in future, and it assists to compare these potential futures with present-day experiences. For instance, the team could use incentives such as corporate

gifts, training, an improved turnaround of delivery for the core network (by perhaps prioritising their tasks), and credit for communication sharing in reports or other documents to encourage other internal stakeholders to be part of the core network. I refer to the previous data point example from the Smart campus field notes that underlined “acknowledgement should be given to the employees involved”. Such buy-in (again, also mentioned in the Smart campus field notes) may see an improvement in the information shared with C & M team members. The professional network map is in Appendix K. The map is divided into the divisions at CUT with the sections of each. From this point forward, the map contains individuals from the internal stakeholder group who have been identified by the participants. Included is each participant (Pt1 to Pt6) as the number 1, 2, 3, 5 and 6. This excludes Pt4 who did not complete the map. It is important to note that certain individuals in the core network have a relationship with more than one of the participants. For instance, the Administrators of faculties were identified as key individuals by four participants. It may be worthwhile for the team to prioritise such relationships further. The team members could also examine which core network members they share and explore reciprocity and mutuality within smaller groups. Below is an extract from Appendix K with the faculties to describe the professional network.

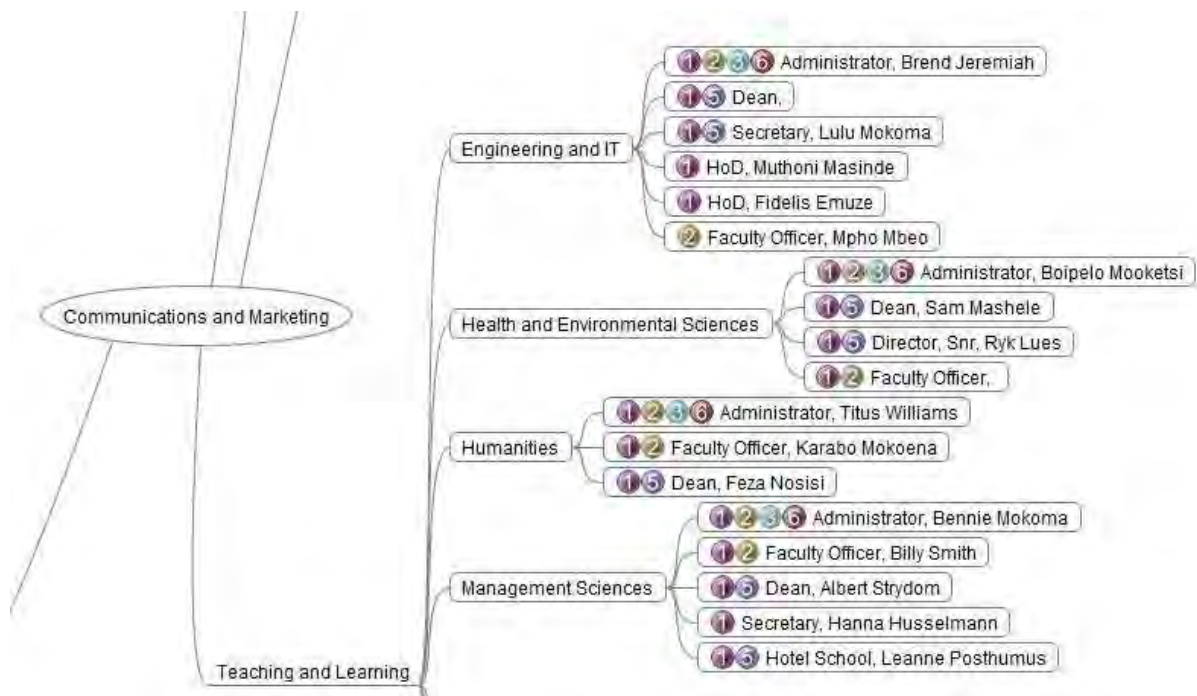


Figure 5-3: Extract from Appendix K. The four faculties with the individuals in the core network.



5.3.2 Practitioners experience working with the internal stakeholders

In the previous section, the data from interviews and field notes foreground the importance of the internal stakeholder group. Innovative design may influence IS and improve the work practices of the team when the CMS supports collaborative work (Section 6.4.1.2). Thus, in this section, I use examples from data to better the understanding of the practitioner's relationship experience with internal stakeholders. As I sought potential ways to support corporate communication practices in the task of relationship building with stakeholders, I continued to underline the data collection methods, the use of unique D-E tools, the Phronesis lens, and excerpts from the data analysis, and the various outcome contributions. However, the approach to the data is going to change in this section. I still allow the data moments to guide my approaches, but I focus on data analysis. In Section 4.1, I included, very briefly, the use of hermeneutics in the given #FeesMustFall data example. In Section 2.4, I mentioned that Klein and Myers (1999) consider the hermeneutic circle the meta-principle for interpretive research. Also, Flyvbjerg (2001) takes the stance that phronetic research is based on interpretation. For these reasons, I consider it necessary to further expand on the use of hermeneutics in this interpretive research. I, therefore, briefly summarise hermeneutics as it pertains to this research. I then describe how the hermeneutical process unfolded using data moments from the analysis.

In Section 2.6, the primary task of hermeneutics was underpinned as understanding the meaning of text or text-analogue (Myers, 2004, 1997; Myers and Avison, 2002). According to Myers (2004), an organisation is an example of text-analogue. Thus, in using the hermeneutic circle as the mode of analysis in this ethnographic research, I attempted to reach my intent of understanding what the practitioners say or do and why, and accepted that meaning is inscribed in documents, social rules and actions within the organisation (Myers, 2004; Ngwenyama and Lee, 1997). In Section 6.4.2, I unpack the contribution of the three states immersion and in that included the principle of suspicion that works hand in hand with hermeneutic principle; thus, I will forego another explanation at this point. I foregrounded my interpretive research stance with the argument of Walsham (2005), who makes a case for some individuals who prefer to focus on what is right with the world, rather than "issues such as asymmetries of power, alienation, disadvantaged groups or structural inequity" (see Section 2.4). To support my interpretive stance and focus on what is right, I turned to Phronesis. When



I expressed how I plan to use Phronesis as a lens (see Section 1.1), I emphasised what would become part 3 of the lens *Who gains, and who loses and by which mechanisms of power?*, as a way to reflect upon the rightness of the actions (Flyvbjerg, Landman and Schram, 2012). In the next paragraph, I begin to use data moments from the analysis to describe how the hermeneutical process unfolded. The data moment examples correspond with the theme of this contribution claim which is practitioners, internal stakeholders and work practices within the University. Therefore, I examine the actions and use of part 3 of the lens in this analysis of data.

When new data was introduced from the field, whether it was reciprocity, fieldwork notes or interviews, I would conduct an initial free tagging session. I did not restrict myself in my thinking about data or tools used but allowed myself to freely tag the data, following my researcher-practitioner sense into the data. I did so with the knowledge that social inquiry is subjective and this research deals with values, contexts and power phronetically. In Section 1.2, I mentioned that these are particular strongholds for Phronesis. Thus, in a second iteration, I used the Phronesis attributes from part 1 of the lens to group and reorganised the free tags. The attributes are ethics and values, reflection, intuition, value-judgement, and virtues (Section 3.2.1). The amalgamation of the attributes is a contribution made by this research. Again, there was freedom of movement in the data. I did not force a free tag into a grouping. Depending on the data set, I then moved through to part 2, and then part 3 of the lens. Each hermeneutic iteration through the data brought different elements to the fore, and I then focused on part 3 of the lens that is Phronesis as professional knowledge to describe this. In Section 4.3.3, I stated that I intend to analyse field notes, reciprocity notes and the recorded audio material from interviews. I did not transcribe the voice recordings before analysis. The result of the action was that I stay closer to the reality of the interview moment. My concern with transcription was the loss of first-level engagement with data because the participants are known to me (LeCompte and Schensul, 1999). Another reason for the decision to forego transcription was that as I listened to the recorded interviews, I iteratively experienced the interviews; thus, I felt it mitigated the risk of prioritising my knowledge (Flyvbjerg, 2001, 2006b, 2008b). Atlas.TI has the capability of tagging audio, video, images and text. I highlight this as a strength for my research design.



I drew on data moments from work practices. The Phronesis professional knowledge criterion that brought together work practices is 'Aesthetic Appeal'. I quote from Section 3.2.3.2 "...an **aesthetic vision of experience views work practice as an art** and the appreciation of that art as the aesthetic. Such a conception recognises more than instrumentalist and efficiency-based views of practice (Stein, 2001) and includes realms that fall outside of traditional epistemic lines. **The aesthetic serves as a way of considering the experience of practice itself**, in the **sense that successful practice may be conceived of as an art form.**" At this juncture, my perspective through the lens was that work practices have a meaning much like the description given above set out. It is more than a practice to be actioned, the performativity for the practitioner. In this viewpoint, ethnography assists, because a knowledge assumption discussed in Section 3.2 is that individuals attach meaning to things that result from an action (Baskerville and Myers, 2015). Herewith follow snippet data examples from participants during interviews transcribed to describe viewpoints of their work practices when the focus is not action.

"We [practitioners] teach. We do. **Communicators teach** because we are the **custodians of information** and then some things people don't even know how to do them. And then when you teach them on Thutong Today [weekly e-newsletter] that this is how we do stuff. More than anything, for me we are teaching. And **we change minds.**" (Pt6, Interview 1 06-04-2017)

"Whatever you say that is relevant and current. People [stakeholders] get to be engaged. **They start listening when you talk of current things and relevant things** to what they want. They start listening. It is important to have complete, intensive and current information." (Pt3 Interview 1 05-04-2017)

"A frustration is dealing with issues after they happened. With you not being involved from an early phase. That's why I think, communication in my view; **we** [practitioners] **are just vessels.** But communication within the context of say CUT or any other organisation; it's a management function. And, when there is a crisis and it is escalated [to executive-level], we have to be involved." (Pt4, Interview 1 27-09-2017)

In the snippet transcriptions above, I marked the focus of this analysis in bold typeface. The first snippet transcription had the view of the participant about the role they play in



communication, which is that of an educator. According to the participant, the role of the educator also has the power to influence the opinions and views of others. The particular role of the teacher could have been chosen in relation to the HE sector, but I think this unlikely. The participant came from a family who placed immense value on and have strong ties to education, and the family valued the role of teachers. I take this forward into the CM practices framework (Appendix A) to support the practitioner through the use of language, style of writing guards and editorial processing. See excerpt of the authoring tools in Table 4-6.

In the second transcription snippet, the participant viewed the art form in practices as the ability to be relevant to the stakeholder that is the target of the communication. Experience as a practitioner guided the participant to the viewpoint that the information should be relevant, complete and current to the stakeholder needs, which it is trying to engage. I analysed the viewpoint with the work practices in this performative research, which I put forth in Section 1.2.2. The communication practitioners assess the reputation and identity of the University. They then have the task to use messages, images and stories as communicative interactions **to the benefit of the University** (Schraver, 2012; Cornelissen, 2004; van Riel, 1997), **and the improved experience of stakeholders** (Rockley and Cooper, 2012). Thus, perhaps it may be said that it is a balancing act. How does it benefit the University, and engage the stakeholder in a way that their needs are met? This will, in fact, improve their experience.

The third snippet of transcription also refers to internal stakeholders, but the starting point of the information is with them being the practitioner and their particular stakeholder group. The participant believed that this changes the role of the communication practitioner. The responsibility is with the internal stakeholder. The participant saw the role as that of a facilitator that will guide the process. The focus was on the benefit of the university (mentioned in previous transcription snippet), and thus the participant considered the function of communication to be a management task. This viewpoint corroborates with that of Cornelissen (2004) in Section 1.2.2, who defines corporate communication as a management function. Though it may not seem so, this aligns with the first transcription snippet which brought to the fore that the practitioner becomes an educator who has the power to influence the opinions and views of others. The viewpoints both underline a facilitator role and the influencing of others at a given point. Thus, the contribution to support the practitioner CM



practices framework (Appendix A) is also relevant (see Table 4-7). The participant mentioned that when a situation evolves into a crisis that is escalated to executive-level, the team should be involved. I view this as part of the strategy (Appendix C). I discuss crisis communication in the first claim Section 6.3, see Table 4-8, and will forego doing so again.

These three perspectives (educator who has the power to influence the opinions and views of others, stakeholders will be engaged when their needs are met, and the practitioner becomes a facilitator) describe the viewpoint of the participants and what meaning their work practices have for them. Upon reflection, I also interpret the “we are vessels” comment to mean that in fact, communication practitioners in the particular social reality of the University have only one stakeholder group. In Sections 1.2.2 and 1.3.2, I affirmed the stakeholders to be prospective students, current students, employees, alumni, partners in government, business and industry. These are indeed the stakeholder groups of the University, but I interpreted this to mean the communication practitioners have a responsibility to each group. The team engages with all of the groups. Thus, the assumption of communication responsibility to all the groups are not unfounded. I have since come to understand that the communication practitioner supports the internal stakeholder group almost exclusively. I now interpret the comment also to mean that the stakeholder groups belong to the internal stakeholders, and the team supports them in their communication endeavours.

As an example, student recruitment is part of the C&M team. They recruit prospective students. They travel to schools, exhibitions as well as host groups on the campuses. To this end, it made sense that the prospective student group belonged to C&M team. However, the team does so with the information of internal stakeholders. Their communication to prospective students is entirely reliant on information from faculties, academic administration, financial aid, sports, residences this list goes on. Another example is communication to media. The team relies on information from the internal stakeholders to release communication to media. The data examples used in this research also focus predominantly on the internal stakeholder group, and this was not by design. As the research unfolded, it transpired to be the focus. Therefore, I now interpret the comment “we are vessels” to mean that the C&M team use their practitioner know-how to support the internal stakeholder group, which is their primary focus. The use of

the Phronesis lens in the ethnography brought forth the viewpoints by valuing the experience of the participants (Section 3.2.4.1).

AUTHORING TOOLS	
Practices	Description
Use plain language	Word Difficulty Word Length, Frequency, and Difficulty Word Concreteness Nominalisations Noun strings
Style guard	AP style guide, templates, stylesheets, editorial guidelines
Editorial processing	Correctness rules Grammar, punctuation, word usage Consistency rules Communication rules Voice (active, passive, 3rd person) Stylistic rules (stylesheets) Correct way to communicate with the intended audience Using the right vocabulary Use of controlled vocabulary (Rockley and Cooper, 2012; Schriver, 2014)
Possible actions for doing things differently What should be done?	
Define the writing by categorising the target audience in a document to assist in communication practices. Must be flexible and revisited regularly. Categories identified from conversations: Academic/research writing Professional organisational writing Awareness of happenings writing Assessment: Media Coverage form Scoring category 1: Research, Teaching and Learning related Scoring category 2: Organisational (partnerships, management) Scoring category 3: Activations, awareness, awards	
Where are we going?	
Establish a culture of urgency to disseminate information via the system with its planned helping tools and reviewer teams. Our target audiences become storytellers for the University, sharing their experience.	

Table 5-4: Extract from Appendix A: The contribution is made to the authoring tools of the CM practices framework.

FUNCTIONALITY	
DESIGN	DESCRIPTION
Functionality on digital platforms such as websites, social networks and e-mail messages have the same status as information. It is also content because you have hyperlinks, e-forms, search function and call to actions embedded in the information. There is an interactivity component (Boiko, 2005; Rockley and Cooper, 2012).	

Determine functionality needs of CMS	- Starts with purpose - Deciding on the right types of information - Deciding on the right sorts of individuals (network) - Understanding information - Finding ways to standardise information - Finding ways to track and assemble information
Standardisation – controlled vocabulary	- Information architecture - Names of content items – function and information - Create CUT controlled vocabulary taxonomy: - Reference list of terminology used in the University - Reference list of names for University facilities - Reference list of structures – academic and support services
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
Reduce time spent on the unimportant task of searching through and for content. Access CM system remotely, employees travel on a regular. Improve co-working practices with access to each other's work. The information system can release employees from waiting for the expert.	

Table 5-5: Extract from Appendix B: The contribution is made to the functionality of the CMS.

I now consider a data moment from the internal stakeholder. As I have already discussed internal stakeholder and some outcomes from data in detail above, I will be brief. The Phronesis professional knowledge criterion (Section 3.2.3.2) that brought together data about the social reality of the University and related best to the focus on internal stakeholder is 'Transformational Potential'. I quote from Section 3.2.3.2 "...rather than looking solely for pragmatic fit within the traditions of practice; one might also consider the **power of imagination and the transformative potential of a situation**. Rather than accepting received views, the practitioner-oriented towards practical wisdom critically considers **why things are as they are**, examines the taken-for-granted, and engages with possibilities for transforming the situation at hand, in the interest of justice." My perspective through the lens is that practical wisdom in the social reality led to questions about the potential of a situation. In this viewpoint, D-E assisted, because in ethnography context is treated as a socially constructed reality (Myers and Avison, 2002). Here follows the snippet data from participant Pt2 during interviews transcribed. Pt2 has the least amount of years' experience in corporate communication for the team but has double that amount of years in HE (Section 3.3.2). In other words, the participant was previously part of another team in HE which would have been in the internal stakeholder group for this team, giving the participant a unique viewpoint on the



matter. At this point, we were discussing practical wisdom and its role in the HE work context. I used the more colloquial term common sense for practical wisdom during the engagements.

"I think about one thing. Exposure is key for me. Without exposure, there's no lesson. Exposure is either through observation, through learning where you are actually researching for yourself. You want to know. **If you are not inquisitive enough, common sense dies.** You should also want to be out there to want to know about something. And that helps you to know. Individuals will be surprised, 'how do you know this' because by right you shouldn't even know. Remember when Madiba was out from jail. I remember this thing. He had so many things he knew about! He was in jail. How did he know? I think it was exposure, I think it was learning, reading newspapers and getting information through spies; I don't know I'm just thinking. I was shocked that he knew many things like this." (Pt2 Interview 2 21-06-2017)

In the snippet transcription above, I mark the focus of this analysis in bold typeface. The participant puts a high value on continuous learning and perhaps an even higher value on the willingness to do so. It may also be inferred that the participant is highlighting how to escape cultural entrapment. Now, consider this if viewed through the Phronesis lens of transformational potential, 'why things are as they are', and 'the power of imagination and the transformative potential of a situation'. I find this aligns with the meaning practitioners brought forth in their work practices. If a high value is placed on continuous learning and willingness to do so in the context, and the communication practitioners have the tools to be the facilitator in the continuous learning process; it could mean that the stakeholders' needs are met. Thus, improve their engagement with other stakeholders of the University. See Table 4-11 in Section 6.4.1, the contribution made is to the CM strategy (Appendix C), and the focus is content for improving communication.

I now consider a data moment from the practitioners. I have already discussed practitioners and some outcomes from data in detail above. The focus on social reality brought to the fore the need for reflection because praxis is a form of practice that is ethically informed, guided by reflection on practices in the social reality as well as one's practice (Section 1.2.2). The Phronesis professional knowledge criterion (Section 3.2.3.2) that brought together data about the practitioners and their view of self is 'Persuasiveness'. I quote from Section 3.2.3.2 "...the



course of action a practitioner chooses in light of his/her reflections within a particular practice context and within a particular disciplinary community. In practice, persuasiveness within the disciplinary community and the practice context is a criterion by which practitioners make judgements." Here follow the snippet data example from participants. The discussion was focused on experience as a professional in the corporate communication field.

Two reflections on corporate communication:

"You know the nice thing about communication is that **communication doesn't change. It just moves with time.** People check their stuff on your website, before it was print, print, print all the way. So, as writers and communicators, we have to find ways to move with them. But communications is just that. It doesn't change." (Pt6, Interview 1 06-04-2017)

"**Not that we should change it** [communication practices], but let's do research and see whether it still serves its purpose and then see **how best we can improve.** Because the needs of our audience, the people that we serve, they constantly change. And even technology itself keeps on improving so much that our practices are still far behind." (Pt4, Interview 1 27-09-2017)

Two reflections on the perspective used when writing content:

"You cannot be the perfect one. You are not perfect. **Yes, most of our stories [content] should be good stories, but if there is something bad, brush it. But, talk about it.** You know, 'there is a solution', 'this is what we did'". (Pt6, Interview 1 06-04-2017)

"I think in most cases, we don't look at which audiences we are communicating too. We just want to be professional and talk academic all the way. Yes, we run an academic institution, but there is a lot of things that are happening that are not academic. We always want to align. Whether it's a cultural theme – we always want to align with academic. Everything we have to add something professional into it or academic into it. **And some things are just there for awareness purposes.**" (Pt6, Interview 1 06-04-2017)



The data examples are reflections participants had on their chosen field corporate communication and the task of writing content within the field. In the snippet transcriptions, I again marked the focus of this analysis in bold typeface. I emphasise the need for and describe the use of reflection because, in Section 3.2.3, the argument for emphasising reflection suggested that it may inform better action, and direct the practitioner in changing contexts of practice (Kinsella, 2012). The first reflection on the field, the participant underlined that the field of communication does not change. It is the tools used by the practitioners and the vehicle of delivery that adapts to the times. The second reflection underlined that practices do not necessarily need to change but should be assessed and improved on if needed. The practitioner explained the reason was that the needs of the targeted stakeholders continuously change. The reflections of writing content proposed that the writing should not portray university as perfect, as no one is perfect; and that some writing is just for awareness. Thus, I agree that the Phronesis lens did emphasise reflection and the outcomes may indeed inform better action and direct the practitioner in the changing context of corporate communication. This is in alignment with the focus on praxis, which I mentioned at the beginning of the data moment from the practitioners. A focus on praxis suggests that the contribution fits into the CM Strategy (Appendix C) that would consider work practices, praxis, and the practitioner. I mentioned the concept of a strategy-as-practice in Section 1.2.2 and noted that I would discuss the concept of strategy-as-practice at this point. According to Tsoukas (2018), strategy-as-practice takes into consideration the social embeddedness of strategy making. The practice of strategy has the elements of praxis, practices and practitioners (Fenton and Langley, 2011; Corradi, Gherardi and Verzelloni, 2010). The aim of the strategy is in alignment with this research as it seeks to understand each of these elements individually (Fenton and Langley, 2011). In so doing, the strategy focus on patterns in performativity (Cooren et al., 2011). Hence, the CM Strategy contributions from this research are made with the understanding that the epistemology of performativity is a focus for the strategy making. Below is an extract from Appendix C to describe how the contributions from above on the patterns of performativity in practice contributed to consistency. Also, included with the strategy-as-practice concept.



CONSISTENCY	
Strategy	Description
Consistency in writing	
Visual consistency	Separating content from presentation and systematising presentation affords the easy maintenance of visual consistency (Clark, 2007). The University can better maintain branding by managing the visual style as a separate entity. This also affords the University the ability to refresh or completely rebrand without discarding entire CMS; only visuals can be replaced.
Separating content and design gives the writer more control of information	By separating content and design, the writer is given more control over information (Clark, 2007). It affords writer the option to reuse written information on for instance a news article and social networks; or include information on a service web page or press release. This, in turn, promotes consistency in communication practices because the writing style and information is the same across all the mentioned channels. <i>See reusability of content in CM Practices.</i>
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
Consistency in messaging is memorable.	
Possible actions for doing things differently What should be done?	
Communication practitioners change the minds of the target audiences. Communication practitioners are obliged to achieve institutional goals. To do so you have to inform, teach and share. Communication practitioners teach because they are the shared-custodians of information. How to do things, when, where, why, the purpose. When paying-it-forward with teaching the learner must have passion, creativity and must read to grow their vocabulary. Also a willingness to learn from others. The content disseminated by communication practitioner (on channels such as social networks) leads to engagement for the University which was previously not possible and should be a valued tool. Communication practitioner adapts to the context for which they are writing.	



Where are we going?

The deep level of hierarchy at the University means employees find it difficult to resonate with overall University objectives.

Example: Employees in academic departments are cocooned. They are part of a particular programme, in a department, in a faculty, in the section Teaching and Learning. They, therefore, lack an understanding of the institutions narrative description and need guidance.

Table 5-6: Extract from Appendix C: The contribution is made to the consistency in practices of the CM strategy.

5.3.3 Summary of the contribution claim

This contribution claim is practical. The intent with the examples from data above is to describe the sub-research question 'What' and descriptive nature of the contribution. The problem claim is that the worldview of communities served are not valued when the needs of the organisation are considered. The third D-E criterion calls for providing rich insights into the culture of the subject in the field. It also underlines that the design experience and creation of the artefact are more important in D-E than evaluation of artefact. The contribution claim is that corporate communication practices support the task of relationship building with stakeholders. Thus, I describe the valuing of the individual practitioner's professional network, and the contribution made to relationship building for the practitioners when doing so. In Section 5.3.1, I foregrounded that the internal stakeholder group was a persistent regularity during data collection. Subsequently, during analysis, the third part of the Phronesis lens *Who gains, and who loses and by which mechanisms of power*, and in particular Phronesis as professional knowledge (Section 3.2.3.2) were used to examine the data. I then used examples from data to explain the importance of the internal stakeholder group to practitioners, and an example from field notes underline that it is not only the communication practitioners who consider the internal stakeholder of key importance (Section 5.3.1). Appendix K contains the social structure of the participant's professional network. In Section 5.3.2, I described the practitioners experience working with the internal stakeholder group from Section 5.3.1 and used data examples transcribed from interviews. From the data, I found that communicative interactions to the benefit of the University, and the improved experience of stakeholders is a balancing act. Three perspectives from data are that educator who has the power to influence the opinions and views of others, stakeholders will be engaged when their needs are met, and



the practitioner becomes a facilitator. The interpretation of data also underlined that the C&M team use their practitioner to know how to support the internal stakeholder group, which is their primary focus and their only stakeholder group. The other listed groups belong to the internal stakeholders. Another perspective found was that if a high value is placed on continuous learning and willingness to do so in the context, and the communication practitioners have the tools to be the facilitator in the continuous learning process, it could mean that the stakeholders' needs are met. Thus, improve their engagement with other stakeholders of the University. I also elaborated on the contributions to the CM Strategy made from this research which is done with the understanding that the epistemology of performativity is a focus for the strategy making. The examples from data explained that practice contributed to consistency and was included with the strategy-as-practice concept. Throughout Sections 5.3.1 and 5.3.2 I extracted examples from Appendices A, B and C as well as examples from Atlas.TI and the thesis itself to describe the use of the Phronesis lens, praxis, reciprocity, D-E in particular social mapping, experience juxtaposing and to describe that individuals attach meaning to things that result from an action (Section 4.3). I paid particular attention to the explanation of hermeneutics, criticality and interpretivism. Therefore, I believe that the D-E criteria that call for the researcher to provide rich insights into the culture of the subject in the field, prioritising the design experience and creation of the artefact and genuineness in the explanation of active engagement have been met. Contribution claim 3 assisted with the findings to address sub-research question 2 is in Section 7.3.2.

5.4 Contribution claim 4: The time-consuming task of searching for information performed by communication practitioners is not justifiable

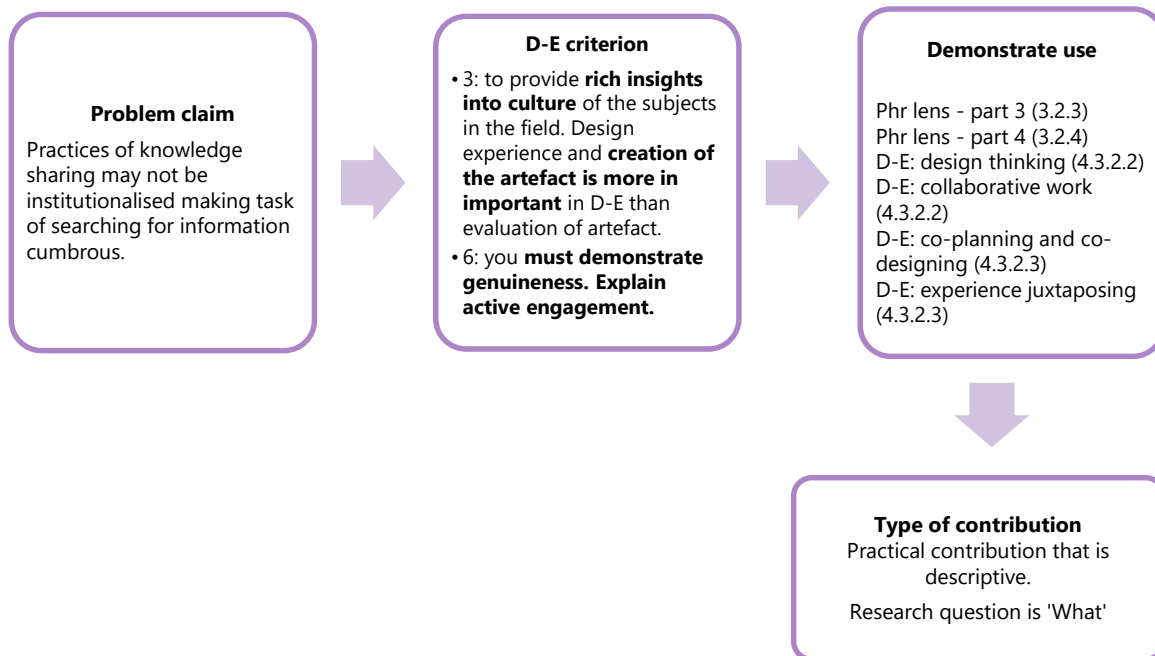


Figure 5-4: A conceptual net to describe the flow from the fourth problem claim.

In this section, I explain the problem claim of practices of knowledge sharing that may not be institutionalised, which makes the task of searching for information cumbrous. As mentioned in the previous claim, the third design criterion calls for rich insights into the social reality and prioritises the design experience in the creation of the IT/IS artefact above its evaluation. The sixth criterion asks for genuineness to be described and foregrounds active engagement. I explain the role of access to information and the role of social culture therein. I examine contribution claim 4 to explain my inference and what it means given sub-research question 2 which is *What should the D-E method interrogate for performativity in corporate communication in a HE SA context to emphasise content management practices?* In Section 7.3.2 I address the question.

In Section 1.2, I discussed that the research problem identified CMS as a focus because of the information systems (CMS Projects A and B) developed did not deliver on the expected outcomes. I will now use examples from data to call attention to the social reality of the University using the viewpoints of the research participants and internal stakeholders and



focus on the expected outcome from previous developments, better access to information. The reason for the focus is that in Section 6.4.1.2, I discuss IS innovation during design and better access to information is underlined as necessary to move forward. I first mention the listed outcomes in Section 1.3. The list was the expected outcomes from the first CMS Projects (A and B) which was not met. Another reason for my focus was to examine the contribution claim which is to make sense of the task that takes up the majority of the communication practitioners' time. I do this because as I explained in Section 1.2, I am capable of identifying which of the project outcomes in CMS Projects A and B had been met and which had not been fulfilled. I was hesitant to pronounce myself entirely capable of identifying why this was the case. Subsequently, I used abductive reasoning to assist me in inferring a better or the best possible explanation, as I did in Chapter 1 with literature. I now turn to data moments. The data moment examples correspond with the themes (expected outcomes) highlighted above, streamlined processes, better access to information, functionalities to drive engagement, reduced time searching for information and improved reusability of content. I grouped these themes rather than address each as an individual item. The examples that follow have more details about the context surrounding the data collection to describe genuineness and explain the active engagement which was called for in the sixth D-E criterion. I will also further describe D-E tools of co-planning and co-designing, design thinking and the use of experience juxtaposing (Section 4.3.2).

I draw on data moments from access to information. During a brainstorming session which I also used in Section 5.3.1, senior management and academic employees were asked to contribute their viewpoints on the possibilities and risks for CUT being a Smart campus. Briefly, the Smart campus is an umbrella term CUT uses which refers to among other things a paperless environment, technologies to monitor electricity, room temperature, and water use (resource use), improved mobility and security (application on phone with live updates). The smart campus also includes integrated systems that are capable of bettering our data usage for statistics and thus improved decision-making capabilities. The outcomes were demonstrated as a SWOT analysis. The session began with the participants being given the opportunity to first share 'how I feel about campus'. This created a space for the meeting participants to make known their initial perceptions. It was a decisive engagement overall, but also a reality check in terms of our readiness for the Smart campus concept. An example would be the different



viewpoints of whether data is subpar, or the systems are incapable of supporting better information delivery. A debate between the two section heads responsible for data integrity and systems ensued, each of course argued for their section. The result was that the group contributed viewpoints to the debate. The outcome was that we could do better in both areas if systems were more integrated, and data could flow with fewer restrictions. Both section heads supported the outcome, and the session continued to explore the topic. Therefore, my first focus will be on the aspect of the integrated system. The first data moment from the field notes is 'e-mail system main source of information'.

The section head for systems indicated that at this point, the university has about 35% of the systems integrated as we work towards Smart campus. We are using $\pm$ 60 systems, not including the individually used per section/faculty/department software. One of the significant issues we have at the moment is the optimisation of these systems. Funds have now been allocated by the management committee (MANCOM) to support this important endeavour. MS Outlook (e-mail application) is the most important of all systems. He commented, "ITS can be offline for two days without issues, but Outlook is off for 15 minutes, and it is chaos." (Field note Smart campus brainstorming session 25-02-17)

ITS is the system that runs finance, human resources and student data, which makes it a critical system. It is considered the central system. Hence, the comment made about ITS being offline vs our e-mail application is a tongue in cheek reference to the University culture of e-mail being the primary source of information. There was some chuckling from the room at that stage. I identify the issue of access to information is via e-mail in Section 6.4.1.2 as well. The D-E tool **design thinking**, which is a systematic way to think and act creatively. Design thinking explores how to understand and solve user requirements in a technologically feasible way through shared insights and ideas (Section 4.3.2.2). Through design thinking, the capability to access content created on behalf of the University was found to improve our ability to deliver more content. The finding foregrounds that this would streamline processes, improve access to information, reduce time searching for information, and improve reusability of content.

I then corroborated the findings of the importance and change needed in access to information. I used analysed tagged data from interviews to discern the reflection on access to



information by the participants. I turn to the Phronesis professional knowledge criterion (Section 3.2.3.2) which brought together work practices related to access to information, 'Pragmatic Usefulness'. I quote from Section 3.2.3.2 ".....for practitioners to make **judgements in practice are the criterion of pragmatic appeal**. The notion of pragmatic usefulness refers to the idea of **practice fit or viability within the practitioner's experiential world**." What I am considering then is the judgement in practice for its usefulness and fit or viability within the social reality. Here follow snippet data examples from participants during interviews transcribed to describe viewpoints of their work practices related to access to information.

Tag: 'Sharing info with all not a CUT culture'

"Can I tell you how easy that [sharing information] was done with my previous employer. Whether it was related to you or not, each team had a contact group. At any time if they are sending information it goes to the group. Let's say I can't access my e-mail and we are at the same meeting. Not a problem, it was sent to all of us in a group. That is how we eliminated all of that. The first time I tried to do that here people were like, don't copy me."

Interviewer says, "It's not a culture we have".

Interviewee continues, "But it's a culture we need. Reason being, certain things happen with information in organisations that are not in sync. It takes away from being knowledgeable as a group. Because at any given point, I don't know what you are trying to do." (Pt5, Interview 1 26-04-2017)

"Let's start to value information. If we start to value any document you are receiving. Let's start to have a culture that says every information that is received; there has to be a culture of immediately communicating – passing it where it is supposed to go." (Pt2, Interview 2 27-06-2017)

"I have my own job that I am being paid for so I can't do that [internal stakeholders sharing information with the team]. So, it needs to be part of their KPAs. They are communicators within the businesses [refers to faculties, departments]. It's [then] recognised as part of your job." (Pt6 Interview 2 26-04-2017)



The above data examples emphasise the university's over-reliance on the e-mail application. It is the primary communication tool for the internal stakeholder group. More importantly, the data examples underlined that the culture of sharing information is low. This would mean that even if the systems were in place, the culture is not conducive for collaboration on tasks, and this would need to be addressed in order to improve access to information. Therefore, I find that indeed the problem claim that practices of knowledge sharing not institutionalised, which makes the task of searching for information cumbersome has merit and is cause for concern. Below is an extract from Appendix C to describe how the contributions from above on the culture of information share contributes to improved access to information and have been included with the strategy-as-practice concept (discussed in Section 5.3.2).

CONTEXT RULES	
Practices	Description
Understand the context to set up these rules. To mix and match content automatically, a set of rules governing process is needed.	
Relationship rules	Small sets of content elements: Back-end of CMS: banners 1, navigation stylesheets 1, content elements (ex. 1,2,4). Front-end employee portal: banners 2, navigation stylesheets 2, content elements (ex. 1,2,3,4). Front-end public: banners 3, navigation stylesheets 3, content elements (ex. 1,4). Small sets of audience types: The back-end of CMS: contributors, editors – pages must be professional, and contain an average amount of content. Front-end employee portal: pages should be vibrant and contain the full content. Front-end public: pages must look accessible, easy to use; and should contain a minimum amount of content. Small set of publications: Detect audience type by login. The employee who do the tasks, identified by their roles (Boiko, 2005; Rockley and Cooper, 2012). Redirect to the appropriate template set based on detection. In templates include applicable banners, navigation, background, style sheets by audience type as specified in CMS repository. See guidelines for design (Appendix B).



Responsibilities of each audience type must be stipulated clearly	The steps to complete a particular piece of work should be outlined in Step 1 to complete. The flow of tasks, as performed by the employees belonging to a particular audience group, should illustrate the interactions and interdependencies among audience types. Everything that must get done within the process explained fully with examples. Tasks include Authoring, editing, reviewing, approval, publishing, and distribution using CM practices to guide employee.
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
Possible actions for doing things differently What should be done?	
Create a network of employees in University that will feed information through, join student recruitment on marketing outings or assist with events. Each team member is encouraged to build own relationships but to the benefit of the entire team. Create and use incentive system such as workshops, pre-release of information, niche branded items etc. to build good relations. Explore the use of chat groups as a communication tool for employees to improve engagement. Example: Instead of over-reliance on e-mail, ask short answer questions on the chat group then formalise with e-mail. University should actively drive skills development of employees, at the moment employees feels very little incentive or encouragement to upskill. Teach other teams in university (and outside partners) how we operate as a team, become leaders in their own work. Team reputation is important to team spirit. Example: a story that has been submitted year on year with very little content change was refused for publication. When the enquiry on why, the fact that there is no new angle, content or concept was not given through. The reputation of the team is not protected by senior but rather the story gets a sudden yes and it is portrayed as if the employee has misinterpreted the situation. This abuse of power affects team reputation. When media enquiries are submitted, there is a period of running around to find the information which could be curbed by establishing a committee and the alert process from the executive offices.	



Where are we going?
Instil a “we are co-creating” attitude towards planning and design of an event or content, publication etc. with the responsible employee (not on your team) to evoke a sense of ownership of the task to be done.

Table 5-7: Extract from Appendix C: The contribution is made to the context rules of the CM strategy.

I continued with the D-E method **co-planning and co-designing** (working together in design) to interrogate the performativity of corporate communication with the participants. The participants contributed their practices during a particular question in interviews. I was able also to conduct participant-observation as I was immersed in the context. These outcomes were combined to become the three outcomes (Appendix A, B and C) from which I have extracted and referred to in this Chapter. The final question during the interviews was whether the participant had ever been part of designing an information system. Most of the participants have not been part of such a design before. In Section 6.4.1, I discuss the roles when I engaged in system design. The practitioners could not elaborate on the technical design of the functions, for instance, the security levels, tags that would be needed, how long the information should be stored in the active system, and it was not expected. Therefore, their idea for the design and my experience in the field of IT design and development complemented each other. We completed the **design thinking** mostly through **experience juxtaposing** exploring possible future experiences and comparing these with present-day experiences (Section 4.3.2.3) I consider this to be **collaborative work** which is a D-E fieldwork tool (Section 4.3.2.3). The CM practices framework (Appendix A), the guidelines for design (Appendix B), and the CM strategy (Appendix C) are the outcomes of the collaborative work.

5.4.1 Summary of the contribution claim

This contribution claim is practical. The intent with the examples from data above is to describe the sub-research question ‘What’ and descriptive nature of the contribution. The problem claim is that practices of knowledge sharing may not be institutionalised, making the task of searching for information cumbersome. The third D-E criterion calls for providing rich insights into the culture of the subject in the field. It also underlines that the design experience and creation of the artefact are more important in D-E than evaluation of the artefact. The sixth criterion calls for genuineness being described and the explanation of active engagement. The



contribution claim is that the time-consuming task of searching for information performed by communication practitioners is not justifiable. Thus, I describe the social reality of the University and use the viewpoints of the research participants and internal stakeholders to focus on the expected outcome, better access to information. The reason for the focus is that in Section 6.4.1.2, I discuss IS innovation during design and better access to information is underlined as necessary to move forward. Another reason for my focus is to unpack the contribution claim, which is to make sense of the task that takes up the majority of the communication practitioners' time – searching for information. With this in mind, I draw on data moments from access to information which brought forth field notes on the Smart Campus brainstorming session. In the session, the over-reliance on the e-mail application comes to the fore. I identify the issue of access to information is via e-mail in Section 6.4.1.2 as well. I corroborate the findings of the importance and change needed in access to information with data moments from interviews to discern the participants' reflection on access. I viewed the data through Part 3 of the lens, Phronesis professional knowledge, in particular, 'pragmatic usefulness'. I found that indeed the participants agree, the university over relies on e-mail application. It is the primary communication tool for the internal stakeholder group. More importantly, the data examples underline that the culture of information share is low. This would mean even if the systems were in place, the culture is not conducive for collaboration on tasks, and this would need to be addressed in order to improve access to information. The examples from data contributed to the culture of sharing information would need improved access to information which was included in the CM Strategy (Appendix C) using the strategy-as-practice concept (Section 5.3.2). I paid particular attention to the explanation of D-E tools, design thinking, collaborative work, experience juxtaposing, as well as co-planning and co-designing. Therefore, I believe that the D-E criteria of providing rich insights into the culture of the subject in the field, prioritising the design experience and creation of the artefact and genuineness in the explanation of active engagement have been met. Contribution claim 4 assists with the findings to address sub-research question 2 is in Section 7.3.2.

5.5 Summary

I reflected and described the practical work of doing the research as a researcher-practitioner. This chapter focused on the two practical contributions to performative research in corporate



communication. I explained specific instances of the data analysis and explained how I undertook the research. I used narrative description to provide hermeneutic descriptions. To describe that I have developed an understanding of the social reality given the research problem, I described what could be done to better support of the communication practitioners. I allowed the data moments to guide my approaches and used the D-E criterion as evaluative tools. The D-E criterion assessed whether I deliver quality research that has value to the fields.

This chapter focused on the D-E descriptive 'What' questions. The Phronesis lens focused on the 'Why' questions and gave strength and reason to the potential effect on the empirical setting. Contribution Claim 3 was that corporate communication practices support the task of relationship building with stakeholders. I described the value of the individual practitioner's professional network, and the contribution made to relationship building for the practitioners when doing so. I used examples from data to describe the importance of the internal stakeholder group to practitioners. The summary of the contribution contains more detail (Section 5.3.3). In Section 7.3.2 I deliver the findings of the contribution claim as part of sub-research question 2. Contribution claim 4, was that the time-consuming task of searching for information performed by communication practitioners is not justifiable. I described the social reality of the University, using the viewpoints of the research participants and internal stakeholders and focus on the expected outcome, better access to information. I found that the participants agreed, the university over-relied on e-mail application. More importantly, the data examples underlined that the culture of sharing information was low. The summary of the contribution contains more detail (Section 5.4.1). In Section 7.3.2 I deliver the findings of the contribution claim as part of sub-research question 2. In Chapter 6, the methodological contributions from the research are explained. I address the methodological and theoretical contribution claims 1, 2 and 5 in Sections 6.3, 6.4 and 6.5.



CHAPTER 6

6 METHODOLOGICAL AND THEORETICAL CONTRIBUTIONS: UNDERTAKING PHRONESIS TO ENACT DESIGN-ETHNOGRAPHY RESEARCH

6.1 Introduction

In the previous chapter, I illustrated the practical contributions of claims 3 and 4 which focused on the D-E descriptive 'What' questions. Using contemporary Phronesis to enact D-E research is a key the focus of this chapter. The contributions are predominantly methodological. I begin by continuing the demonstration of the approaches. I demonstrate specific instances of the data analysis and interpret, and how I undertook the research. I select key data moments from narrative description participants provided to provide hermeneutic descriptions that support arguments and claims made in the research. I seek to describe that I have developed an understanding of the social reality given the research problem. I draw on the D-E requirements for evaluation proposed by Baskerville and Myers (2015) as part of the criteria to structure the chapter because of the relative newness of the D-E in the IS method.

The next section will discuss the D-E criterion and includes a table for guidance. I refer to the design phases that was explicated in the previous chapter (Section 4.3.2). The research is itself a practice of power (Section 3.2.3 and 6.4.1.3). My status as an immersed researcher-practitioner needed some careful consideration, and the strategy of inquiry interrogates different kinds of thinking about the data so that different viewpoints can be explored (Ngwenyama and Klein, 2018; Neuman, 2014). Thus, in this chapter, I will also describe the intertwined nature of fieldwork, design, and the data analysis process. This chapter focus is on the D-E prescriptive 'How' questions. The Phronesis lens focuses on the 'Why' questions and gives strength and reason to the potential effect on the empirical setting.



6.2 A reader's guide for methodological and theoretical contributions

As mentioned in the introduction of the chapter, I drew on the proposed criteria for judging D-E in IS. Baskerville and Myers (2015) were cognizant of the fact that the ethnographer utilising D-E would require guidance in order to deliver high-quality research, and others (editors, reviewers, assessors) would need criteria to guide them in the as yet, unfamiliar method of D-E in IS. There are six criteria. Included in the chapter are four criteria; shared experience in design, methodological contribution, plausibility, and criticality (Baskerville and Myers, 2015). The chapter focus is the data collected from reciprocity, fieldwork and interview methods (Section 4.3.2); the analysis thereof and interpretations made. I also demonstrate my experience of using the Phronesis lens to enact D-E. Table 6-1 serves as a reading guide for the rest of the chapter. The three methodological contribution claims (Section 1.3.2), the relevant D-E criterion (Baskerville and Myers, 2015) and its description as well as key themes that have emerged from the research.

Contribution Claims	Relevant D-E criterion and the description of the requirement	Key themes emerging from data
Phronesis seeks to balance the social and technological aspects.	5 Criticality The design ethnographer should critically reflect upon and challenge taken-for-granted assumptions and be encouraged to imagine new ways of designing artefacts.	Phronesis lens
A practitioners' contribution to the design process is different when leveraging the uniqueness of the D-E method.	2 Theoretical contribution The design ethnographer should describe a theory that explains how and why individuals create artefacts and adapt them to their environment.	Contributing to the socio-technical nature of IS.



	4 Plausibility The design-ethnography should be plausible and a contribution to new knowledge in IS; it should demonstrate insight into the meaning and relevance of the design practices in the particular context to designers in other contexts.	New knowledge in IS – three states of immersion.
There are significant implications for power in practitioners' work practices when the focus is not on limitation and exclusion.	1 Shared experience in design The design ethnographer should demonstrate their experience in design and their understanding of social and cultural practices and values.	The role of power in the contexts

Table 6-1: Chapter reading guide summary.

Each of the sections to follow (named for the contribution claim it is addressing) begins with a conceptual net diagram. Each figure underlines the problem claim to be addressed. The relevant D-E criteria, a breakdown that demonstrates the particular part of the approach, method or other aspects that I demonstrate in the section. I also include the type of contribution being made. Again, I emphasise the Phronesis lens and the discussions that demonstrate data collection, data analysis, interpretations of the data in the sections to follow. In Section 3.2, I expressed that I would enact the Phronesis exploratory questions as a lens during the different research phases to examine the three definitive priorities, technology (CMS), individuals (communication practitioners), and the context (the University). However, I go on to demonstrate that the Phronesis exploratory questions are not relegated to a particular phase in the research with no function elsewhere. It was necessary to have a form of structure to construct the lens sensibly, but I underline that it is not a rigid 'to follow' form. This transpired in the previous chapter and continues in this one. The intention of the exploratory questions throughout this research is not necessarily getting a response. Rather, it is to serve as a guide for phronetic actions when a situation is closely examined (see Section 3.2 for the full discussion). Thus, in the three methodological contribution claims to follow, I let the data moments guide which data collection, data analysis, and interpretation of the data aspects I discuss and what part of the lens and enactment of D-E method is described. Both are not necessarily demonstrated in each example. The conceptual net figures at the beginning of each contribution claim list which of the data collection, data analysis, and interpretation of

the data aspects are addressed in the section. In Section 7.5 a checklist is presented as part of the evaluation to corroborate data aspects. Included in each section is a summary of the contribution claim.

6.3 Contribution claim 1: Phronesis seeks to balance the social and technological aspects

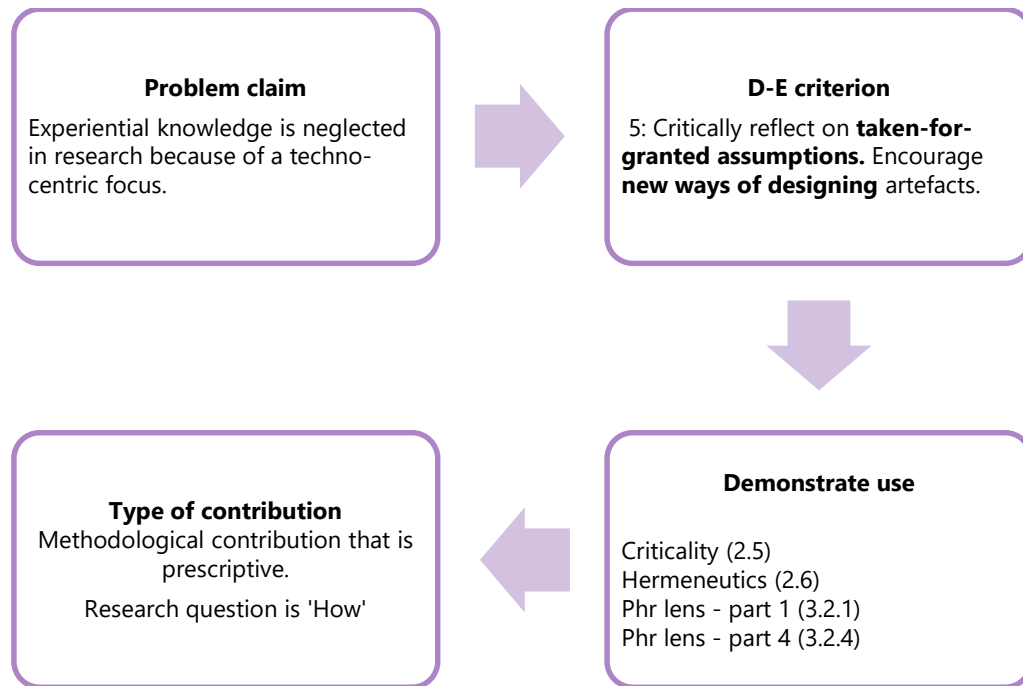


Figure 6-1: A conceptual net to demonstrate the flow from the first problem claim.

In this section, I demonstrate how the problem claim of experiential knowledge being neglected in research because of techno-centric focus led to identifying the knowledge assumptions that require Phronesis and D-E (Section 3.2). This, of course, was done after the approaches were deemed appropriate given the research problem (Sections 1.4). Then, I focus attention on whether contributions to new ways of design in IS have come to the fore. These are captured in an improved CM practices framework (Appendix A), better guidelines for design with practitioners as participants (Appendix B), and a more adept CM strategy for the University (Appendix C). I examine contribution claim 1 to demonstrate my inference and what it means given the sub-research question 1, which is *How can Phronesis enact D-E in a performativity-oriented research context?* In Section 7.3.1 I address the question.



Ngwenyama and Klein (2018) draw attention to the essentiality of letting the problem context inform your understanding of the research and literature problems when studying a puzzling problem phronetically in a socially constructed reality (Section 1.2). The knowledge assumptions for a research problem that requires Phronesis are that the particular social reality will allow for reflection, judgement and praxis which is crucial in the development of comprehensive insight (Kinsella and Pitman, 2012; Flyvbjerg, 2008b). I drew on the example of the #FeesMustFall movement (Section 1.2.3) to demonstrate how a particular problem context developed my understanding of the social reality and allowed for reflection, judgement and praxis. I began with a brief summary from Section 1.2.3, which calls attention to the experiences of practitioners during the #FeesMustFall movement. I then used example data to demonstrate how the analysis process unfolded hermeneutically (Section 2.6) from the field notes that related to #FeesMustFall. I also demonstrated the role of the Phronesis lens at the first phase of data analysis, using the Phronesis attributes (Section 3.2.1). The data examples used here were chosen to underline the experience of practitioners across the HE sector in a particular social reality informed by influences of government, society and stakeholder groups from various Universities. This is referred to as #FeesMustFall. Thus, the examples gave context to the research from a HE and national level, and the particular data sets may not be taken forward for CUT outcomes which are captured in the CM practices framework (Appendix A), guidelines for design (Appendix B), and CM strategy (Appendix C). More importantly, that this was a methodological contribution claim and the examples are tools to demonstrate the use of Phronesis (Section 3.2), criticality and hermeneutics (Sections 2.5 and 2.6). In the example, I described HE in South Africa. I utilised the CHE reports and 2016 MACE conference field notes to give an account of the social reality of the sector.

This focus on the sector at the time foregrounded the #FeesMustFall movement, which influenced the corporate communication practices of the sector, and in turn, affected the practitioners. Some key aspects that came to the fore are the use of hashtag #FeesMustFall which was used to drive the message and connect the student-led protest movement across the country. #FeesMustFall was communication driven by user-generated content. User-generated content is when the users of your content start also to generate content, sharing their views and experiences (Marsland, 2009). Established crisis communication plans and experience fell short because the sector

was unprepared for the students preferring to believe and accept the voices of their peers and disregarding the official communication channels of the Universities and the Department of Higher Education and Training. At the MACE Conferences of 2016 and 2017 communication practitioners of MACE had shared what they know and how they approached situations during #FeesMustFall. The communication experience had been on an unprecedented scale affecting communication practitioners across the HE sector (Section 1.2.3).

The screenshots in Figure 6-2 are from my field notes at the 2016 MACE Conference. In particular, during a session where the practitioners discussed the #FeesMustFall movement and their experience thereof. I discussed in Section 4.3.3 that I used the qualitative data analysis tool Atlas.TI. I have redacted the names of the practitioners and the universities. The conversations are meant to foreground the situatedness of HE, rather than the particulars of the experience for various universities. On the left of Figure 6-2 are my field notes from the session(s). On the right are the tags I had added during my analysis of the data. In Section 6.5.1, I demonstrate the role of power in the HE sector which relates to these data moments. There is an expectation that power in the practices and in communication are influenced by and on behalf of the University.

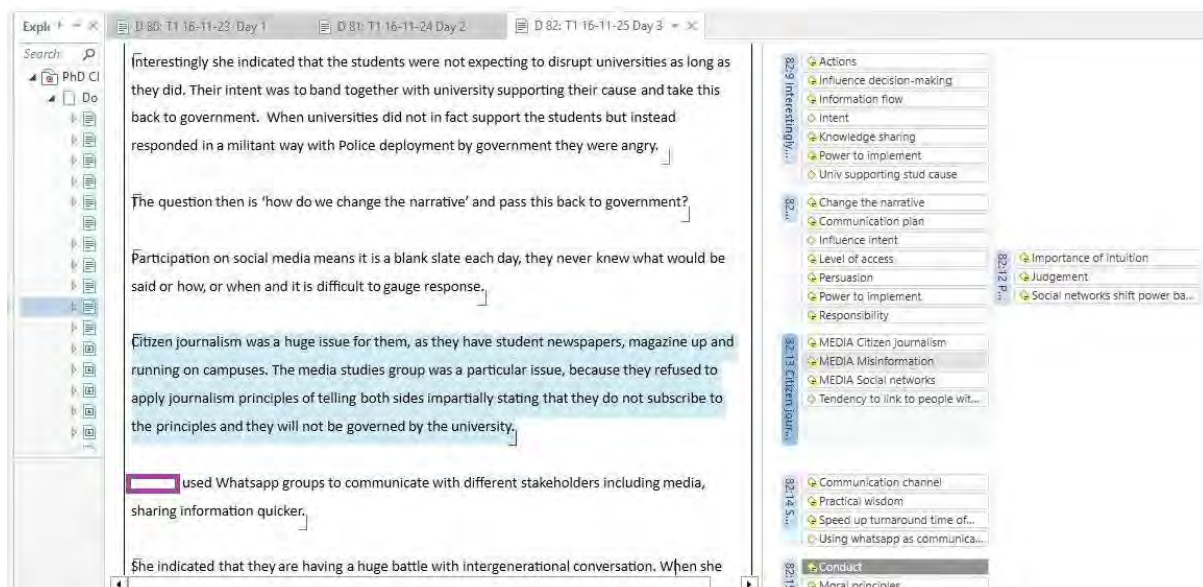


Figure 6-2: Atlas.TI screenshot 1 2016 MACE Conference field notes of the third day, 25/11/2016.



Hermeneutics being the mode of analysis for this interpretive research means that the results in Figure 6-2 are after several iterations through the data (Section 2.6). As an example, on Figure 6-2 above (highlighted text) the tags are 'MEDIA Citizen Journalism', 'MEDIA Misinformation', 'MEDIA Social networks'. The category MEDIA was not part of the initial free tagging. After some reiteration, I started to recognise groupings. I use MEDIA as an example in this instance because the tag grouping links to #FeesMustFall. Returning to the data cyclically meant that at different phases, I reworked, and grouped the information. As I grew my understanding of performativity – which is the epistemology – and rebalancing the social and the technology – which is the phenomena of interest (Section 3.2). In Table 6-2 below, I have extracted the marked content on Figure 6-2 above from the Atlas.TI system for the sake of clarity in the discussion. The first column has the field note item, followed by the tags, and then as I continued working through the data, I began to add analysis notes. The last field lists other items across my research reciprocity notes, field notes, interviews that are tagged with the same tag item. This demonstrates linkages in the data. Through the hermeneutic iteration, I made connections and group tags to align data analysis for interpretation. In cases where the same item is tagged with multiple tags in the MEDIA grouping, I only added the unique items to the table and referred to the other items.

Field note	Tag	Analysis note
Citizen journalism was a huge issue for them, as they have student newspapers and magazine up and running on campuses. The media studies group was a particular issue because they refused to apply journalism principles of telling both sides impartially stating that they do not subscribe to the principles and they	MEDIA Citizen Journalism	Every member of society or a particular community can now be a "journalist" reporting to their followers on an issue. Telling two sides of the story would be the better application of the trade, but in real-life, it is normally a biased practice.
	Other field notes, interviews and items from across the project with tag	
	Many a time I find it is not necessary to engage community members who state antagonistic messages. Your community will do it for you, if, and only if they are confident, they have the facts. That is where you focus. (16-11-06 2015 Fieldnote: RememberFMF)	



will not be governed by the university.	The revolution will be tweeted (see cartoon by Zapiro below). This cartoon demonstrated the use of social networks and the power in communication tools. A cellphone was used to demonstrate the domino effect of 'citizen journalism' for universities and government structures who found themselves at the centre of the #FeesMustFall movement. (90:2 The revolution will be tweeted 22-10-2015) In some instances, there were reporters on campus, at other times they would make a student an offer to be a freelance informal journalist who would feed the media house. This helped us, as the media saw the real campus. Mostly students were attending their classes and tests or learning in the allocated venues. We were not too interesting and media quickly moved on to other matters. (16-11-14 2016 Fieldnote: RememberFMF) <table border="1"> <thead> <tr> <th>Tag</th><th>Analysis note</th></tr> </thead> <tbody> <tr> <td>MEDIA Misinformation</td><td>Just as the world is dealing with satire news sites and fake news, so HE is experiencing a huge influx of misinformation. Trying to stop the flow is impossible and puts institutions in a defensive position.</td></tr> </tbody> </table>	Tag	Analysis note	MEDIA Misinformation	Just as the world is dealing with satire news sites and fake news, so HE is experiencing a huge influx of misinformation. Trying to stop the flow is impossible and puts institutions in a defensive position.
Tag	Analysis note				
MEDIA Misinformation	Just as the world is dealing with satire news sites and fake news, so HE is experiencing a huge influx of misinformation. Trying to stop the flow is impossible and puts institutions in a defensive position.				
	Other field notes, interviews, items from across the project with tag				
	Misinformation is a serious issue on social networks. Pushing back by stating the universities side worked against institutions. So the question is what to do about this? (17-02-17 Fieldnote: USAf Workshop Community of Practice). Many years ago, such matters would have been followed in news bulletins on television and radio and then long articles on the events were expected in the newspapers tomorrow. Not anymore, you can follow live feeds on media websites or the # itself on Twitter, Facebook pages were created, Instagram stars were created as they captured it all in images. Social media has made anyone a credible source (16-11-06 2015 Fieldnote: RememberFMF). At CUT media carried mostly accurate encounters of events. One media house however published a story using a Facebook student group as a source which inaccurately posted a call to disrupt schools around Bloemfontein campus the following day and it caused fear among parents of the school learners with threats of violence etc. should any such action be taken. We contacted the media house requesting a retraction which they posted but the				

	damage had been done (16-11-14 2016 Fieldnote: RememberFMF).	
	Tag	Analysis note
	MEDIA Social networks	Social networks have made journalists of everyone. Universities cannot manage the flow of content as was possible previously leading to reactive communication which yields very little or even unwanted results.
	Other field notes, interviews, items from across the project with tag	
	Media was everywhere capturing every aspect of it in the moment and perhaps seeking sensation (16-11-06 2015 Fieldnote: RememberFMF). Items 2.1, 2.2 and 2.3 from above were also tagged MEDIA Social network.	

Table 6-2: Outcome example of the hermeneutic iteration in Atlas. TI during data analysis.



Figure 6-3: The revolution will be tweeted 22-10-2015 cartoon by Zapiro. Tagged as 'MEDIA Citizen Journalism' during the analysis of data.



Table 6-2 and Figure 6-3 are examples of how I deciphered context hermeneutically. The example has a focus on power and demonstrates how perspectives were shaped at a specific point in the history of HE SA. Before summarising the contributions of the claim, I examine another example from the data above. I do so to demonstrate the use of the Phronesis lens. In particular, the first part of the lens as it was used during a first iteration through the data. The lens assists in keeping the focus on the minute details at the various phases of the research, a key tenet of Phronesis (Flyvbjerg, 2001). As an example, on the screenshot Figure 6-3 above the last field note visible says:

"She indicated that they are **having a huge battle with intergenerational conversation**" (16-11-25 Day 3 MACE Conference).

I tagged the item as 'Conduct', and 'Moral principles' referring to both sides of the conversation. The students (a younger generation) wanting to be heard on their needs. The practitioners (usually the older generation with several years of experience) who are putting the needs of the organisation forward along with the role they play in relationship building with the key stakeholder group. I discussed relationship building in Section 5.3. There seemed to be some difficulty in the conversation related to conduct, and in turn, moral principle. The practitioner commented that:

"When she asks students to be respectful and not yell during meetings they will tell her not to assume she has the power to tell them how to express themselves" (16-11-25 Day 3 MACE Conference).

Described are the two attributes that were tagged as 'Conduct: actions join together to form conduct; thus, no action stands alone', and 'Moral virtues are initially learned through habits that are inculcated by education and through feelings of pleasure and pain. Moral virtues enable one to perform reasonable action to achieve one's ends. Moral virtues are realised through actions: courage, generosity, justice, gentleness, temperance, hope, faith and love of the good' (Section 3.2.1). In my analysis note, I wrote, "being respectful has to do with your principles" (16-11-25 Day 3 MACE Conference). The intergenerational conversation being called a battle during the engagement also brought to the fore that "moral principles are important in a morally dilemmatic situation or in a conflict that must be resolved by a third party" in my notes. The tags are from the initial free tagging iteration. The tags refer to the



Phronesis attributes (table in Section 3.2.1) which is a single source contribution of phronetic attributes constructed during this research. The attributes formed part of the first phase in the Phronesis lens. A D-E assumption sees practices in the context treated as a socially constructed reality (Myers and Avison, 2002). I was trying to make sense of the assumption. Thus, I began by focusing on the influence on practices from different viewpoints (Section 3.2.1). I did this by considering what it takes for good deliberation capabilities, the ability to weigh factors and to make decisions (Costello, 2018). This was a way to begin the process of putting the lens on minute details. This particular item has the initial free tagging because it was not taken forward to the interpretation phase. The exploratory question in part 1 of the lens *Where are we going with CM practices?* revealed that the data had no bearing on CM Practices for a CMS as such but could be a discussion point for an overall communication or crisis communication strategy which is, not a focus of this research. However, the D-E criterion calls for reflection on taken-for-granted assumptions. I may have assumed that relationship building with stakeholders should not be a focus for research that considers CM practices, but, in fact, it is an important aspect. I refer to the contribution claim 3 in Section 5.3 where the relationship building with internal stakeholders was discussed. During the research data collection, other engagements also brought crisis communication concerns and contributions to the fore. I grouped these due to the work practices nature and linkages to CM. Included for consideration is the grouping as a sub-section in the CM strategy (Appendix C). See extract from the appendix in Table 6.3 below. This concludes the demonstration of tagging data, iteration of data analysis guided by hermeneutics, and a short example of how I deployed part 1 of the Phronesis lens. I will summarise the contribution claim in the following paragraph and consider the sub-research question only at the end of the contribution claim 2. I do this because both claims 1 and 2 are necessary to address sub-research question 1.



CRISIS COMMUNICATION
VALUING EXPERIENCE – FROM RECIPROCITY, FIELDWORK AND INTERVIEWS
A crisis communication committee should be established from key internal stakeholders and management team.
Identify crisis communication channels and levels: e-mail and SMS.
How to empower your internal stakeholders: release Q and A sheet during a crisis which will empower stakeholder and promote the communication of one message.
Where are we going?
To communicate is an executive management function and the onus is on this team to start the chain. Should take responsibility and alert Communications senior team members of possible situations giving them time to prepare should there be a need to communicate. Built an alert process for the executive team into the crisis communication plan.
Crisis and other communication: acknowledge the issue at hand and devise a solution to be shared.

Table 6-3: Extract from Appendix C: relevant CM strategy crisis communication contributions made during the data collection.

6.3.1 Summary of the contribution claim

This contribution claim is methodological. The intent with the examples from data above is to demonstrate the sub-research question 'How' and prescriptive nature of the methodological contribution. Thus, I demonstrated how I used hermeneutics and its iteration through the data. I demonstrated how the linkages began to appear in data. I also demonstrated how the Phronesis lens, in particular, the first part was used to focus on the influence of practices from different viewpoints. Thereby I demonstrated how the lens assists in the examination of the minute details, which was an essential phronetic aspect during the design process. Thus, in the iteration of hermeneutics, and the focus on minute details that the Phronesis lens addressed, the first part of the D-E criterion (see contribution claim 1 Figure 6-1) which is taken-for-granted assumptions and underlined the relationship building with stakeholders as a focus. The second part of the D-E criterion (see contribution claim 1 Figure 6-1) calls for imagining a new way to design artefacts, which I inferred the Phronesis lens could be through its capability to focus on minute details. The contribution claim is that Phronesis seeks to balance the social and technological aspects. I am cognizant that the example data used above did not focus on

the technological aspect per se but rather on experiential knowledge and experiences of practitioners. This was not an oversight. The examples used in claim 2 had a stronger focus on the technological aspect. Thus, claims 1 and 2 demonstrated the balance. Both claims' findings are necessary to address sub-research question 1 in Section 7.3.1.

6.4 Contribution claim 2: A practitioners' contribution to the design process is different when leveraging the uniqueness of the D-E method

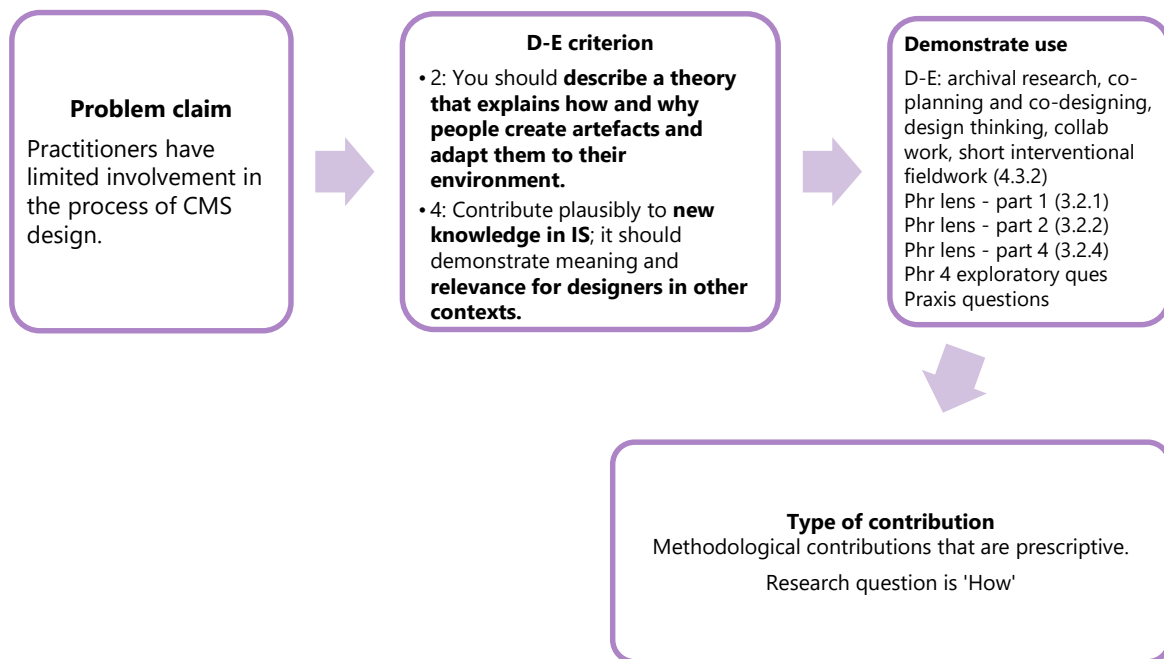


Figure 6-4: A conceptual net to demonstrate the flow from the second problem claim.

In this section, I demonstrate how the problem claim of practitioners having limited involvement in the process of CMS design. The second D-E criterion calls for a methodological contribution which is a reflective, idiographically-based explanation for the creation or adaption of an IT/IS artefact in a particular context (Baskerville and Myers, 2015). In this criterion, I focused on the methodological contribution to the socio-technical nature of IS. In Section 2.3, I put forth that the research undertook to respond to the call of Sarker, Chatterjee and Xiao (2013) who foreground challenges of the socio-technical approach which may be factors that contribute to its positioning in the IS field (Section 6.4.1). The fourth criterion requires the design ethnographer to contribute new knowledge to IS, that is relevant to current concerns in IS and relevant to designers in other contexts (Baskerville and Myers, 2015). I



discussed reciprocity as a starting point when the ethnographer is immersed in the organisational context in Section 4.3.2.1. To accommodate the ethnographer's initial position in the empirical setting, I proposed that the starting point of the research design may be different. The three states of immersion is a key methodological contribution and is relevant for ethnographies and D-E, in particular for ethnographers that have an organisation as their empirical setting. Thus, new knowledge in IS is contributed, and there is relevance to designers in other contexts. I discuss this in Section 6.4.2. I examine contribution claim 2 to demonstrate my inference and what it means given sub-research question 1 which is *How can Phronesis enact D-E in a performativity-oriented research context?* The question is addressed in Section 7.3.1.

6.4.1 Contributing to the socio-technical nature of IS

The D-E criterion calls for a theoretical research contribution. I examined the socio-technical nature of IS and responded to the call of Sarker, Chatterjee and Xiao (2013) who foreground specific challenges to position the socio-technical approach in the IS field. Sarker, Chatterjee and Xiao (2013) establish these challenges as:

1. the inherent idealism of the approach (Section 6.4.1.1),
2. its inability to influence IS innovation during design, use, and implementation (Section 6.4.1.2),
3. its neglect of power dynamics (Section 6.4.1.3).

In Chapter 2, Section 2.3, I brought these challenges into the research problem and contribution claims. In an attempt to establish the methodological contribution to IS, I put forth how the Phronesis lens could bring balance to the socio-technical nature of IS in this research. From the literature, I identified that some researchers in the field agreed with Benbasat and Zmud (2003) and called for the IT artefact to be the core of the field, whilst others wanted to consider its socio-technical nature (Agrawal and Lucas Jr, 2005; El Sawy, 2003; Robey, 2003; Robey, Anderson and Raymond, 2013; DeSanctis, 2003; Beynon-Davies, 2009; Boland and Lyytinen, 2004; Carlsson, 2007). The following three sections examine each of the challenges Sarker, Chatterjee and Xiao (2013) put forth to position the socio-technical approach in the IS field.



6.4.1.1 *The practicality of the socio-technical approach*

I support the belief that IS research should foreground its socio-technical nature and should value and balance both the social and the technological. The question was whether this even-handed balance is an idealism, as research seems to – for the most part – emphasise one over the other (Sarker, Chatterjee and Xiao, 2013). The literature review shows that the practitioner perspective, and thus their experiential knowledge is neglected in CMS research because of a techno-centric focus (Appendix J), which supports the stance that one aspect (in this case the technology) is prioritised over the other. Therefore, the second problem claim considered the involvement of practitioners in the process of CMS design. If this is the case, I consider the impact of the practices of professionals (who use the systems) perhaps not being given a voice in the decision-making and planning phases of projects or during design. The brief description to follow (and the full discussion in Section 1.3) required the use of historical documents for CMS Projects A and B. These included e-mails, working documents and project plans. In D-E, this is a fieldwork tool I identified for use in the research called **archival research** (Section 6.4.1.1). As part of the background to the research (Section 1.3), I related my experience of two CMS Projects (A and B) undertaken by the University, namely CMS Project A, with a substantial practitioner and management involvement, and CMS Project B without the same support from the two groups. CMS Project A with significant practitioner involvement from its inception as well as executive management support was launched and used as the primary CMS for the public website from April 2013 until September 2018 ($\pm$ 5 years and 5 months), whilst CMS Project B had less commitment from practitioners and management. CMS Project B was initiated and managed by the IT team. A service provider team took the lead in planning, designing and developing the CMS. This included engagement with the internal stakeholder group on their wants and needs. CMS Project B did not reach the completion phase. Thus, the phenomena of interest for this research (to rebalance the socio-technical nature of IS) brought forth the performative nature as the epistemology. The focus was on corporate communication practices, looking at what they do, and how they do it (Section 1.2.2). In using work practices as the epistemological stance for my research, I was able to access knowledge that lies at the intersection of the social (practitioner experience), the technological (using co-planning, co-designing and other unique data collection tools of D-E within the context (the University).



The orientation to knowledge drew on the particular strengths of Phronesis. I, therefore, argue that in continuously asking the exploratory questions, this research gave credence to the socio-technical approach in its prioritisation of the importance of performativity. This pause in the process to ask the Phronesis exploratory questions led to continuous reflection and brought to the fore praxis. This occurred because each reflection called attention to the questions which were *Why is it good for the university?, How does it serve the community, teaching and learning, and/or research foci?, How does it fit the purpose of the CMS or what other existing systems?, and Who would be responsible or has influence in this matter (power)?* An example follows from the interview data to demonstrate the use of the Phronesis lens exploratory questions. This contribution claim was theoretical and prescriptive, but I use a practical contribution example to demonstrate. The interview question related to sub-research question 2 *What is the content management practices in a HE SA context if the D-E method is used to interrogate the performativity of corporate communication?*. The interview question was, "Should we change our communication practices?" A prompt follow-up question was then asked, depending on the response and whether further elaboration was necessary. "If yes, how should we change practices and what plan of action is needed or should be in place to do this in your view?". "If no, explain why you feel we are doing the right thing in our communication practices?".

A participant with experience in both the private and public sectors said "Yes, collaboration is missing for us. We need to start using software to work together". The participant turned to example from a previous work environment. She shared that a system exists called Opera, which is an event management tool designed by Oracle. This system would assist to manage the logistical details such as venue, time, date, food and beverages, targeted stakeholders (prospective students, current students, employees, alumni, partners in government, business, and industry), distinguished guests who are expected to attend the event, as well as security needs, to name a few of the items. These collected details are called a function sheet in events. The system wants for the participant is to have a centralised point, and capability to manage each event hosted by the University. Additionally, the participant would like to give access to internal stakeholders to view information relevant to their teams for a particular event. She said, "for instance, in the case of security, do we have VIP guests? An estimated parking allocation required? The number of security employees needed at the venue on the day of the event? Add these to



the system and security can check. You don't have to send an e-mail or have a meeting". The participant felt that the change to the particular way of communicating to internal teams would improve collaboration in practices. (Pt5, Interview 1 26-04-2017)

Enacting the phronetic questions, I could determine whether the want was a need that should be incorporated into the CMS plan and design. The research problem sought a better understanding of how the work practices of communication practitioners are considered during the design of a CM system. This is a part of the analysis of the data. Here follows an example of the unfolding of the interview analysis using the exploratory questions:

1. *Where are we going with CM practices?* We aim to support work practices (advanced writing, visual design activities, communication activities) of the communication practitioners explicitly focused on corporate communication. I discussed this in Section 1.2.2 and Section 1.3.2. The focus in the interview response from the participant was to manage logistics and share information with internal stakeholders. Thus, the focus was not work practices but operational (manage logistics) and therefore, beyond the scope of CM practices. The requirements that the interview foregrounds do not align with the identified aim which was to support work practices of communication practitioners when doing corporate communication. Though an event is a form of communication, the logistical arrangement made to host does not fall within CM practices. I say that an event is a form of communication because the team uses different written sources such as invites, programmes, corporate items, speeches, videos, images, written forms of storytelling such as press releases, to communicate a particular message before, during and after the event.
2. *Is this development desirable?* Not for the CMS plan and design being discussed, but a need is identified as well as another system that could potentially meet the need.
3. *Who gains, and who loses and by which mechanisms of power?* If the answer was yes to include the requirements, I would have explored this, but I moved on as it is not included.
4. *What, if anything, should we do about it?* A separate undertaking should now be considered. The conversation called attention to the practices of the small events team, which could improve and be better supported. Also, the discussion can have another interpretation. Consider that it was not necessarily about a system, but about better



collaboration between various teams on campus. The minute details indicate that the discussion focus is to improve the information flow during the process of event planning. I, therefore, link this with Section 5.4, where the contributions emphasise the culture of information share is low, and access to information needs attention. Events are marketing endeavours that generate content in the form of storytelling write-ups and experiences for the stakeholders that take part in them.

In this particular case, I did not continue with the questions that focus on praxis. As the research unfolded, I understood and interpreted the outcomes to mean that not all the praxis questions were relevant for each instance, and different questions may have arisen as I made sense of the dialogue through hermeneutics. I demonstrated the hermeneutic iteration in Section 6.1. I now understand that in producing this knowledge – phronetically – experience and dialogue have a central role to play, but so does judgement (Ngwenyama and Klein, 2018). I applied my judgement to the interpretive research that is context-dependent in this manner and not being mechanistically is expressed as appropriate by Klein and Myers (1999). Flyvbjerg (2001) also concurs with the view, chastising any attempt to apply the Phronesis methodological guidelines as imperatives, he calls for the use of judgement in the context of the research. Though the event logistics item will not be incorporated into the CMS, there were contributions made to system design that should be noted in the guidelines. The outcomes of the findings. I capture these as part of the guidelines for design (Appendix B).

VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS

Systems to do event management can contribute to the team ability to deliver event content with more consistency exist and should be explored to prevent reinventing the wheel scenario. An example system to explore: Opera.

A job well done is satisfying for communication practitioner. Share analytics, comments, other outcomes of content published via a dashboard with employees responsible for the process.

Table 6-4: Extract from Appendix B: contributions to the guidelines for design in the system and workflow section.

Have I addressed in totality the inherent idealism that was made known for the socio-technical approach in IS? I cannot be sure that I have done so, but I do think that the enacted Phronesis lens with its roots in social sciences has at the very least contributed a possible way to support



balance in the social and the technological aspects in IS. Importantly, it suggests that the focus is not generalisation. In Section 2.2.2, I discussed that Flyvbjerg foregrounds that we fail to see the importance of human interactions when we focus on generalisation possibilities of the research (Flyvbjerg, 2001; Flyvbjerg, Landman and Schram, 2012). His viewpoint is supported by Thomas (2010, p.576) who declares "I argue that the goal of social scientific endeavour, particularly in the study of cases, should be exemplary knowledge unselfconsciously based on abduction gained and offered through phronesis rather than through theory." Flyvbjerg has resuscitated an invaluable source to better our understanding of context, and he puts forth present-day cases where he had applied Phronesis. He moves away from the "think global" trend we have seen over the last two or three decades, by appreciating practical inputs by individuals who live or work in the setting (Section 2.2.2).

6.4.1.2 Influence IS innovation during design

Perhaps I should begin by briefly defining how I view innovation in this research as it is a rather broad phraseology in IS. Avgerou (2008) takes the stance that IS innovation in developing countries should consider the local experience of technology implementation and the socio-organisational change. This may be common and widespread in other parts world but not necessarily where the IS innovation is planned when in a developing country. Thus, innovation is within the context of the organisation. I am comfortable with the viewpoint put forth by Avgerou (2008) as this research is context-dependent, and the local experience is a priority. The question Sarker, Chatterjee and Xiao (2013) put forth is, should the socio-technical influence IS innovation? To explore this, contribution claim 2 seeks to understand practitioners' involvement in the design process by leveraging the uniqueness of the D-E method. The unique characteristics of the D-E method supported my endeavours to focus on the social. The characteristics were the acceptance of a certain level of immersion (Section 6.4.2), some freedom to actively engage in creating, innovating, designing or improvising artefacts rather than ethnographically observing the process, and short interventional fieldwork (Baskerville and Myers, 2015; Crabtree, Rouncefield and Tolmie, 2012). It was the ability to actively engage in the process of co-creation with participants that brought out innovative thinking in this research. Rather than merely observing their engagement, and through the initial reciprocity undertaking, I was able to contribute ideas as well. I called attention to reciprocity which became the first data collection method due to its importance to the research. Early self-



reflection on my relationships with others brought this to the fore, and reciprocity in this research brings a certain openness to mutuality (Section 4.3.2.1).

These co-creation sessions took place during interviews, fieldwork, or in the hallways as we were busy conducting the business of the University. Used in this instance was the D-E tool of **co-planning and co-designing**. The tool was identified as a fieldwork tool for this research. The tool involves the designers and users working together in design (Section 4.3.2.2). One of the participants commented at the end of an interview that she would continue to think (create) and share her thoughts with me. It was a long, fruitful session, and the interview was drawing to a close, but the energy of the engagement had brought a certain excitement. This is an example of the continued mutuality and openness developed during reciprocity (see Figure 4-3). The example following is one that began to develop during the interview and continued to develop during other sessions we had. As a co-creation team, we were co-planning and co-designing the CMS to be supportive of the work practices we deem it should support. Nevertheless, the D-E tool of **design thinking** also began to play a role as we were becoming systematic in our thinking and acting creatively to understand and solve user requirements in a technologically feasible way (Section 4.3.2.3). After the example data discussion, I draw particular attention to the addition of the technical contribution in the excerpt from Appendix A. The technical contribution is based on the input made possible through the D-E tools co-planning and co-designing and design thinking. The co-creation influenced the viewpoint of the social and technical, rather than just one of the two. Salvador, Bell and Anderson (1999a) draws attention to the act of doing by participants in D-E, not the making of facts. An example of how this began to unfold was during an interview. The discussion continued beyond the initial conversation in impromptu "hallway" discussions. D-E and the particular chosen data collection methods included in the fieldwork of this research have made provision for this type of engagement (Section 4.3.2). The interview question, "Looking at how we do tasks now, how can we, in your view, enhance branding, reputation, and competitive advantage of the university?" began the engagement. The participant and I discussed the idea to improve co-working practices by giving access to each other's work via a system (IS).



A news article that tells the corporate communication story of a partnership event the University had hosted, and perhaps I had written five years ago may, with the metadata ability of an IS, be a continued resource to others. If the news article was accessible, searchable and contained information such as who my sources for information were in the University. Also where, when and how the event took place, which partners were involved, and unique aspects of the engagement. Unique aspects may be project outcomes that would be applied in a community which was revealed during the event. As a UoT the focus is an application of the research and project outcomes. At the moment, the news article is on my computer, posted to the website, send via e-mail to particular groups (perhaps media) meaning it is not accessible to other team members in a workable file format. The metadata is either on e-mail or part of my experiential knowledge, which is not helpful to the team. This will also remove the vulnerability of lost content that is being experienced by the team at the moment. When computers break, the content, specifically the metadata and work-in-progress versions of documents, which is not being stored in a system and is backed up by the University systems are lost (also mentioned in Section 5.4). Currently, the team request and share content via e-mail. That is if it is known who worked on the information or even that it exists. The likelihood is low. The assumption is made that we are starting from a clean slate on most of the projects. The participant made a comment, "it's frustrating to have to wait for colleagues to share information. Individuals are travelling on this team. They are in meetings a lot. Then we have to wait and I feel we can do this another way". Together we began to think about what it is that we need. How we would improve on the current work practice. After some discussions, we established that the following simple change would improve the practices of the team. If we were capable of accessing content created on behalf of the University and empowered to do so without the assistance of the content originator, it could improve our ability to deliver more content, as well as improve the richness of the content. This would streamline processes, improve access to information, reduce time searching for information, and improve reusability of content. Once the access is established (a simple tool in today's collaborative environments) we can move on to the next step which is to safeguard the metadata too. (Pt6, Interview 1 26-04-2017)



The Phronesis lens draws on the particular strengths of Phronesis. I would, therefore, argue that in continuously asking the exploratory questions, this research gave credence to the socio-technical approach in its prioritisation of the importance of performativity. This pause in the process to ask the Phronesis exploratory questions led to continuous reflection. It brought to the fore praxis because each reflection called attention to the questions *Why is it good for the university?*, *How does it serve the community, teaching and learning, and/or research foci?*, *How does it fit the purpose of the CMS or what other existing systems?*, and *Who would be responsible or has influence in this matter (power)?* I now turn to the Phronesis exploratory questions to determine if this socio-technical influenced example from data should be included in the CMS.

1. *Where are we going with CM practices?* We want to support work practices (advanced writing, visual design activities, communication activities) of the communication practitioners explicitly focused on corporate communication. Releasing employees from waiting for the expert (a particular team member) to share information would improve co-working and therefore contribute to CM practices. This is particularly relevant to communication practitioners of the University where team members are travelling, moving between the campuses, and attend meetings or other engagements which renders them unavailable for short or long periods.
2. *Is this development desirable?* Yes, it is. There are three immediately obvious value-adds, accessibility of content that belongs to the University and the potential improvement on turnaround times for the delivery of updated content, as well as employees being empowered to access information and be informed. Consider new employees who join the team who will then have access to an archive, rather than starting from point zero, as is the case at the moment. The culture of information sharing is low and access to information is first brought to the fore in Section 5.4 and again in Section 6.4.1.1.
3. *Who gains, and who loses and by which mechanisms of power?* The team members gain access to information, and the University improves its continuity in the content delivered in the long run. Thus, this is to the benefit of the university as well. The team members will have the additional task of adding metadata to content on the system and will relinquish exclusivity in access to their niche areas (as the custodian of particular content sets) which may be an uncomfortable transition to make.



4. *What, if anything, should we do about it?* The innovation was added to the CM practices framework (Appendix A). Example follows.

The positive results from the Phronesis exploratory questions opened the door to also continue with the questions that focus on praxis.

1. *Why is it good for the university?* I mention the aspect of continuity, which in communication is a critical element (Rockley and Cooper, 2012; Schriver, 2012). The communication practitioners who are the focus of this research have the phronetic-based task to assess the reputation as well as the identity of the University. They use advanced writing and visual design activities to the benefit of the organisation (Schriver, 2012; Cornelissen, 2004; van Riel, 1997). These include messages, images, stories, and the communicative interactions of organisational communication that creates and maintains an identity which will reach the intended stakeholder groups in a way that matters to the groups (Cornelissen, 2004), and also in a way that matters to the University. These were contributions in Section 5.3, where I interpreted what can be done to support communication practitioners in the task of relationship building from data. The key aspects to take away is "to the benefit of the organisation", and "in a way that matter to the stakeholder groups". These are imbibed with the virtues described in Phronesis attributes – a brief extract from the attributes "virtues are central to principle and include fairness, compassion, correct reasoning about particular actions, and actions joined together become conduct" (Section 3.2.1). By giving access to previous writings, the opportunity exists to establish the praxis question "is it good for the university and our community?" as a virtue that guides the conduct of the practitioners.
2. *How does it serve the community, teaching and learning, and/or research foci?* This is a long-term action to change the working habits of the team. The impact may be felt, in, for instance, improved turnaround times of content delivery in the three areas community, teaching and learning as well as research. The other advantage is the richness of the content. If relevant historical information is effortlessly accessible to the team, it may benefit the storytelling endeavours of the practitioners.
3. *How does it fit the purpose of the CMS or what another existing system?* Traditionally, CMS is for current content. Thus, incorporating a feature for an archive such as this is a break



with the tradition. It still fits the system purpose of the team which is to manage content. Over time, the addition of content to the system has the effect of a slowly built archive.

Have I addressed the question put forth on whether the socio-technical should influence IS innovation? The contribution claims seek to understand practitioners' involvement in the design process by leveraging the uniqueness of the D-E method. The example from data above begins in an interview when the participant and I discuss improving co-working practices by giving access to each other's work via a system (IS). The idea became a collaborative work process and contributed to the design of the functionality. Though the practitioner could not elaborate on the technical design of the function, for instance, the security levels, tags that would be needed, how long the information should be stored in the active system. The idea for the design and my experience in the field of IT artefact design and development complemented each other; hence I consider this to be **collaborative work** which is a D-E fieldwork tool (Section 4.3.2.3). Partial answers were contributed that became a whole. The Phronesis lens brought forth the need to consider virtues "to the benefit of the organisation", and "in a way that matter to the stakeholder groups". This is not the first time that these Phronesis virtues are emphasised. In Section 5.3, the interpretation of the data also brought the virtues forward. It is mentioned that an ethnographical assumption plays a role in performativity, which is that individuals attach meaning to things that result from an action (Baskerville and Myers, 2015). The research focus on performativity and the Phronesis lens support the valuing of acts; thus, enacting D-E. Captured as part of the CM practices framework (Appendix A) are the outcomes of the findings. Table 6-5 is an extract from the appendix to demonstrate the various contributions included. I emphasise the inclusion on the technical contribution. The technical contribution is based on the input made possible through the D-E tools co-planning and co-designing, and design thinking and is at the top of Table 6-5, followed by the valuing experience (practices) contribution.



COLLECTION	
Practices	Description
Authoring	Creating new content Should have available: - Authoring tools - Content lifecycle
Acquisition	Gathering content from existing sources. Employees submit information: - Use web forms for content submissions (Forms can curb user creativity). - The benefit is structured content submissions. Functions to aid collection process (which is also the editing function) checking content is tagged and ready to be published: - Use MS Word template for creative content .DOT files with fill-in fields, - Validation macros, data connections to metadata lists and CMS repository. May allow the user to feel at home with the tool. Content inventory (existing sources): - Archived information - Printed marketing materials - Individual workstations - E-mail Conduct a content audit to determine potential worth (reusability) of information. Create syndicated information which means components that are reusable and can be shared with others in the University.
Conversion	Remove unnecessary information from the content: - Use plain language. - Unwanted information such as old headers, footers, navigation etc. Format Mapping: standardise format – separate rendering format from the structure. Structure-mapping: make information explicit or change as necessary. See content lifecycle and reusability of content.
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
Communication practices should be improved, not completely changed. Regular training of system users is essential. Change media coverage form to two forms: research, projects (full feature article), organisational related AND highlights such as awards, happenings (short version article).	

An environment that supports and encourages reading by communication practitioners to better vocabulary of team members who are predominantly second or third language speakers. Identify the expert of the particular content component within University, add the name of individual to the system so other employees can contact expert should it be needed. Advisory information should be added. Example: What a video can be used for, timelines of relevance, target audience etc.
Possible actions for doing things differently What should be done?
University culture forces a writing style. Communication practitioners have different writing styles influenced by their background, education, etc. and the tendency of policing writer's perspective is unappreciated. Communication practitioners should have the ability to write from their own viewpoint and get review/edit input without changing style to another writer's style. This causes a lack of freedom of expression. Freedom to interpret is vital to creativity and too many voices curbs the process. None of the writers wants to dent to reputation of the University, co-responsibility does exist and should be valued. Editing function should be to do risk mitigation – a check to determine can content cause damage? Speeding up the release of content.
Where are we going?
Teach internal stakeholders about how to communicate with us. Value input from colleagues during review phase – institute 2-way round-robin.

Table 6-5: Extract from Appendix A: contribution is made to the collection of the CM practices framework.

6.4.1.3 Power dynamics in IS

The final concern in the socio-technical approach raised by Sarker, Chatterjee and Xiao (2013) is the matter of work practices being unable to support the dynamics of power, and thus it has led to a neglect of the issue in IS, a matter which was raised in a paper by Avgerou and Mcgrath (2007). Avgerou and McGrath (2007) propose that power may be ignored in socio-technical conception because often, context is precluded. I agree with the viewpoint that Avgerou and McGrath (2007) put forth, which was that context must be considered if power is to be addressed in research. The Phronesis lens and ethnographic methodology both assisted in the valuing of context for this research. Although I also hold the opinion that power does not necessarily have to be a negative focus (see Section 2.4, and 3.2.3). Contribution claim 5 seeks the significance of the role of power in this research about practitioners' work practices. The problem claim is that there is a need to examine the potential for significance if power is seen as productive and positive. Moreover, the sub-research question is *Given the phronetic perspective, how is the role of power supported in this research about practitioner's work practices?* Thus, I would at this point, refer to Section 6.5 as the discussion point for the role of



power in this research. Also for the contributions made as example data for this discussion. Though I used example data in the previous sections, I emphasise that this is a methodological contribution that is prescriptive. I, therefore, discuss what is meant by the research itself being a practice of power. In Section 6.5, I discussed the role of power which is a methodological contribution to the research. I also refer to the discussion on the role of power during the construction of the Phronesis lens (Section 3.2.3), where I use a mind map to unpack the role of power (Appendix D³). In the mentioned section, I focus on the six Flyvbjergian characteristics of power put forth to analyse power.

Phronesis, as a lens, addresses the following power practices of my research: the lens assisted me, as an immersed researcher, to mitigate the risk of prioritising my knowledge by prioritising reflection on the context (Flyvbjerg, 2001, 2008b, 2006b); and the lens also assisted in the act of interpretation. I discussed the choice of interpretive research in Section 2.4. I made the choice for three reasons which I will briefly summarise. First, I did not focus on oppressive power, rather implications thereof. Second, I did not question the status quo of the social reality, nor did I have emancipatory ambitions. Third, I did not focus on what is wrong with the world; instead rather, what is right. This, however, does not mean that I am not critical in the research, which I also discuss (Section 2.5). In Section 6.3, I focused on example data to demonstrate the use of the hermeneutics, criticality, and the first part of the lens. In Section 6.4.1.2, I demonstrated how the valued characteristic of the D-E method made provision for me to actively engage with the participants in the co-creating process (Baskerville and Myers, 2015). We were innovating and contributing to the design of an IT/IS artefact that would suit the needs of the team by adding partial answers about the problems, possibilities, and risks (Section 3.2.4.2). These we could contribute from our years' experience in the different specialisation fields held in the team (see Research participants Section 3.3.2, and valuing experience 3.2.4.1). The Phronesis lens assisted in valuing experience and collaborative work as I interpreted the research. In Section 3.2.4.2, I used the exploratory questions of Phronesis to analyse the data.

Have I addressed the neglect of power dynamics in IS? The fourth part of the Phronesis lens has the exploratory question *What, if anything, should we do about it?* Usually, researchers who collaborate with participants in research have to carefully consider their role in terms of power



because there may be financial means to do the research, which the researcher perhaps control, and their level of knowledge versus that of the participants may also have a power-related role in the relationships (Flyvbjerg, Landman and Schram, 2012). However, in the context of this research, I was an equal. I again call attention to reciprocity, which became the first data collection method due to its importance to the research (Section 4.3.2). I was a practitioner the same as the participants, I was more knowledgeable in certain aspects such as IT/IS, but the participants each also hold specialisation in a field, which means in knowledge, we were balanced (research participants Section 4.3.1). The understanding of the context meant I could connect and enjoy the polyphony of voices with no voice claiming the final authority, and in this, I include myself. The Phronesis methodological guidelines were valuable indicators of direction for my conduct (Section 3.2.2). I discussed the use thereof for self-evaluation in Section 4.5 and will give feedback about the experience in Section 7.5. Below is an extract from the CM strategy (Appendix C) in which the partial answers to problems, possibilities, and risks. The role of power in the practices also feature in the extracted contribution.

CONTENT FOR COMMUNICATION	
Strategy	Description
The relevance of content should be driven by the audience and context.	Who is the person we are writing for? What would we like the experience or action to be? What do we expect the outcome to be?
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
Conduct an audit of communication channels and create a target audience to react to the information guide. This will assist communication to gauge audience receptiveness to information. Introducing a firm structure for communication practices through organisational documents will place Communications and Marketing employees in a better position of power. The team will benefit by becoming known as experts in their work and actioned consistency. Students are not informed about what we are doing as a University. Share how CUT is doing compared to other universities on platforms – to create interest in their university. The way information is verbally given to students – communicated to them – is an experience they will reflect on.	



Possible actions for doing things differently What should be done?
Value of historical marketing messages to evoke feelings of belonging with alumni. Put a timeline on marketing messages to segment audience in future campaigns. Using generalised information instead of experience storytelling does not add value to content. The information professional must be the writer and the reader of the story being told – narrator. Give recognition to the task by adding it to the employee KPAs. Strengthen information professional in the team by bettering engagement with professional body MACE. Junior employees should be exposed to other portfolios to encourage learning more tasks, create a team environment of sharing which allows them to grow. This also enables them to assist in the absence of another junior employee team member. Example: the current team of junior employee members share an office space which gives them the opportunity to share their tasks with each other and simply be aware of what the other juniors are doing. This is encouraged by senior employees. Take time to reflect on tasks, determine if it is still relevant to the context we find ourselves in. There may be changes to the management of a team or executive management, changes to HE such a free education, and operational plan which can impact on previously executed tasks or planned tasks. Be careful of getting into a comfort zone and not reflecting on your activities – “shake yourself out of comfort zone”.
Where are we going?
Sharing success stories (as a practice) shows us where and who we are as a university. Writing improvement happens with practice. The same content can be released in different formats: text, video and image to different target audiences – broadening the scope of the content use.

Table 6-6: Extract from Appendix C: demonstrate the contribution made to the concept of collaborative work by adding partial answers to problems, possibilities, and risks.

In summary, I undertook to explore the socio-technical nature and respond to the call of Sarker, Chatterjee and Xiao (2013) who foreground specific challenges to positioning the socio-technical approach in the IS field. In the practicality of the socio-technical nature of IS, I have at the very least contributed a possible way to support the balancing of the social and the technological aspects in IS that is not focused on generalisation by enacting D-E. In whether the socio-technical should influence IS innovation, I contributed an example of a collaborative work process and contributed to the design of the functionality, also made



possible by the uniqueness of the D-E method. Moreover, the final challenge of the neglect of power dynamics in IS, I contributed the Phronesis lens which assisted in valuing experience and collaborative work, and the six Flyvbjergian characteristics of power put forth to analyse power. To this end, I put forth that the Phronesis lens is capable of contributing to the socio-technical nature of IS.

6.4.2 New knowledge in IS – states of immersion

In finding reciprocity as a starting point for data collection in this research, I subsequently looked at the traditional ethnographic approach to gain access in a different light. Traditionally, ethnographic fieldwork begins with the assistance of a gatekeeper. My experience in this ethnographic research brought to light the three states of immersion. I discussed this in Section 4.3.2.1. Briefly, the three states are, immersion through the traditional concept of fieldwork (requires a gatekeeper), immersion in the organisational context (requires a gatekeeper – an internal stakeholder) and immersion in core team context (no gatekeeper but reciprocity is critical). I grappled with ethnographic methodology giving priority to the gatekeeper as the starting point of access to the empirical setting. Yet, I already had access. As I progressed in my research and my understanding developed, I was able to recognise that reciprocity had been a critical entry point for me. However, it was not about access, but rather about what LeCompte and Schensul (1999) refer to as a certain openness to mutuality. In Section 2.6, I discussed that as a researcher that was immersed, I required a safeguard for what Gadamer calls “self-interpretation of our doings” (Gadamer, 1984) and bring to the fore the hermeneutic principle of suspicion. Hermeneutics prompted that I acknowledge my preconceptions and prejudgements. The positivistic nature of my formal education foregrounded my training viewpoint but more importantly, the prejudgements that may have perhaps unconsciously been the core of my approaches to work practices (Section 4.3.1.2) and prioritise self-reflexivity which I do through self-evaluation (Section 4.5). I relied on the Phronesis methodological guidelines (part 2 of the lens) as indicators of direction for my conduct at this point. As an example, the methodological guideline ‘getting close to reality’ affirmed that I had to contribute my viewpoint on reciprocity as the starting point. By anchoring the research in context (Section 3.2.2), getting close to reality calls for the transcendence of the concern of relevance. The outcome that the starting point is different came from my engagement in the context, and thus was a reflection of the reality I experience.



I should also foreground that interpretivism assumes that individuals “develop and use their subjective understandings of themselves, their setting, and their history” (Lee and Baskerville, 2003, p.230). The three states of immersion is a key methodological contribution and are relevant for ethnographies and D-E, in particular for ethnographers that have an organisation as their empirical setting. Thus, it is a new knowledge contribution when IS has an organisation as its empirical setting and ethnography is used as the methodology.

This brings me to the value that the D-E approach has for short interventional fieldwork. It is emphasised as a unique characteristic of D-E in Section 1.4 and again in Section 4.3. I discussed that the long-term fieldwork approach of traditional ethnographies was challenging to implement in my empirical setting as a practitioner immersed in work practices. I underlined that there would be a need for freedom to move from my profession to research focus at a moment’s notice. This was indeed the case. Baskerville and Myers (2015) support the notion of short interventional fieldwork from the viewpoint that different social realities may be studied. Nevertheless, I found that even in the context of a single social reality, I was doing shorter periods of fieldwork. It was two or three hours on average a week, with no engagement taking place some weeks, and other weeks more sessions. This also gave me ample time for reflection as I progressed. There was no true pattern, rather the time available to me as a researcher-practitioner, and the participants determined the fieldwork sessions.

6.4.3 Summary of the contribution claim

These contribution claims are theoretical (Section 6.4.1) and methodological (Section 6.4.2). The intent with the examples from aforementioned data is to demonstrate the sub-research question ‘How’ and prescriptive nature of both the theoretical and methodological contributions. The problem claim of practitioners having limited involvement in the process of CMS design was explored to assess the possibility of a different or better explanation. The second D-E criterion (see contribution claim 2 Figure 6-4) calls for describing a theory that explains how and why individuals create artefacts and adapt them to their environment. Thus, in Section 6.4.1, I demonstrated through the use of example data how the challenges put forth by Sarker, Chatterjee and Xiao (2013) for the socio-technical nature of IS could be addressed using examples from data that focus on performativity. In the practicality of the socio-technical nature of IS, I contributed a possible way to support the balancing of the social and the



technological aspects in IS that is not focused on generalisation by enacting D-E. In whether the socio-technical should influence IS innovation, I demonstrated influence in innovation with an example of collaborative work and contribute to the design of the functionality. The uniqueness of the D-E method tools was crucial for the contribution as also demonstrated. Moreover, the final challenge of the neglect of power dynamics in IS, I contributed the Phronesis lens which assists in valuing experience and collaborative work, and the six Flyvbjergian characteristics of power put forth into analysing power (see also Section 6.5.1). The fourth D-E criterion (see contribution claim 2 Figure 6-4) states a plausible contribution to new knowledge in IS that demonstrates meaning and relevance for designers in other contexts. In Section 6.4.2, I contributed from experience that the starting point of the research design may be different when you are immersed in the core team of the context. I foregrounded that for an immersed ethnographer, reciprocity is the starting point. The three states of immersion was a key methodological contribution and are relevant for ethnographies and D-E (Section 7.4.1), in particular for ethnographers that have an organisation as their empirical setting. Thus, new knowledge in IS is contributed, and there is relevance to designers in other contexts who focus on organisational research when ethnography is the chosen methodology. As I mentioned in Section 6.3.1, claims 1 and 2 demonstrate the balance. Both claims' findings are necessary to address sub-research question 1, which will be dealt with in Section 7.3.1.

6.5 Contribution claim 5: There are significant implications for power in practitioners' work practices when the focus is not on limitation and exclusion

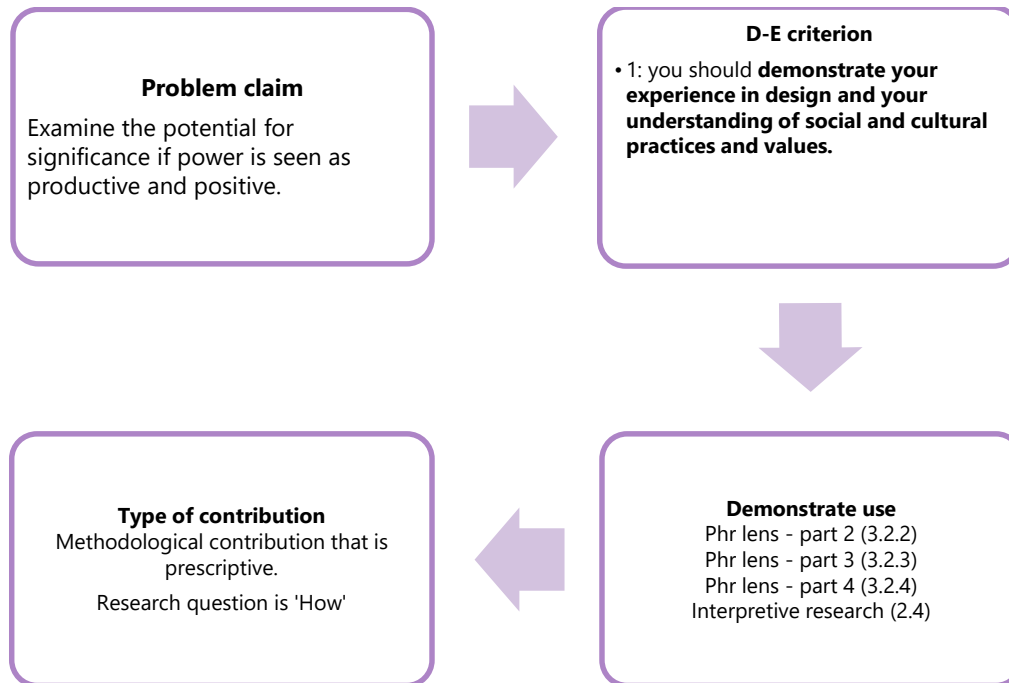


Figure 6-5: A conceptual net to demonstrate the flow from the fifth problem claim.

In this section, I demonstrate how the problem claim for potential significance of power is seen as productive and positive. The first criterion draws attention to the fact that D-E is not DSR which means, as with this research, the IT/IS artefact is a secondary outcome of the research. The focus is on experience in design and understanding the social reality (Baskerville and Myers, 2015). I, therefore, demonstrate how the role of power could be seen as productive and positive in the context of HE, the social reality of CUT, and this IS research itself. I examine the contribution claim to demonstrate my inference and what it means given sub-research question 3 which is *Given the phronetic perspective, how is the role of power supported in this research about practitioner's work practices?* In Section 7.3.3 I address the question.

Power is placed at the core of analysis in Phronesis (Section 3.2.2). In Section 2.2, Flyvbjergian Phronesis placed power at the core of analysis and insists that organisational inquiry can only be complete if it deals with the issue of power (Flyvbjerg, 2002, 2003, 2006b). The focus is whether power or the capability to act is influenced. What this means is power is studied with



a point of departure in small questions. Or as referred to in the research, a focus on minute details. Throughout the thesis, I ask questions that are phronetically aligned but not related necessarily to the research questions themselves. As an example, in Section 4.3.1, I asked the exploratory questions *Does my culture and worldviews put me on the outside of the team dynamic? Also, is my culture truly different?* because of my concern about being too far removed from the rest of the team. Another example would be when (to support my abductive argument) I include literature in Chapter 1 as part of my praxis (Section 1.2) because I questioned my potentially limited view due to immersion.

Flyvbjergian features of power seek to characterise power in order to be able to analyse power (Flyvbjerg, 2006b). Thus, before I begin to demonstrate the role of power, to reference how this research views power. I summarise the phronetic methodological guideline from part 2 of the Phronesis lens in Section 3.2.2. If power is placed at the core of analysis, it is seen as **productive and positive**, and not only as restrictive and negative. The concept of power is seen as **ultra-dynamic; power is appropriated, reappropriated and exercised. Power produces knowledge, and knowledge produces power**. The central question is **how power is exercised**, and not merely who has power, and why they have it. I again call attention to the fact that this research was interpretivistic, which this view of power supports. Accordingly, I did not focus on oppressive power, rather implications thereof, I did not question the status quo of the social reality nor did I have emancipatory ambitions, and I did not focus on what is wrong with the world, instead perhaps what is right (Section 2.4). I will demonstrate the use of Phronesis lens – part 3 in particular, the role of power in this interpretive research. To demonstrate that power was indeed at the core of analysis, I will use examples from previous four contribution claims to demonstrate the role of power. I will demonstrate the role of power in the contexts of HE, CUT, this IS research itself because it is a practice of power.

6.5.1 The role of power in the contexts

This section illustrates the role of power in the HE sector. In Section 3.2, I acknowledged that there is an expectation that power in the practices and in communication are influenced by and on behalf of the University, as well as the HE sector. The examples are from contribution claim 1 – the #FeesMustFall descriptions:



"This focus on the sector at the time foregrounded the #FeesMustFall movement, which influenced the corporate communication practices of the sector, and in turn, affected the practitioners. Some key aspects that came to the fore are the use of hashtag #FeesMustFall which was used to drive the message and connect the student-led protest movement across the country. #FeesMustFall was communication driven by user-generated content. User-generated content is when the users of your content start also to generate content, sharing their views and experiences (Marsland, 2009). Crisis communication plans and experience fell short because the sector was unprepared for the students preferring to believe and accept the voices of their peers and disregarding the official communication channels of the Universities and the Department of Higher Education and Training."

In contribution claim 1, I also used the example from data that underlines the shift in power:

"When she asks students to be respectful and not yell during meetings they will tell her not to assume she has the power to tell them how to express themselves" (16-11-25 Day 3 MACE Conference).

In the examples, the role of power in the communication practices had for a time, changed hands. The communication practitioners were caught off guard by the scenario when their power in their work practices shifted to the stakeholder group they usually communicate too. What the examples call attention to in terms of power, is that power need not be seen as limiting or excluding of individuals. But it is dispersed and can be **appropriated even reappropriated** as is needed. Thus, this is a demonstration of the role of power as ultra-dynamic. The Phronesis lens part 3 in Section 3.2.3.1, item 3 in the table describes this as "The concept of power is seen as ultra-dynamic; power is not merely something one appropriates, it is also something one reappropriates and exercises in a constant back-and-forth movement within the relationships of strength, tactics and strategies inside of which one exists." In this instance, the episodic nature of power (Flyvbjerg, Landman and Schram, 2012) shifted the authority of the act of communication to the stakeholders who are usually the recipients of the content. The movement of power left the communication practitioners with the difficult task of trying to restructure their communication to fit with the user-generated content. The communication teams who acknowledged the legitimacy of #FeesMustFall and who then



supported the aim thereof were able to reappropriate some power in their communication. Other communication practitioners who attempted to take control of communication and repeatedly stated the case of the university or condemned the actions of #FeesMustFall had difficulty in establishing a trust relationship (from field notes 16-11-25 Day 3 MACE Conference). This had an impact on the communicative interactions for the benefit of the universities. In Section 5.3, I demonstrated how the problem claim of valuing the worldviews of the community are served when consideration is given to the needs of the publicly-funded institution. The outcomes in Sections 5.3.3 and 6.4.1.3 were in line with the consideration of the needs of the University. Unlike the previous outcome, where the power shifted for a time. The University's needs were side-lined. Therefore, an exploratory question I asked but could not answer was, *Did the publicly-funded institutions not consider the needs of their stakeholders and hence the power shift? Or was it a necessary and unavoidable occurrence?* Explorative questions and were discussed in Section 3.2.

This illustration is the role of power in the social reality of CUT. In Section 3.2, I acknowledged another expected influence is the process whereby the information system (the CMS) influences and is influenced by its context. The following examples are from contribution claim 3 – the practitioners' experience descriptions:

"We [practitioners] teach. We do. **Communicators teach** because we are the **custodians of information** and then some things individuals don't even know how to do them. And then when you teach them on Thutong [weekly e-newsletter] that this is how we do stuff. More than anything, for me we are teaching. And **we change minds.**" (Pt6, Interview 1 06-04-2017)

"Whatever you say that is relevant and current. People [stakeholders] get to be engaged. **They start listening when you talk of current things and relevant things** to what they want. They start listening. It is important to have complete, intensive and current information." (Pt3 Interview 1 05-04-2017)

"A frustration is dealing with issues after they happened. With you not being involved from an early phase. That's why I think, communication in my view; **we** [practitioners] **are just vessels.** But communication within the context of say CUT or any other



organisation; it's a management function. And, when there is a crisis and it is escalated [to executive-level], we have to be involved." (Pt4, Interview 1 27-09-2017)

The three perspectives from data are that educators have the power to influence the opinions and views of others, stakeholders are engaged when their needs are met, and the practitioner becomes a facilitator. I found that communicative interactions to the benefit of the University, and the improved experience of stakeholders is a balancing act. This could have been due to the fact that in a knowledge-driven organisation such as the University, CM practices is a type of conduct that brings about value in its ability to create and share information (Section 3.2.3.1). Thus, performativity of the practitioners and their experiential knowledge when doing the activities were the focal point. In the examples, each participant foregrounded a principle of guiding the relevant stakeholder groups. In the first example, the communicator is described as a "teacher", guiding the stakeholders. In the process, the "teacher" may change the minds of the stakeholders, but it is not forceful, it is through earned trust, and then merited influence. The second example foregrounds the importance to value the stakeholders and their needs. Again, it is not suggested that communicators have to communicate. The stakeholders are the priority. The third example brings the other two examples together by stepping the practitioner position back and thereby foregrounds the role of facilitator to others (internal stakeholders). The onus is on the internal stakeholders to know their particular stakeholder communication needs. Each of the participants talked about the process of advising in different forms. Power took on two roles in the given examples. First, the Phronesis lens part 3 in Section 3.2.3.1, item 5 in the table describes this as "the central question is **how power is exercised**, and not merely who has power, and why they have it; the focus is on the process in addition to structure." Second, the Phronesis lens part 3 in Section 3.2.3.1, item 1 in the table describes this as "Power is seen as **productive and positive**, and not only as restrictive and negative."

This illustration is the role of power in this IS research itself because it is a practice of power. Throughout the thesis, I mentioned that this research is a practice of power. In Section 3.2. I stated, "As an immersed researcher, I will influence the social reality, and of course, as a practitioner, I have already influenced the social reality of the research context." I deployed several support mechanisms (D-E, hermeneutics, interpretive research, Phronesis lens) and will



briefly describe each mechanism in the support role. D-E supports a certain level of immersion and active engagement (Section 4.3). Hermeneutics and the principle of suspicion required that I recognised and acknowledged my prejudgements. I did this as part of the research participants section because I was immersed and considered myself a researcher-practitioner (Section 4.3.1.2). At the beginning of this section, I applied my judgement to this interpretive research that is context-dependent. I highlighted that power is studied by considering the minute details. I then provided examples of the phronetically aligned questions I had asked myself – culture and worldview from Section 4.3.1. I supported the abductive argument in Section 1.2 and underlined the criticality aspect (Section 2.5). I put forward that my understanding of the context meant that I could connect the polyphony of voices with no voice claiming the final authority and include myself. The self-evaluation (Section 4.5) used the Phronesis methodological guidelines as indicators of direction for my conduct. An example was brought to the fore in Section 6.4.2 where I used the methodological guideline ‘getting close to reality’ as an example to affirm that I had to contribute my viewpoint on reciprocity as the starting point. This was part of the three states of immersion key contribution. In Section 6.4.1.3 I used part 4 of the Phronesis lens which contained the exploratory question *What, if anything, should we do about it?* to demonstrate my role as equal to that of the participants. The Phronesis lens part 3 in Section 3.2.3.1, item 4 in the table describes this as, “Knowledge and power, truth and power, rationality and power are analytically inseparable from each other; **power produces knowledge, and knowledge produces power**”.

6.5.2 Summary of the contribution claim

This contribution claim was methodological. The intent with the examples from data in Section 6.5.1 was to demonstrate the sub-research question ‘How’ and prescriptive nature of the contribution. The problem claim was that there is a need to examine the potential for significance if power is seen as productive and positive. The first criterion drew attention to the fact that D-E is not DSR which means, as with this research, the IT/IS artefact is a secondary outcome of the research (Section 7.3). The focus was on experience in design and to better understand the social reality. The contribution claim sought the significance of the role of power in this research about practitioners’ work practices. Thus, I demonstrated how the role of power could be seen as productive and positive in the context of HE, the social reality of CUT, and this IS research itself. What this meant is that power was studied with a point of



departure in small questions, or as referred to in the research, a focus on minute details. Throughout the thesis, I asked questions that were phronetically aligned but not related necessarily to the research questions. Because this was a methodological contribution, I use examples from the previous four contribution claims to demonstrate the role of power. I mentioned that Flyvbjergian features of power seek to characterise power in order to be able to analyse power. I began with the HE context and demonstrated the episodic nature of power when power shifted the authority of the act of communication to the stakeholders who are usually the recipients of the content. This demonstrated the Flyvbjergian power feature of power appropriation and reappropriation. In the social reality of CUT, I demonstrated that participants foreground a principle of guiding stakeholders rather than forcing their viewpoint as the experts. This demonstrated the Flyvbjergian power feature of how power is exercised, and not merely who has power, and why they have it. I then demonstrate the role of power in this IS research itself because it is a practice of power. I guarded against my immersion and specific influence by deploying mechanisms in D-E (supports a certain level of immersion and active engagement), hermeneutics principle of suspicion (recognise and acknowledge my preconceptions and prejudgements), interpretivism (criticality in context-dependent research), Phronesis methodological guidelines (self-evaluation). This demonstrated the Flyvbjergian power feature that knowledge and power, truth and power, rationality and power are analytically inseparable from each other. Therefore, I believe that the D-E criterion of the IT/IS artefact being a secondary outcome and the focus being on the experience in design and understanding the social reality has been met. Sub-research question 3 is addressed in Section 7.3.3.

6.6 Summary

I reflected and demonstrated the practical work of doing the research as a researcher-practitioner. This chapter focused on the methodological and theoretical contributions as I deployed Flyvbjergian Phronesis to enact D-E research. I demonstrated specific instances of the data analysis and demonstrated how I undertook the research. I used narrative description to provide hermeneutic descriptions. To demonstrate how the socio-technical nature of IS could be balanced, get a better understanding of practitioners' involvement in the design, and view the potential of power if seen as productive and positive, I turned to contemporary Phronesis. I allowed the data moments to guide my approaches and used the D-E criterion as



evaluative tools. The D-E criterion assessed whether I deliver quality research that has value to the fields. The rebalancing of the socio-technical nature of IS is a key methodological contribution made from the research (Section 7.4.2).

This chapter also focused on the D-E prescriptive 'How' questions. The Phronesis lens focused on the 'Why' questions and gave strength and reason to the potential effect on the empirical setting. Contribution claim 1, sought to balance the social and technological aspects. I foregrounded that the Phronesis lens would do so and constructed the lens. I also enacted the lens in the research. The summary of the contribution has more detail (Section 6.3.1). In Section 7.3.1 I deliver the findings of the contribution claim as part of sub-research question 1. The Phronesis lens is a key methodological contribution made from the research (Section 7.4.4). Contribution claim 2, was that a practitioners' contribution to the design process is different when leveraging the uniqueness of the D-E method. A theoretical contribution to the research addressed the challenges put forth to the socio-technical nature of IS. My immersion in the social reality of the University, brought forth that the starting point of access was reciprocity, rather than the traditional ethnographical viewpoint of access gained through a gatekeeper. The methodological contribution was the three states of immersion and the role of reciprocity. The summary of the contributions has more detail (Section 6.4.3). In Section 7.3.1 I deliver the findings of the contribution claim as part of sub-research question 1. The three ethnographical states of immersion when doing organisational research is a key methodological contribution made from the research (Section 7.4.1). Contribution claim 5 was that there are significant implications for power in practitioners' work practices when the focus is not on limitation and exclusion. I demonstrated the use of the Flyvbjergian features of power when the focus is not limitation and exclusion. In the context of HE, the social reality of CUT, and this IS research itself, power was seen as productive and positive. The summary of the contribution has more detail (Section 6.5.2). The viewpoint of power, when seen as productive and positive, is a key methodological contribution made from the research (Section 7.4.3). In Section 7.3.3 I delivered the findings of the contribution claim as part of sub-research question 3.



CHAPTER 7

7 SUMMARY, FINDINGS, KEY CONTRIBUTIONS AND CONCLUSIONS

7.1 Introduction

The techno-centric emphasis found in literature called attention to the fact that CMS predominantly focuses on the technology involved but lacks insight about the practitioners who use the information systems as well as social and contextual aspects. There is also a lack of information on how these practices are taken into consideration during the design process, if considered at all. Thus, this research proposed that CMS literature may benefit from emphasising a better understanding of the social reality and the potential that can be gained when prioritising and articulating experiential insight for work practices. The context of the research also has unique aspects. After the HEIs mergers, universities with very different approaches to information practices and disparate campuses had to be unified, employees and students had to be incorporated into new situational settings, campuses had to be assessed, upgraded and supported to become one institution with shared values and outlooks (Symes et al., 2004; Auf der Heyde et al., 2007).

To this end, the phenomena of interest for this research has been how the work practices of communication practitioners are considered during the CMS design process. The worldviews involved in the work practices which are undertaken for the good of the University community were considered a type of conduct (Hart-Davidson et al., 2007; Kinsella and Pitman, 2012; Flyvbjerg, Landman and Schram, 2012). The research interrogated the expectation that power in the practices and in communication are influenced by and on behalf of the University, as well as the HE sector (Jansson, 2014; Kinsella and Pitman, 2012). I proposed that a better understanding of how and why emphasising the practitioner's experience in the design of CMS could improve corporate communication for the University. This required that the content management practices of communication practitioners be interrogated.

This chapter concludes the thesis, where I first present the summary of the thesis, followed by an analysis of the primary outcomes of each chapter. I then proceed to elaborate on the



research findings that speak to the three sub-questions of the research. Next, I establish the key contributions and how the overarching research question has been addressed. Other matters that are discussed in the chapter include how the research was evaluated, limitations and difficulties experienced when doing the research, who should consider this research, as well as the possibilities for future research.

7.2 Summary of the thesis

Chapter 1 began with an examination of the background of the research (Section 1.1), after which I unpacked the abductive argument with support of the three key literature foci (Section 1.2). The foci are CMS, the performativity of corporate communication practices, and HE in SA and the role of power. Thereafter, I articulated the research problem and emphasised the overarching research question, presented the three sub-questions that the research would interrogate and elaborated on the problem and contribution claims (Section 1.3). I provided a brief overview of the chosen approaches given the research problem. Included were interpretive research, Phronesis and D-E.

Chapter 2 presented Phronesis from the viewpoints of Aristotle and Bent Flyvbjerg. I discussed how Flyvbjerg expanded Phronesis as a way of knowing and considers the role of power, as well as the value of collaborative work in our contemporary world. I articulated the field of IS and called attention to the debates on the nature, identity and legitimacy of the field. I examined the position of the IS research field as socio-technical. Rather than to follow the techno-centric viewpoint found to be prevalent in the literature, I set out to balance both social and technological aspects. I unpacked interpretivism and my reason for the choice in paradigm as the most appropriate. I set aside the paradigms of critical research and positivism. I heeded the warning of Klein (1999) that a certain reluctance in interpretivism to address norm and value issues will render the IS research incomplete and discuss the aspect of criticality. I also discussed the use of hermeneutics as the mode of analysis. The intent was to understand what the practitioners say or do and why. I addressed the matter of my immersion and the hermeneutic principle of suspicion. In Section 4.3.1.2 I committed to acknowledge, reconstruct and move beyond my prejudices (Bentz and Shapiro, 1998). In Section 2.7, I explained the approach to theory as a way of knowing, that aligns with ethnography being a theory of description.



Chapter 3 presented and explained contemporary Flyvbjergian Phronesis. Thereby, I addressed the 'How' questions of the approach. A key tenet of Phronesis is to focus on the minute details rather than the 'big idea' (Flyvbjerg, 2001). I put this forth during the discussion as to why I constructed the Phronesis lens (Section 3.2). I particularised Flyvbjerg's four value-rational questions to the performative perspective in the different phases of this research and thereby constructed the Phronesis lens. The constructed contemporary Phronesis lens was to enact D-E and not an all-encompassing guide for doing Phronesis research. In each part of the lens (Sections 3.2.1 to 3.2.4), I devised and then linked the exploratory question that was particularised for this research. In order to construct the lens, structure is necessary but not a rigid form by any means.

Chapter 4 explored and explained Design-Ethnography (D-E). I addressed the 'How' questions of the approach. In Section 4.3, I mentioned that the D-E in IS paper by Baskerville and Myers (2015) was seminal, and I would not find applications of the method until later in my research. I disclosed that fieldwork rather than interviews are the primary source for data collection. The reason had to do with my immersion in social reality (Section 4.3.2.2). I discussed reciprocity, fieldwork and interviews as the data collection methods. Due to its importance to the research, I foregrounded reciprocity as a data collection method rather than as part of fieldwork. Fieldwork was discussed as the underlying support of interpretive research. I disclosed that fieldwork was to be conducted with the assistance of archival research, design workshops, design thinking, and search conferences captured as field notes (Section 4.3.2.2). Interviews were to be conducted to allow participants the space to describe their world in their words. The D-E tools of social mapping and experience juxtaposing assisted (Section 4.3.2.3). After that, I unpacked how data analysis and interpretation would unfold in this interpretive research. I proposed the use of the Phronesis lens to guide the initial data treatment phases (free tagging) and the four exploratory questions. In the final sections of the chapter, I discussed the process of ethical clearance and the role of Phronesis in the evaluation of the research. Importantly, I discussed the continuous self-evaluation of the ethnographical research and how the Phronesis methodological guidelines would assist in my immersive state.

Chapter 5 focused on the two practical contributions to performative research in corporate communication. I described specific instances of the data analysis and explained how I



undertook the research. I used argument, claims and evidence to make inferences. To describe that I have developed an understanding of the social reality given the research problem, I explicate what could be done to better support of the communication practitioners. The data moments guided my approaches and I used the D-E criterion as evaluative tools. The D-E criterion assessed whether I am delivering quality research that has value to the fields. Chapter 5 focused on the D-E descriptive 'What' questions. The Phronesis lens focused on the 'Why' questions and gave strength and reason to the potential effect on the empirical setting. Contribution claim 3 was that corporate communication practices support the task of relationship building with stakeholders. I explained the value of the individual practitioner's professional network, and the contribution made to relationship building for the practitioners when doing so. I used examples from data to demonstrate the importance of the internal stakeholder group to practitioners. Contribution claim 4 was that the time-consuming task of searching for information performed by communication practitioners is not justifiable. I explain the social reality of the University, using the viewpoints of the research participants and internal stakeholders and focus on the expected outcome, better access to information. I found that the participants agreed, the university over relies on e-mail application. More importantly, the data examples underlined that the culture of sharing information is low.

Chapter 6 outlined the methodological and theoretical contributions as I deployed Phronesis to enact D-E research. I demonstrated specific instances of the data analysis and explained how I undertook the research. I used narrative description to provide hermeneutic descriptions. To demonstrate how the socio-technical nature of IS could be balanced, get a better understanding of practitioners' involvement in the design, and view the potential of power if seen as productive and positive, I turned to Phronesis. I allowed the data moments to guide my approaches and used the D-E criterion as evaluative tools. The D-E criterion assessed whether I deliver quality research that has value to the fields. Chapter 6 also focused on the D-E prescriptive 'How' questions. The Phronesis lens focused on the 'Why' questions and gave strength and reason to the potential effect on the empirical setting. Contribution claim 1 was that Phronesis seeks to balance the social and technological aspects. I foregrounded that the Phronesis lens would do so and constructed the lens. I also enacted the lens in the research. The Phronesis lens is a key methodological contribution made from the research (Section 7.4.4). Contribution claim 2 was a practitioners' contribution to the design process is different



when leveraging the uniqueness of the D-E method. A theoretical contribution to the research addressed the challenges put forth to the socio-technical nature of IS. My immersion in the social reality of the University, brought forth that the starting point of access was reciprocity, rather than the traditional ethnographical viewpoint of access gained through a gatekeeper. The methodological contribution was the three states of immersion and the role of reciprocity. Contribution claim 5 was that there are significant implications for power in practitioners' work practices when the focus is not on limitation and exclusion. I demonstrated the use of the Flyvbjergian features of power when the focus is not limitation and exclusion. In the context of HE, the social reality of CUT, and this IS research itself, power was seen as productive and positive.

7.3 Findings – addressing the sub-research questions

This section discusses the findings of the research. The research sub-questions structure the information. Following the sub-research questions, I address the overarching research question and the key contributions made to it in Section 7.4. The question *How should content management practices be examined, when considering performativity and the value of practitioners' experience in corporate communication?*

7.3.1 How can Phronesis enact D-E in a performativity-oriented research context?

I drew on my involvement of two CMS Projects (**the technology**) that did not meet the expected outcomes to outline the experience of the problems the research interrogates (Section 1.3). I supported the abductive argument with literature as I was hesitant to pronounce myself capable of identifying why both these CMS Projects were not fully delivered on (Section 1.2). What came to the fore was that the practitioner perspective, and thus their experiential knowledge, are neglected in research. This was found to be due to a techno-centric focus. Thus, the first claim of this research was that Phronesis seeks to balance the social and technological aspects. Performativity was declared the epistemology in Section 1.2.2. Performativity balanced the social and technological aspects of my research. In using work practices as the epistemological stance for my research, I was able to access knowledge that lied at the intersection of the social (practitioner experience – Sections 5.3.1, 5.3.2), the technological (using unique data collection tools of D-E – Section 4.3.2) within the context (the



University – Section 5.4). I utilised the structures of support of the phronetic exploratory questions at different phases (Chapter 5). In Section 6.3, I demonstrated how I used hermeneutics and its iteration through the data. I demonstrated how the linkages began to appear in the data. I also demonstrated how the Flyvbjergian Phronesis lens, in particular, the first part (Section 3.2.1) was used to focus on the influence on practices from different viewpoints, and thereby demonstrated how the lens assisted as I examined the minute details. The problem claim states that experiential knowledge is neglected in research because of a techno-centric focus; thus, I focused on experiential knowledge to bring balance.

Following that, the second claim centred on D-E and its unique characteristics, which may improve practitioner involvement in system design, as they also seem to have limited involvement in the process of design. I explored the possibility of a different or better explanation for the viewpoint that practitioners seemed to have limited involvement in the process of CMS design (Section 1.2.2). Thus, in Section 6.4.1, I used examples from data that focus on performativity to address the socio-technical nature of IS which was put forth as challenges by Sarker, Chatterjee and Xiao (2013). I enacted D-E with the support of the Phronesis lens and found that a focus on the generalisation of research outcomes brought imbalance to the social and the technological aspects in IS (Section 6.4.1.1). I demonstrated how the Phronesis collaborative work process (3.2.4.2), contribute to the design of the functionality of a CMS. I identified Phronesis collaborative work and the D-E tool search confers as one and the same in Section 4.3.2.2. Both focus on the grouping of opinion or adding partials answers from individuals to problems, possibilities, and risks. Rebalancing the socio-technical nature of IS is a key methodological contribution of this research (Section 7.4.2). Access to do ethnographic research has traditionally started with the assistance of a gatekeeper (Section 4.3.2.1). My immersion in the social reality of the University, brought forth that that starting point of access was reciprocity (Section 6.4.2). The three states of immersion is a key methodological contribution of this research (Section 7.4.1).



7.3.2 **What should the D-E method interrogate for performativity in corporate communication in a HE SA context to emphasise content management practices?**

The intent of the research in terms of individuals (**communication practitioners**) is to value the practitioners' stakeholder. The practitioners' stakeholders are considered representative of the worldviews of the community. This is done whilst also considering the needs of the organisation. The third claim was that corporate communication practices support the task of relationship building with stakeholders. I used examples from data to explain the importance of the internal stakeholder group to practitioners, and an example from field notes to underline that it is not only the communication practitioners who consider the internal stakeholder of key importance (Section 5.3.1). I illustrated the value of the individual practitioner's professional network to the practitioner and the team, and the contribution made to relationship building for the practitioners. Appendix K contains the social structure of the participant's professional network. I also found that communicative interactions to the benefit of the University, and the improved experience of stakeholders was a balancing act (Section 5.3.1). The interpretation of data underlined that the C&M team use their practitioner know-how to support the internal stakeholder group, which I interpreted as their primary focus and their only stakeholder group (Section 5.3.2). The perspectives from data consolidated that communication practitioners are educators who have the power to influence the opinions and views of others (Section 5.3.2). The fourth claim was that the time-consuming task of searching for information performed by communication practitioners is not justifiable. As a crucial organisational asset, the data analysis showed that information should be reliable, timely and organised for employees to access and use to the benefit of the UoT. The focus was on design to the benefit of the University, and as the research progressed the design called attention to a system that is fit-for-purpose in terms of the communication practitioners' work practices (Section 5.4).

7.3.3 **Given the phronetic perspective, how is the role of power supported in this research about practitioner's work practices?**

The intent of the research in terms of organisation (**the University**) is to prioritise the success of communication undertaken by the University. The fifth claim was that there are significant



implications for power in practitioners' work practices when the focus is not on limitation and exclusion. I demonstrated how the role of power could be seen as productive and positive in the context of HE, the social reality of CUT, and this IS research itself. I used examples from the four other contribution claims to demonstrate the role of power when research is focused on the practitioners' work practices. Throughout the thesis, I had asked questions that were phronetically aligned and with a focus on minute details. The Flyvbjergian features of power allowed me to characterise power as I analysed the viewpoints (Section 3.2.3.1). When power shifted the authority of the act of communication to the stakeholders who are usually the recipients of the content, it revealed the episodic nature of power (Section 6.5.1). I demonstrated that participants in the social reality of CUT foregrounded a principle of guiding stakeholders rather than forcing their viewpoint, which underlined how power is exercised rather than who has power. I deployed mechanisms in D-E, hermeneutics, interpretivism and Phronesis to guard against my immersion; thus, power produces knowledge, and knowledge produces power (Section 6.5).

7.3.4 Reflecting on how findings contributed to a new CMS Project C

Quite late in my research (2018), approval was given that a new public website CMS could be designed and developed. I opted to 'test' the findings from this research in a new CMS Project (Project C) that was initiated at the beginning of 2018 and completed in September 2018. As project leader from the University's side, I loosely employed CM practices framework (Appendix A), guidelines for design (Appendix B), and CM strategy (Appendix C) in Chapters 5 and 6. CMS Project C is not an outcome nor a contribution from this research, but I opted to use this project to reflect on my findings.

This was the fastest turnaround time seen yet on any of the CMS Projects. I (practitioner) had executive management support as with CMS Project A, and the IT team was part of the project team. A locally based external service provider, Digital Platforms, was appointed to design and develop the CMS. Design workshops (D-E tool section 4.3.2.2) took place on-campus and off-campus. The team used whiteboards to share views during the creative sessions. At different stages, I was joined by IT team members, whilst the project team was able to establish technical requirements for the CMS. I followed the smaller task teams' approach. If the focus were design, the design group would have a workshop; if it were system requirements, the



developers would workshop. Rather than bringing the communication practitioners on board to reiterate what they had already shared with me during the interviews, I referred to the CM practices framework (Appendix A) and the guidelines for the design (Appendix B). When necessary, clarity was sought from a particular participant. This streamlined the input into the design and development of the system, and critically, the IT/IS practitioners on the project had a single person from which to take direction. This may have contributed to the faster turnaround time of the project. Appendix S is a compilation of screenshots from the live website of CMS Project C. The CMS was operational from July/August 2018 and website went live in September 2018 (see Sections 1.3 and 6.4.1.1 for more on the CMS Projects).

7.4 Key contributions

In the previous section, I discussed the findings which addressed how the sub-research questions were answered. In the next section, I discuss the key methodological contributions to address how the overarching research questions were answered. The question *How should content management practices be examined, when considering performativity and the value of practitioners' experience in corporate communication?*

7.4.1 Ethnographical states of immersion when doing organisational research

My immersion in the social reality of the University, brought forth that the starting point of access was reciprocity, rather than the traditional ethnographical viewpoint of access gained through a gatekeeper. The three states of immersion are immersion through the traditional concept of fieldwork, immersion in the organisational context and immersion in core team context (Sections 4.3.2.1 and 5.3.1). I identified that in the first two, the starting point of access to the empirical setting is indeed through a gatekeeper but with different levels of knowledge. However, in the third state of immersion, there exists involvement within the context. Early self-reflection on my relationships with others brought to the fore and reciprocity in this research would bring a certain openness to mutuality. Thus, reciprocity is the starting point. Example from the research is in Sections 5.3 and 6.4.



7.4.2 Rebalance the socio-technical nature of IS

A theoretical contribution to the research addressed the challenges put forth to the socio-technical nature of IS (Section 2.3). In Section 6.4, I used examples from data that focus on performativity to address the socio-technical nature of IS, which was put forth as challenges by Sarker, Chatterjee and Xiao (2013). In whether the socio-technical should influence IS innovation, I demonstrated the value of collaborative work in the design process. In the final challenge of the neglect of power dynamics in IS, I demonstrated how the contemporary Phronesis lens assisted me and valued experience as well as collaborative work. I enacted D-E with the support of the Flyvbjergian Phronesis lens and found that a focus on the generalisation of research outcomes brought imbalance to the social and the technological aspects of IS.

7.4.3 Viewpoint of power when productive and positive

The viewpoint in this interpretive research was the role of power, how power is exercised, and not who has power, and why they have it. I did not focus on oppressive power, rather implications thereof, I did not question the status quo of the social reality nor did I have emancipatory ambitions, and I did not focus on what is wrong with the world, instead perhaps what is right (Section 2.4). I demonstrated the Flyvbjergian features of power which sought to characterise power in order to be able to analyse power. In the context of HE, the social reality of CUT, and this IS research itself, I have demonstrated a viewpoint of power when the focus is not limitation and exclusion but rather proactive and positive (Section 6.5).

7.4.4 The Phronesis lens – a contribution to theory

The phenomena of interest for my research was to rebalance the social and technological. The techno-centric focus found in literature supported my abductive argument that there is an imbalance between the focus on technology and the value given to experiential knowledge (Section 1.2). That would be the reason that I chose performativity as the epistemology of the research. I constructed and enacted the Phronesis lens to my research to demonstrate how Phronesis could rebalance the social and technological aspects (Section 3.2, Chapters 5 and 6). The intention of the exploratory questions throughout this research was not necessarily getting a response. Rather, it was to serve as a guide for phronetic actions when a situation is closely examined (see Section 3.2 for the full discussion). The lens also supported the



enactment of D-E which I chose because immersion is accepted and expected in the method (Section 4.3).

In Section 2.7, I explained the approach to theory. I discussed how the views of Gregor, (2006b), Ingold, (2008) and Nader, (2011) had influenced my view of theory and what I understand as theory in this research. The research of Schwandt, (1994 cited in Gregor, 2006, p.615) emphasised that the world of lived reality is constructed by social actors and that to understand their world you should find meaning by describing the social reality through internal elements - for *Verstehen*. I remarked above that D-E and the Phronesis lens supported such immersion. I also explained that the viewpoint of Ingold, (2008) on the matter of theory aligned with my experience as a practitioner. He remarked that theory could be a way of knowing rather than a framework for knowledge (Ingold, 2008). His research emphasises the notion that for practitioners there are no division between method and theory (Ingold, 2008). In Section 2.7, I also discussed that should I have chosen to use design theory, I would potentially perpetuate the imbalance between the social and the technological. Both the product of the design and the process of design (without the social) aspect focus on the technological. Should I have explicated design theory principles and demonstrated that they are effective, it would, in this instance, have been a falseness and an incorrect emphasis of what I really do – which is a demonstration of a way of knowing.

Nader, (2011) asserted that ethnography is a theory of description because ethnography is not merely description, but is in fact theoretical in its mode of description. Nader, (2011, p.211) also defined theory as “the analysis of a set of facts in their relation to one another, or the general or abstract principles of any body of facts”. Thus, I understood theory as a way of knowing in which questions are continuously asked and theory as well as method are not necessarily separate. I referenced “a way of knowing” as it relates to Phronesis in different ways throughout the thesis, some of which include “knowledge used in action”, and “knowing as part of action”, “knowing-in-action”. I constructed the contemporary Phronesis lens from value-rational questions to accumulate knowledge, and have endeavoured to do so in a systematic manner which to me means, asking questions constantly (Gregor, 2006a). Thus, to represent both IS and ethnography with D-E, I purported that it could not be a theory from



either but should be able to support both, hence the use of the term lens. I discussed the use of the lens in Section 3.2.

I conclude the key methodological contributions of the research by deconstructing the overarching question to interpret if indeed, the question and the key contributions are aligned. The question *How should **content management practices be examined** (Section 7.4.1), when **considering performativity** (Section 7.4.2) **and the value of practitioners' experience in corporate communication?** (Section 7.4.3)*

The research sought to provide practitioners with the opportunity to share their experiential knowledge; in this, I include myself as well as experiential knowledge found in the literature. Focused on conduct in the performing of tasks emphasised the attention on the practices of experts and gave insight into the context of content management and use. The insight gained through the Phronesis lens placed value on the communication practitioners' experience. In the remainder of the chapter, I discuss how the research was evaluated, limitations and difficulties experienced when doing the research. Also, who should consider this research, and possibilities for future research?

7.5 Evaluation and self-evaluation of the research

I begin this evaluation of the research with the checklist. The intent is to corroborate which aspects of the approaches were addressed in Chapters 5 and 6. Figure 7-1 below contains the five "demonstrate use" items from the contribution claims in Chapter 5 (Figures 5-1, 5-3), and Chapter 6 (Figures 6-1, 6-4, and 6-5). If I did indeed demonstrate all aspects of the approaches, what should appear when these are organised into a sequence is the significant sections of the structures in Chapters 2, 3 and 4.

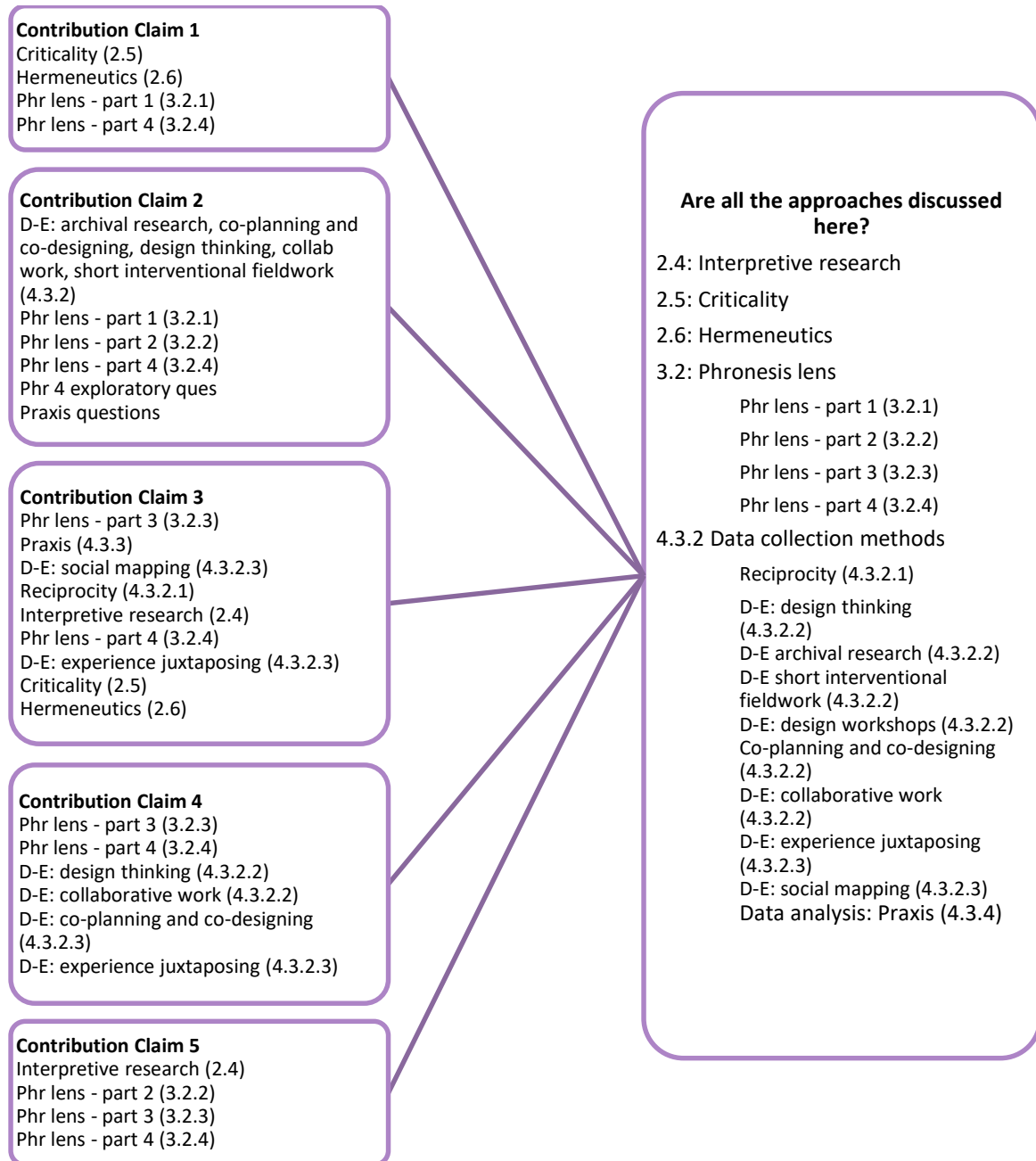


Figure 7-1: Graphical checklist to corroborate that all the approaches were demonstrated.

The graphical checklist confirms that all the approaches discussed in the thesis have been demonstrated. I discuss the evaluation of the research with Flyvbjerg's Phronesis methodological guidelines as valuable indicators of direction for my conduct (self-evaluation). I then briefly refer to the D-E criterion that was used in Chapters 5 and 6 (method). Then, I answer the questions that aim to guide ethnographical research from an interpretive stance in IS (interpretive research).



The contemporary Phronesis attributes of values and ethics, reflection, intuition, value-judgement and virtues are an amalgamation of how research could view ethical conduct. Using Phronesis as a lens with its strong focus on value-judgement meant that it had permeated the research from the planning phase through to the analysis and interpretation phases (Chapter 5 and 6). I have made every effort to ensure the Phronesis lens had not only presence but also function in all the phases of the research (see Figure 7-1) above. In Section 1.4, when I discuss the first-person writing approach taken in this research, I mention that the guide 'focus on values' calls for balancing instrumental rationality with value-rationality, and how this shifted focus to prioritise both the social and the technological. This view supports my involvement in the context, as I interrogate how individuals interact within the organisation and with technology. In Section 4.3.1, when I add to the discussion of what the collaborative work entails (no 'one voice' claims the final authority) my conduct was guided by the guideline dialoguing with a polyphony of voices. At the beginning of Section 6.5, I gave examples of the phronetically aligned questions I had asked myself – culture and worldview in Section 4.3.1 and supported the abductive argument in Section 1.2 which underlined the criticality aspect as well (Section 2.5). Another example was in Section 3.2 where I explained, "As an immersed researcher, I will influence the social reality, and of course, as a practitioner, I have already influenced the social reality of the research context." I deployed several support mechanisms (D-E, hermeneutics, interpretive research, Phronesis lens) and described each mechanism briefly in Section 6.5.1. D-E supports a certain level of immersion and active engagement (Section 4.3). The final illustration was brought to the fore in Section 6.4.2 where I use the methodological guideline 'getting close to reality' as an example to affirm that I should contribute my viewpoint on reciprocity as the starting point. This is part of the three states of immersion key contribution. In Section 6.4.1.3 I use the fourth part of the Phronesis lens which has the exploratory question *What, if anything, should we do about it?* to explain my role as equal to that of the participants. I, therefore, put forward that I understood the research context and was able to connect the polyphony of voices, and no voice claimed final authority. In this, and through the supportive structure of the Phronesis methodological guidelines as self-evaluative mechanisms, I include myself.

I had used the proposed criteria for judging D-E in IS as part of the demonstrative tools in Chapters 5 and 6. Baskerville and Myers (2015) were cognizant of the fact that the



ethnographer who utilises D-E would require guidance to deliver high-quality research, and others (editors, reviewers, assessors) would need criteria to guide them in the as yet, unfamiliar method of D-E in IS. I used each criterion and discussed how or why the criteria were met in the relevant contribution claim. In Sections 4.2 and 6.2, I have included an assistive guide table to navigate each chapter. I also considered and evaluated the ethnographic research in consideration of the interpretive paradigm and had asserted this position in Section 4.5. Myers (1999) proposed questions for when you conduct ethnographical research from an interpretive stance in IS.

1. Is this a contribution to the field?

Yes. This research makes three key methodological contributions and a theoretical contribution. Discussed in the previous section are the ethnographical states of immersion when doing organisational research (Section 7.4.1), the rebalance of the socio-technical nature of IS (Section 7.4.2), the viewpoint of power when productive and positive (Section 7.4.3), and the Phronesis lens (Section 7.4.4). Beyond that, there are also practical contributions to the context of the research. I discuss this as part of the findings in Section 7.3.

2. Does the author offer rich insights?

Beginning in Chapter 1, I had already begun to use hermeneutic descriptions and narrations of the HE context, the social reality of CUT, as well as my abductive argument to support the problem discovery (Sections 1.2 and 1.3). In fact, the entire thesis narrates the developed of a story – an argument – in support of a methodological contribution. Central to this activity is that the thesis draws on deeply engaged narratives of a team of CMS practitioners. I explained the stance of theory in Section 2.7 as a way of knowing and that ethnography is a theory of description. In Section 4.3.1, I discussed the research participants and declared my preconceptions and prejudgements, which is part of the hermeneutic principle of suspicion (Section 4.3.1.2). In Chapters 5 and 6, I demonstrated the use of the various approaches and draw on data moments to guide the process. I used narrative descriptions to share the research journey of discovery, analysis of the data, and the interpretations thereof.



3. Has a significant amount of data been collected?

I conducted this research with a small group of participants, in a particular context, and the research topic focused on niche areas. A "significant amount of data" is open to interpretation. I want to think that yes, in the case of this research and its context it has been achieved. I had written numerous field notes from reciprocity sessions and other engagements, documents from archives, workshops and conferences attended, design workshops, interviews with written notes and voice recordings. Data collection through immersion and practical involvement allowed for a significant amount of very in-depth data to emerge, featuring different types and phases, such as reflexive fieldnotes, ongoing conversations even after interviews, iterative interviews, and collaborative sensemaking. My sense is that the question is more to ensure that you place focus on the data collection task during the process of doing the research – as opposed to answering yes or no. I interpret the question to mean that you should find a way to define when you know enough data has been collected. Also, this is interpretive research. In giving exact numbers of how many interviews, field notes and hours I had spent, I am quantifying qualitative research. This, I will not do. I gathered and analysed data – through repeat interviews, for example – until I began to see repetitive patterns in the data. Once this occurred, I was comfortable that I had enough data collected to interpret the context of the research. For interest, I have made a screenshot of the code groups from Atlas.TI. The screenshot below has the number of final code groups and the number of tags is indicated in brackets.

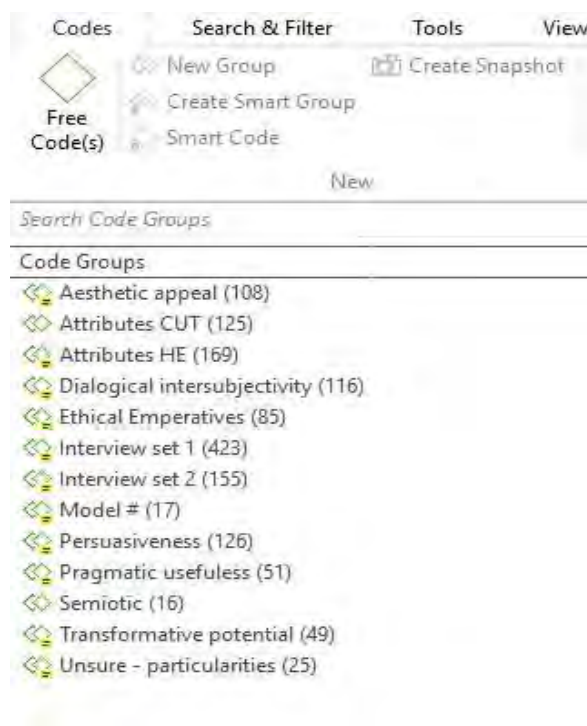


Figure 7-2: Screenshot of code groups from Atlas.TI.

4. Is there sufficient information about the research method?

I discuss the newness of D-E in Section 7.6. I briefly relate some of my experience in the use of the method. I was comfortable to explore the method and the research paper by Baskerville and Myers (2015) was an excellent guide. In October of 2017, when I was already some ways into the fieldwork, I had the opportunity to attend a two-day workshop and engage with Prof. Richard Baskerville, co-author of the D-E in IS paper. This allowed me to ask my burning questions and gauge whether my gut feeling had served me well. The opportunity to engage with him may perhaps have been one of the most significant advantages I had in using the approach. D-E in IS now has a few years under the belt, and more research has been published.

7.6 Reflection on shortcomings and difficulties

I chose the research approach in consideration of the fact that I am immersed in the context and would need to use my experiential knowledge. Though it may be unconventional for a researcher to use their knowledge of practices in the manner which I have done, I have both acknowledged the viewpoint and carefully considered my state of immersion (Sections 2.4, 2.6, 4.3.2.1, 4.5). The research was made more difficult due to my immersion. I spent countless hours debating and carefully weighing whether I was doing the right thing for the right reason.



The choice of approaches was one of the difficulties in the research because the review of literature had little to no guidance on such immersion. However, I am convinced that the occurrence of my immersive state is not unique. The only uniqueness is perhaps that I have emphasised the stance as a factor that has been considered in the research. Another limitation was the newness of D-E in Information Systems (at the time the research began in 2015; I had a preprinted version of Baskerville and Myers seminal paper). The paper proposed that ethnography in IS had moved beyond the observation of participants to active engagement in the field. It meant I had no published papers to review and assess the method. I had to follow my gut feel into the approach. I was daunted but also exhilarated at the prospect of discovery.

To operationalise Phronesis as a lens was a challenge. This was a gruelling undertaking in my research. The lens did not exist (Section 3.2) as I articulate it in this thesis. I had to conceptualise the idea of a lens, create the lens and then operationalise the lens. It would be remiss if I omitted that there were many difficulties I had to overcome as the process of discovery unfolded. One particular difficulty with Phronesis and a PhD research undertaking is structure. Phronesis has adaptability due to its philosophical nature and strong roots in social science which could have been applied in many ways. There was potential as a theory, methodology, knowledge orientation and as an evaluation tool. I considered all, and I even considered not including Phronesis. However, I was convinced that Phronesis would be crucial to the research, in particular, its emphasis on context and the value placed on experience. As I said, to conceptualise and implement how to take advantage of phronetic research was a formidable task. The published research about Phronesis offers deep insight from the experiences of the researchers, and I wanted to take advantage of the access I had to their experiential knowledge. However, applied Phronesis is not a step-by-step method to follow, which can be seen as a difficulty, or it can be seen as 'freeing'. I think it depends on your interpretation of such matters. I opted to construct the lens, but other researchers should not limit themselves to the same interpretation. Another option I considered was Phronesis as a knowledge orientation. Once you grasp the concept of Phronesis, it is free to structure (or not structure) as needed. This openness may be a limitation to some.



7.7 To whom will this research be of value?

The research is recommended for IT/IS practitioners who prefer to value participants' views in design activities. I offer this research as a potential way for how this can be achieved. Also, researchers or practitioners who have an interest in the balance between social and the technological aspects of IS projects may find some guidance in the thesis. The approaches used could be of value for researchers who consider the context of their research to be of higher importance than the generalisation of outcomes. Researchers who find themselves in the position of being immersed in the context but questions the correctness of active engagement in the field may discover some value from the research approaches and my experience. Researchers or practitioners who are interested in contemporary Phronesis and perhaps the viewpoint of a lens. This research is, as far as I know, the first to apply D-E in a CMS social phenomena. My hope is that the contributions made may serve other IT/IS research and projects, but also beyond the scope of the field. Perhaps organisational research, content or information management, corporate or organisational communication as well.

7.8 Possibilities for future research

The research used the constructed Phronesis attributes to interpret value-judgements and the experience of the participants in consideration of their constructed social reality. However, the nature of the particular social reality was not part of the focus of the research and perhaps could be a consideration to explore in future research. Organisational communication was not the focus of this research as the focus on work practices of the particular team headlined corporate communication. However, organisational communication has an important role to play, especially in hierarchical settings. More research could be conducted about how individual team member performance impacts on the collaborative work and practices of the entire team. It was beyond this research scope to interrogate precisely how to approach the issue, but the matter was flagged repeatedly during the interviews. This may, however, be more relevant for research that focuses on human resources or performance management.

Finally, traditional ethnography has a problem of scale, the smaller project focus is reachable but scaling up to the entire organisation, or distributed activities was found to be problematic (Beynon-Davies, 1997). D-E support movement in and out of the setting (short interventional fieldwork) and accepts that the researcher may change the social reality. However, to upscale



the research to an entire organisation such as the University may still be an issue. Especially in instances where there are much larger teams to consider. I suspect the time spent on data collection would be an issue in a real-world project scenario. However, if time is not an issue, a project of this nature on a larger scale may be a worthwhile contribution to the research in the fields of ethnography and information systems.

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APPENDICES

APPENDIX A: CONTENT MANAGEMENT PRACTICES FRAMEWORK

Content management consists of collecting, managing and publishing content which is the end goal (Boiko, 2005). Practices refer to the communication practices and the tasks they have to complete in order to reach the end goal of publishing content and is captured in this document. The management of content is discussed as part of the guidelines for design and refers to the system needs (Appendix B) in order to manage content for the University. A contribution to the content strategy which aligns with practices has been made (Appendix C).

COLLECTION	
Practices	Description
Authoring	Creating new content Should have available: - Authoring tools - Content lifecycle
Acquisition	Gathering content from existing sources. Employees submit information: - Use web forms for content submissions (Forms can curb user creativity). - The benefit is structured content submissions. Functions to aid collection process (which is also the editing function) checking content is tagged and ready to be published: - Use MS Word template for creative content - .DOT files with fill-in fields, - Validation macros, data connections to metadata lists and CMS repository. - May allow the user to feel at home with the tool. Content inventory (existing sources): - Archived information - Printed marketing materials - Individual workstations - E-mail Conduct a content audit to determine potential worth (reusability) of information. Create syndicated information which means components that are reusable and can be shared with others in the University.



Conversion	Remove unnecessary information from the content: Use plain language. Unwanted information such as old headers, footers, navigation etc. Format Mapping: standardise format – separate rendering format from the structure. Structure-mapping: make information explicit or change as necessary. See content lifecycle (below) and reusability of content.
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
- Communication practices should be improved, not completely changed. - Regular training of system users is essential. - Change media coverage form to two forms: research, projects (full feature article), organisational related AND highlights such as awards, happenings (short version article). - Environment that supports and encourages reading by communication practitioners to the better vocabulary of team members who are predominantly second or third language speakers. - Identify the expert of a particular content component within University, add name of individual to system so other employees can contact expert should it be needed. - Advisory information should be added. Example: What a video can be used for, timelines of relevance, target audience etc.	
Possible actions for doing things differently What should be done?	
- University culture forces a writing style. Communication practitioners have different writing styles influenced by their background, education, etc. and the tendency of policing writer's perspective is unappreciated. Communication practitioners should have the ability to write from their own viewpoint and get review/edit input without changing style to another writer's style. This causes a lack of freedom of expression. - Freedom to interpret is vital to creativity and too many voices curbs the process. - None of the writers wants to damage the reputation of the University, co-responsibility does exist and should be valued. Editing function should be to do risk mitigation – a check to determine can content cause damage? Speeding up release of content.	
Where are we going?	
- Teach internal stakeholders about how to communicate with us. - Value input from colleagues during review phase – institute 2-way round-robin.	

AUTHORING TOOLS	
Practices	Description
Use plain language	- Word Difficulty - Word Length, Frequency, and Difficulty



	- Word Concreteness - Nominalisations - Noun strings
Style guard	AP style guide, templates, stylesheets, editorial guidelines
Editorial processing	- Correctness rules - Grammar, punctuation, word usage - Consistency rules - Communication rules - Voice (active, passive, 3rd person) - Stylistic rules (stylesheets) - Correct way to communicate with the intended audience - Using right vocabulary - Use of controlled vocabulary (Rockley and Cooper, 2012; Schriver, 2014)
Possible actions for doing things differently What should be done?	
- Define the writing by categorising the target audience in a document to assist in communication practices. Must be flexible and revisited regularly. Categories identified from conversations: - Academic/research writing - Professional organisational writing - Awareness of happenings writing Assessment: Media Coverage form - Scoring category 1: Research, Teaching and Learning related - Scoring category 2: Organisational (partnerships, management) - Scoring category 3: Activations, awareness, awards	
Where are we going?	
- Establish a culture of urgency to disseminate information via the system with its planned helping tools and reviewer teams. - Our target audiences become storytellers for the University, sharing their experience.	



CONTENT LIFECYCLE	
Practices	Description
Determine Content Lifecycle for each component and its audience within the University community. <i>Who is the intended community members we want to reach? – See strategy (Appendix C)</i>	- Manage: version control and access control (create, view, edit); - Create: collection – how, process, authoring tools; - Check in: content created/reviewed (add to system); - Setting status: ready for edit, revision/update, release; - Workflow: deliver content – date control (activation date, de-activation date, revision date); - Reusability: once-off; yes – multiple locations; yes – with revision; 3, 6 or 12 months.
Reports should be created to aid in analysis, risk mitigation, content tracking.	- Where used (also where content is reused). - Status (status of a project or content process). - Responsible employees (who is responsible for each task). - Project review (for example, what were the durations of a task, how many reviews were required). - Inactive modules (on hold, archived). - All content on a particular subject regardless of content type. - Requires metadata to be able to automate reporting.
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
- Good practice is that the owner of the content must first review the information before it is released. This is not to change edits to preferred version, but to check for inaccuracies or critical information that may be missing. The editor of the content makes changes to fit the target audiences and this needs to be considered and explained to the owner in the process. Over time, this practice will instil confidence in the team's ability. - Relationship building with internal stakeholders can be used as a tool to allow power to be exercised in crisis communication. - Internal stakeholder is the most important: be sure to share relevant information with internal stakeholders, empowering them to communicate on behalf of the university.	
Possible actions for doing things differently What should be done?	
- Individuals will make their own assumptions if you do not share information timely. Even simply acknowledging that a process is unfolding and there will be an update with clear guidelines on what to say if you are asked about the topic can improve the reputation of the University. - Not reporting or acknowledging a negative situation is perceived as hiding information. - Action: do not have to give full details but can simply mention and then give the actions that are being taken.	



- Manage rumours by telling your own story. Take responsibility of giving employee information that they can communicate in the form of Q and A or regular full but brief updates. This creates a knowledgeable communication channel during a crisis from any desk in the University.
- Example: Remind employees not to listen to rumours (perhaps about retrenchments). Tell them what you are doing well in 1, 2,3, 4. We are working on 1,2,3. Then in the next workshop remind them that the rumour perhaps did not come to be (retrenchments) and update. This gives the internal stakeholders confidence in the information shared and believe in the system.
- Served community can contribute positively to transformation if they are informed and have access to the goals and objectives of the University.
- Example: graduation booklet that contains achievements. Parents, prospective students etc. can read about what CUT is doing and pay it forward for the University.
- Events are a type of content that allows the community to have an experience of the University in the same manner as when reading a news story or watching video.
- Empower readers of content by using the right terminologies for the context in writing and doing so consistently – vocabulary lists can assist. Better the ability by reading more.

Where are we going?

- Give internal stakeholders the responsibility of managing the reputation of the University. Be clear about the stakes should they choose to communicate information or give credence to rumours. “Reputation is everyone’s job risk”.
- Can we encourage employees to read more? Or create content types that are easy to absorb and more accessible, takes less time and reading? Increased vocabulary comes from reading, which makes a better writer.

REUSABILITY OF CONTENT	
Practices	Description
Content audit	Looking at content and assessing its value and opportunity for reuse. - Content audit how it is written, organised, used, reused, and delivered to its various audiences. - The amount of content: content items, content types. - The amount of contribution: diverse authors, complex sources. - The amount of change that you expect in content: content throughput, design revision. - The number of publications you intend to create: content channels, personalisation (target audience). Get legal and other permissions should it be necessary for reuse.



Gauging complexity guidelines	- Identify scope - Select representative materials - Assess quality of content - Assess opportunities for reuse - Analyse content for reuse - Interpret the findings Analyse opportunities for reuse: - Look for similar identical content. - Look for content currently distinct but could be identical. - Then make decisions on how to unify. Adaptive content automatically adjusts to different environments and device capabilities to deliver the best possible customer experience by filtering and layering content for greater or lesser depth of detail. - Uses metadata - Segmentation - Authoring tools
Segmentation	Manageable chunks (content components) Components can be reused in different information models: - A press release - A project or profile web page - A brochure, annual report, magazine etc. - Social networks The structure remains the same; only the content changes. Components break down further into elements. Content Models - Create, compile information consistently. - Can automate assembly. - Describe element structure of components assembled to create information models. - Content tagged, separated from design but not forever. Simply stored as machine-parseable structures to be reunited. Granularity of reuse – Identifies the size of your components. You create components when: - Content is a logically self-contained chunk of information. - Content can be reused across and within information products.



	Content Elements - Element is smallest part of a component that can be semantically defined but not broken out into a separate component. - Relate to other element from same or other components.
Metadata	Metadata has distinct categories to which it makes valuable contributions: - Navigation: TOC, index, cross reference and browse - Management: author, create date, last edit, status, version numbering - Content type - Internal structure: title, abstract, body - Inclusion: add media here, add banner here, add standard text here.
Where are we going?	
Structuring in content allows for sharing and reuse.	

CONTENT ORGANISATION	
PRACTICES	DESCRIPTION
Organising content into information	- Starts with purpose - Deciding on right types of information - Deciding on right sorts of individuals - Understanding information - Finding ways to standardise information - Finding ways to track and assemble information
Content type	By purpose - Single publication: structure that aids presentation of publication. - Content base: creating structure to make content easier to create, manage, and build into variety of publications. By type - Divisional structure: slices content into useful chunks – lowest level (with a period) – named segments (article, press release), named elements (title, abstract, paragraph). - Access structure: division based on audience need (outlines, taxonomies, links, browse sequence). - Management structure: attributes of content component – metadata.



	- Inclusion structure: components to include in others “add picture here”. By scope - Below the radar structure: content below certain level (for instance actual content in books) not structured. - Inner structure: Table of contents or index considered inner structure. - Outer-structure: stored outside the component and show how component relates to peers and parents.
University content types	Event item - name/title, venue, date, time, short description, image(s)/video, invitee, owner, RSVP, target audience type, marketing purpose, event programme (tweak visibility on/off), event checklist and brief (visibility off only available upon request) News item - title, short introduction, body text, image(s)/video, Image headings, owner Notice item - title, body text, contact page/info, image(s)/video, owner Social networks item - title, short introduction, image(s)/video, owner Publication item - title, short introduction, image(s)/video, owner Service item - name/title, short description, image(s)/video, owner, target audience type, marketing purpose Project (research, partnership, 3rd stream, HE) item - name/title, short description, image(s)/video, owner, target audience type, marketing purpose
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
- Writing: when content is written by an expert the risk is that the writer will assume everyone else knows information that is part of their knowledge base. It should be flagged that they consider the target audience and write in plain language. - Focus on the target audience and their communication needs. There is a tendency to focus on what internal stakeholders want instead. Example: previously focused on academic/researcher to the detriment of the research or project. It needs to be a better balancing act.	
Possible actions for doing things differently What should be done?	
Slogans (Messaging) - What Project(s) - Which target audience group - Timeframe of usage	



- Creativity in producing content is blocked if not given space to practice. Information professionals enjoys being given space to write.

Where are we going?

- Share information but teach employees to use what they need and disregard rest.

Event Content

- Comment section for feedback.
- Robot system (green, orange, red) for booking venues.

Boiko, B., 2005. Content Management Bible. 2nd ed. [online] [e-book] Indianapolis, USA: John Wiley & Sons. Available at: <<https://books.google.com/books?hl=en&lr=&id=p6nUDn3ZaBoC&pgis=1>> [Accessed 8 Mar. 2016].

Rockley, A. and Cooper, C., 2012. Managing Enterprise Content: A unified content strategy. 2nd ed. Berkeley, California, USA: New Riders.

Schrivver, K., 2014. On developing plain language principles and guidelines. In: Clear communication: A brief overview. Tallin, Estonia: Institute of the Estonian Language, pp.55–69.



APPENDIX B: GUIDELINES FOR DESIGN

Content management consists of collecting, managing and publishing content which is the end goal (Boiko, 2005). Practices refer to the communication practices and the tasks they have to complete in order to reach the end goal of publishing content. The management of content is discussed as part of these guidelines for design and refers to the system needs in order to manage content for the University.

FUNCTIONALITY	
DESIGN	DESCRIPTION
Functionality on digital platforms such as websites, social networks and e-mail messages have the same status as information. It is also content because you have hyperlinks, e-forms, search function and call to actions embedded in the information. There is a interactivity component (Boiko, 2005; Rockley and Cooper, 2012).	
Determine functionality needs of CMS	- Starts with purpose - Deciding on right types of information - Deciding on right sorts of individuals (network) - Understanding information - Finding ways to standardise information - Finding ways to track and assemble information
Standardisation – controlled vocabulary	Information architecture - Names of content items – function and information - Create CUT controlled vocabulary taxonomy: - o Reference list of terminology used in the University - o Reference list of names for University facilities - o Reference list of structures – academic and support services
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
- Reduce time spent on unimportant task of searching through and for content. - Access CM system remotely, employees travel on a regular. - Improve co-working practices with access to each other's work. Information system can release employees from waiting for the expert.	

REPOSITORY	
Design	Description
Content database (storage)	Markup Languages - Darwin Information Typing Architecture (DITA) - XML format allows software to communicate with each other - Controlled vocabulary



Control and configuration files Non-content files that is managed within CMS.	Input and Publishing Templates - Content input, publishing output Employee data - Used for access and personalisation Rules files, database - Content types, workflows, personalisation routines. Meta information lists, content index - Augment metadata stored directly Log and other control files Scripts and automated maintenance routines
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
- Empower internal stakeholders with the university processes to respond to tasks with consistency. - Content component creation: levels of access and levels of support for the writers (expert, intermediate, novice). - Alerts (e-mail) with share function when new information is added should go out to relevant team members.	

SYSTEM AND WORKFLOW	
Design	Description
Parameters and structure	Collection system - Employee configuration – roles and access rights. - Metatatorial configuration – metadata fields and controlled vocabulary maintained. - System configuration – structure and workflow of CMS maintained. Management system - DB Admin tasks – user maintenance, permissions, backup, archiving - Sys Admin tasks – content-specific: creating content types, metadata reviews, creating workflows. Publishing system - Sys admin ensure hardware and software to display content is working according to plan. - Web admin ensure web server, application server, CM application objects, databases, and other progs running well. - Web/digital editor ensure creation process for publication (CM practices). Apply standards of the World Wide Web Consortium (Clark, 2007)
Workflow	Collection system - Workflows for: content collection, creation, and aggregation tasks.



	- Workflow should include creation, review, and approval tasks. Steps to complete. - Distribute to individuals to process, and edit. Management system - Sys admin to create workflows for backup, archiving. - Web admin to create connections between CM and non-CM systems that provide data. Also to create workflows for data-mining, and synthesis tasks (reasoning from the general to the particular) for seamless system integration. - Web/digital editor to review, change, verify usefulness of content.
Connection to other University systems	Integration with other systems: - Using LAN WAN effectively - HR system (iEnabler) – for user profiles - Other metadata systems on ITS – programmes offered - Document Management System - Social networks
VALUING EXPERIENCE – RECIPROCITY, FIELD WORK AND INTERVIEWS	
	- Systems to do event management can contribute to the team ability to deliver event content with more consistency exist and should be explored to prevent reinventing the wheel scenario. Example system to explore: Opera. - A job well done is satisfying for communication practitioner. Share analytics, comments, other outcomes of content published via a dashboard with employees responsible for the process.

Boiko, B., 2005. *Content Management Bible*. [online] John Wiley & Sons. Available at: <<https://books.google.com/books?hl=en&lr=&id=p6nUDn3ZaBoC&pgis=1>> [Accessed 8 Mar. 2016].

Clark, D., 2007. Content Management and the Separation of Presentation and Content. *Technical Communication Quarterly*, [online] 17(1), pp.35–60. Available at: <<http://dx.doi.org/10.1080/10572250701588624%5Cnhttp://www.tandfonline.com.ezproxy.net.ucf.edu/doi/full/10.1080/10572250701588624%5Cnhttp://www.tandfonline.com.ezproxy.net.ucf.edu/doi/pdf/10.1080/10572250701588624>>.

Rockley, A. and Cooper, C., 2012. *Managing Enterprise Content: A Unified Content Strategy*. [online] New Riders. Available at: <https://books.google.com/books?id=82X6jGY_dHMC&pgis=1> [Accessed 28 Sep. 2015].



APPENDIX C: CONTENT MANAGEMENT STRATEGY

Content management consists of collecting, managing and publishing content which is the end goal (Boiko, 2005). Practices refer to the communication practitioner and the tasks they have to complete in order to reach the end goal of publishing content. The management of content is discussed as part of the guidelines for design and refers to the system needs in order to manage content for the University. This document is a contribution to content strategy which aligns with practices, and the guidelines for design.

CONTENT FOR COMMUNICATION	
Strategy	Description
Relevance of content should be driven by the audience and context.	Who is the person we are writing for? What would we like the experience or action to be? What do we expect the outcome to be?
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
- Conduct audit of communication channels and create a target audience to react to information guide. This will assist communication to gauge audience receptiveness to information. - Introducing firm structure for communication practices through organisational documents will place Communications and Marketing employees in a better position of power. Team will benefit by becoming known as experts in their work and actioned consistency. - Students are not informed about what we are doing as a University. Share how CUT is doing compared to other universities on platforms – to create interest in their university. - The way information is verbally given to students – communicated to them – is an experience they will reflect on.	
Possible actions for doing things differently What should be done?	
- Value of historical marketing messages to evoke feelings of belonging with alumni. Put a timeline on marketing messages to segment audience in future campaigns. - Using generalised information instead of experience storytelling does not add value to content. The information professional must be the writer and the reader of the story being told – narrator. - Give recognition to the task by adding it to the employee KPAs. - Strengthen information professional in the team by bettering engagement with professional body MACE. - Junior employees should be exposed to other portfolios to encourage learning more tasks, create a team environment of sharing which allows them to grow. This also enables them to assist in the absence of another junior employee team member.	



Example: current team of junior employee members share an office space which gives them the opportunity to share their tasks with each other and simply be aware of what the other juniors are doing. This is encouraged by the senior employees.

- Take time to reflect on tasks, determine if it is still relevant to the context we find ourselves in. There may be changes to management of team or executive management, changes to HE such a free education, operational plan which can impact on previously executed tasks or planned tasks. Be careful of getting into a comfort zone and not reflecting on your activities – “shake yourself out of comfort zone”.

Where are we going?

- Sharing success stories (as a practice) shows us where and who we are as a university.
- Writing improvement happens with practice.
- Same content can be released in different formats: text, video, image to different target audiences – broadening the scope of the content use.

CONSISTENCY	
Strategy	Description
Consistency in writing	
Visual consistency	- Separating content from presentation and systematising presentation affords the easy maintenance of visual consistency (Clark, 2007). - The University can better maintain branding by managing the visual style as a separate entity. - This also affords the University the ability to refresh or completely rebrand without discarding entire CMS, only visuals can be replaced.
Separating content and design gives writer more control of information	- By separating content and design, the writer is given more control over information (Clark, 2007). - It affords writer the option to reuse written information on for instance a news article and social networks; or include information on a service web page or press release. This in turn promotes consistency in communication practices because the writing style and information is the same across all the mentioned channels. <i>See reusability of content in CM Practices.</i>
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
Consistency in messaging is memorable.	
Possible actions for doing things differently What should be done?	
- Communication practitioners change minds of the target audiences. - Communication practitioners are obliged to achieve institutional goals. To do so you have to inform, teach and share.	



- Communication practitioners teach because they are the shared-custodians of information. How to do things, when, where, why, the purpose.
- When paying-it-forward with teaching the learner must have passion, creativity and must read to grow their vocabulary. Also a willingness to learn from others.
- Content disseminated by communication practitioner (on channels such as social networks) leads to engagement for the University which was previously not possible and should be a valued tool.
- Communication practitioner adapt to the context for which they are writing.

Where are we going?

- The deep level of hierarchy at the University means employees find it difficult to resonate with overall University objectives.
Example: Employees in academic department is cocooned. They are part of a particular programme, in a department, in a faculty, in the section Teaching and Learning. They therefore lack an understanding of the institutions narrative description and need guidance.

CONTEXT RULES	
Practices	Description
Understand context to setup these rules. To mix and match content automatically, a set of rules governing process is needed.	
Relationship rules	Small sets of content elements: - Back-end of CMS: banners 1, navigation stylesheets 1, content elements (ex. 1,2,4). - Front-end employee portal: banners 2, navigation stylesheets 2, content elements (ex. 1,2,3,4). - Front-end public: banners 3, navigation stylesheets 3, content elements (ex. 1,4). Small sets of audience types: - Back-end of CMS: contributors, editors – pages must be professional, and contain a medium amount of content. - Front-end employee portal: pages should be vibrant and contain the full content. - Front-end public: pages must look accessible, easy to use; and should contain a minimum amount of content. Small set of publications: - Detect audience type by login. The employee who do the tasks, identified by their roles (Boiko, 2005; Rockley and Cooper, 2012). - Redirect to appropriate template set based on detection.



	- In templates include applicable banners, navigation, background, style sheets by audience type as specified in CMS repository. <i>See guidelines for design.</i>
Responsibilities of each audience type must be stipulated clearly	- The steps to complete a particular piece of work should be outlined from step 1 to complete. - The flow of tasks, as performed by the employees belonging to particular audience group, should show the interactions and interdependencies among audience types. Everything that must get done within the process explained fully with examples. - Tasks include: Authoring, editing, reviewing, approval, publishing, and distribution using CM practices to guide employee.
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS	
Possible actions for doing things differently What should be done?	
- Create network of employees in University that will feed information through, join student recruitment on marketing outings or assist with events. Each team member is encouraged to build own relationships but to the benefit of the entire team. Create and use incentive system such as workshops, pre-release of information, niche branded items etc. to build good relations. - Explore the use of chat groups as a communication tool for employees to improve engagement. Example: Instead of over-reliance on e-mail, ask short answer questions on chat group then formalise with e-mail. - University should actively drive skills development of employees, at the moment employees feels very little incentive or encouragement to upskill. - Teach other team in university (and outside partners) how we operate as a team, become leaders in own work. Team reputation is important to team spirit. Example: story that has been submitted year on year with very little content change was refused for publication. When the enquiry on why, the fact that there is no new angle, content or concept was not given through. The reputation of the team is not protected by senior but rather the story gets a sudden yes and it is portrayed as if the employee has misinterpreted the situation. This abuse of power affects team reputation. - When media enquiries are submitted, there is a period of running around to find the information which could be curbed by establishing a committee and the alert process from the executive offices.	
Where are we going?	
- Instil a “we are co-creating” attitude towards planning and design of an event or content, publication etc. with responsible employee (not on your team) to evoke a sense of ownership of the task to be done.	



CRISIS COMMUNICATION
VALUING EXPERIENCE – RECIPROCITY, FIELDWORK AND INTERVIEWS
Possible actions for doing things differently What should be done?
- A crisis communication committee should be established from key internal stakeholders and management team. - Identify crisis communication channels and levels: e-mail, SMS. - How to empower your internal stakeholders: release Q and A sheet during a crisis which will empower stakeholder and promote the communication of one message.
Where are we going?
- To communicate is an executive management function and the onus is on this team to start the chain. Should take responsibility and alert Communications senior team members of possible situations giving them time to prepare should there be a need to communicate. Built an alert process for the executive team into the crisis communication plan. - Crisis and other communication: acknowledge the issue at hand and devise a solution to be shared.

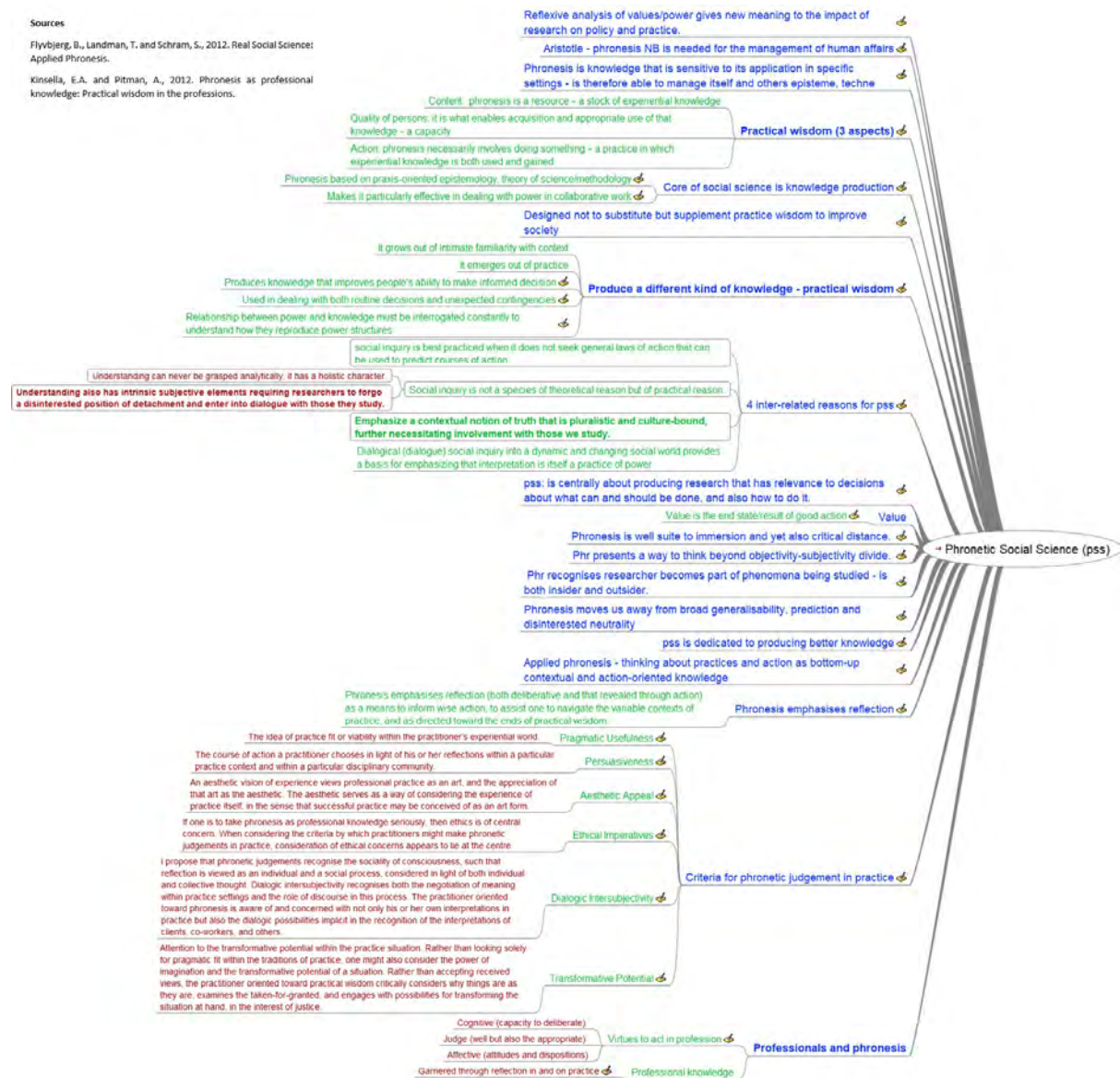


APPENDIX D¹: MIND MAP – PHRONESIS OVERVIEW

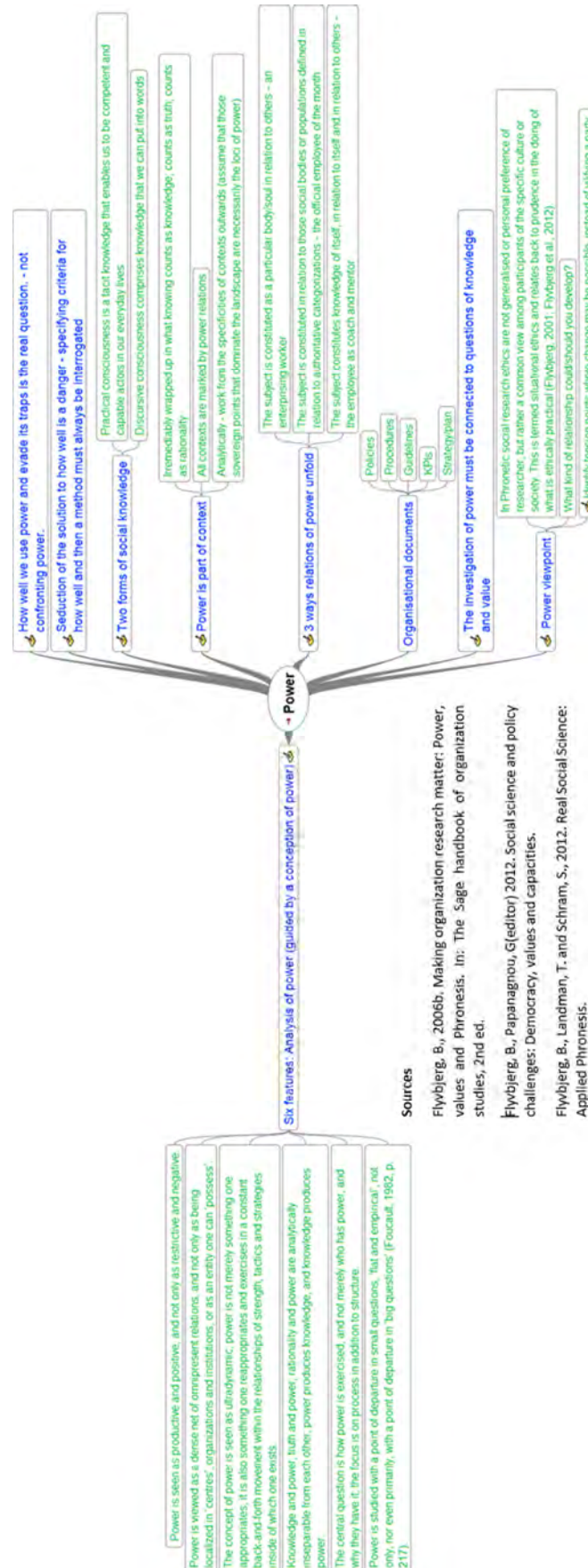




APPENDIX D²: MIND MAP – PHRONESIS AS SOCIAL SCIENCE



APPENDIX D³: MIND MAP – ANALYSIS OF POWER





APPENDIX D⁴: MIND MAP – PHRONESIS APPLIED IN A PROFESSION

Sources

Atkinson, P. and Hammersley, M., 2007. Ethnography: Principles in Practice.

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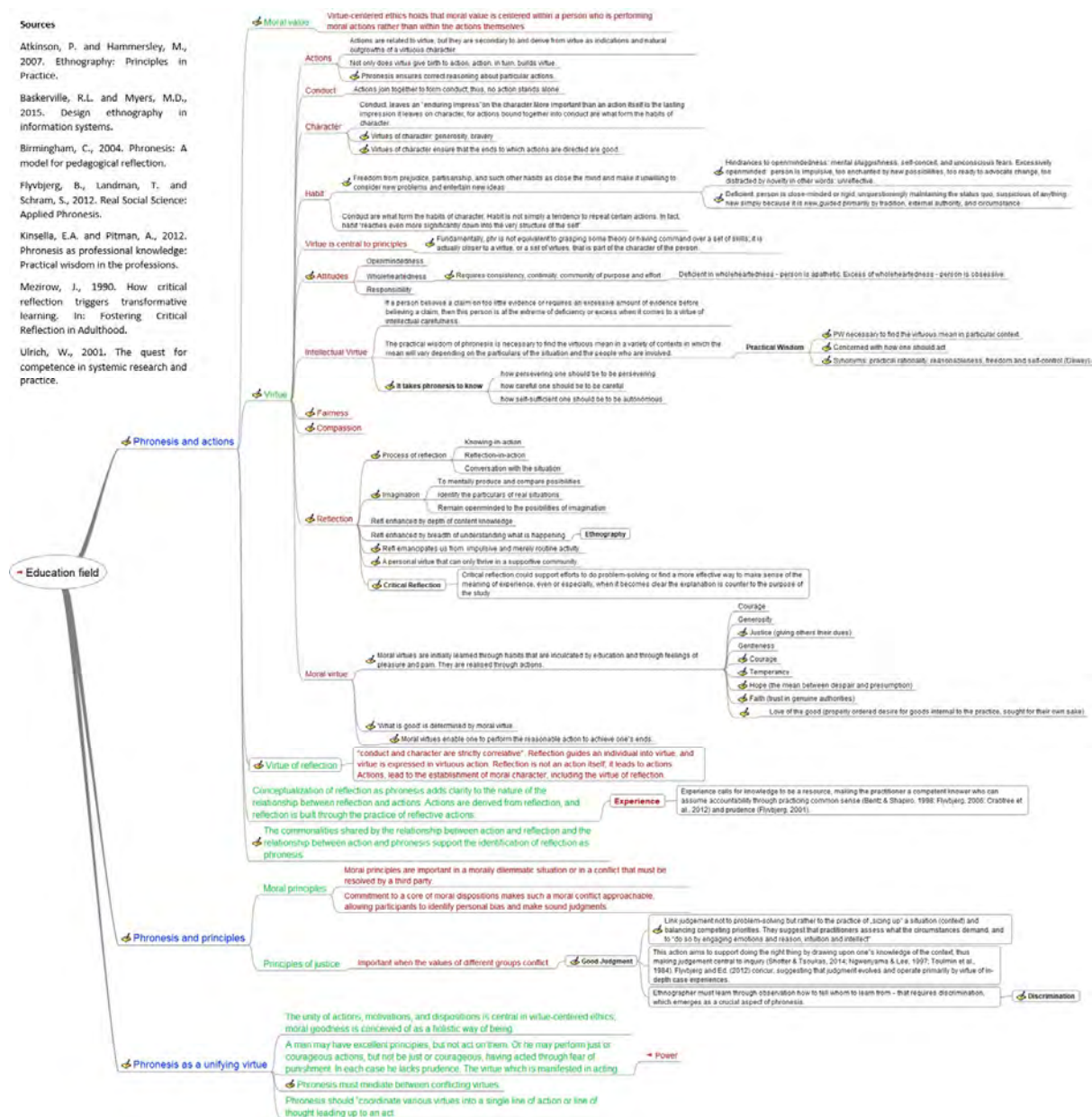
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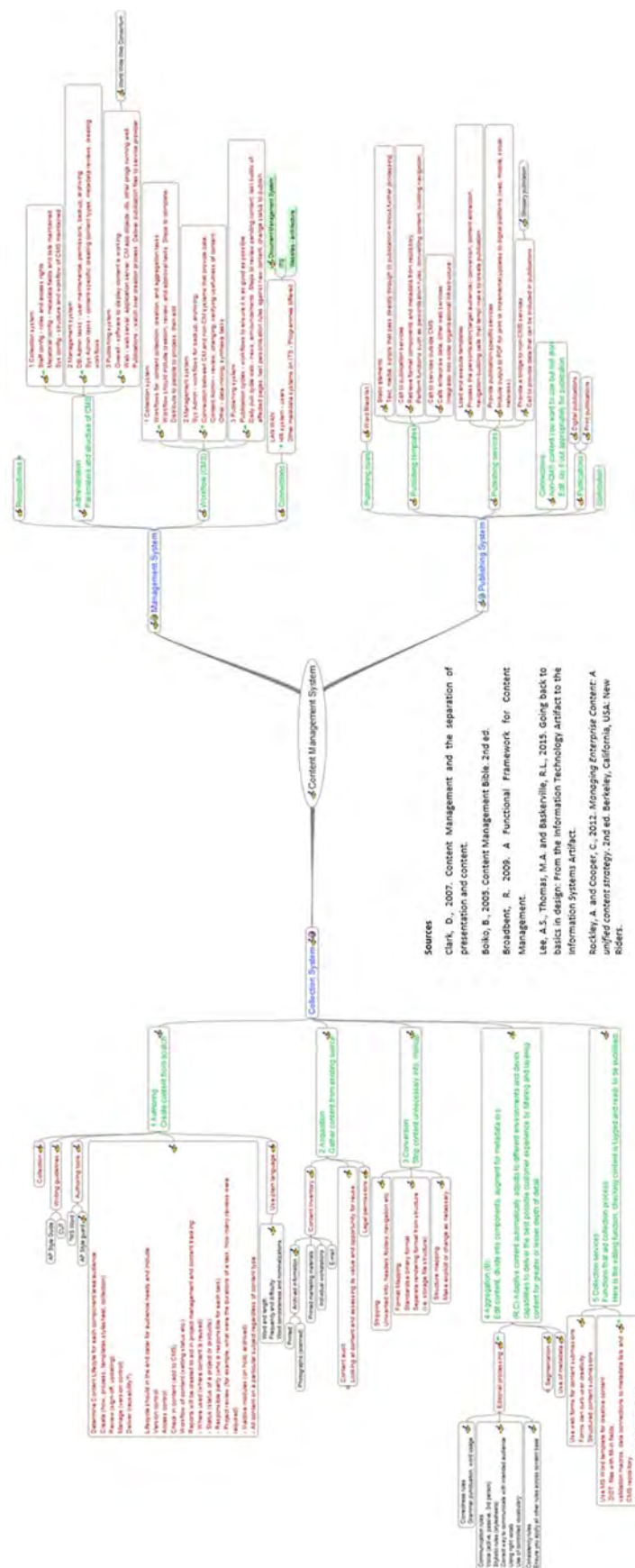
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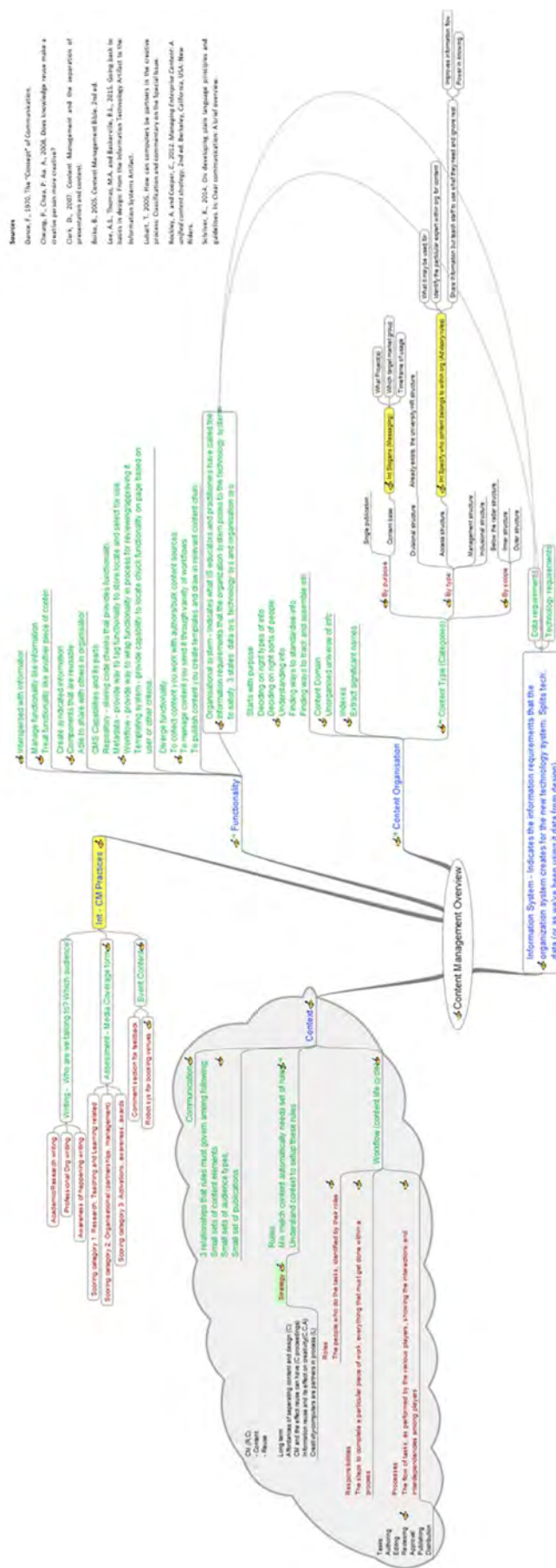
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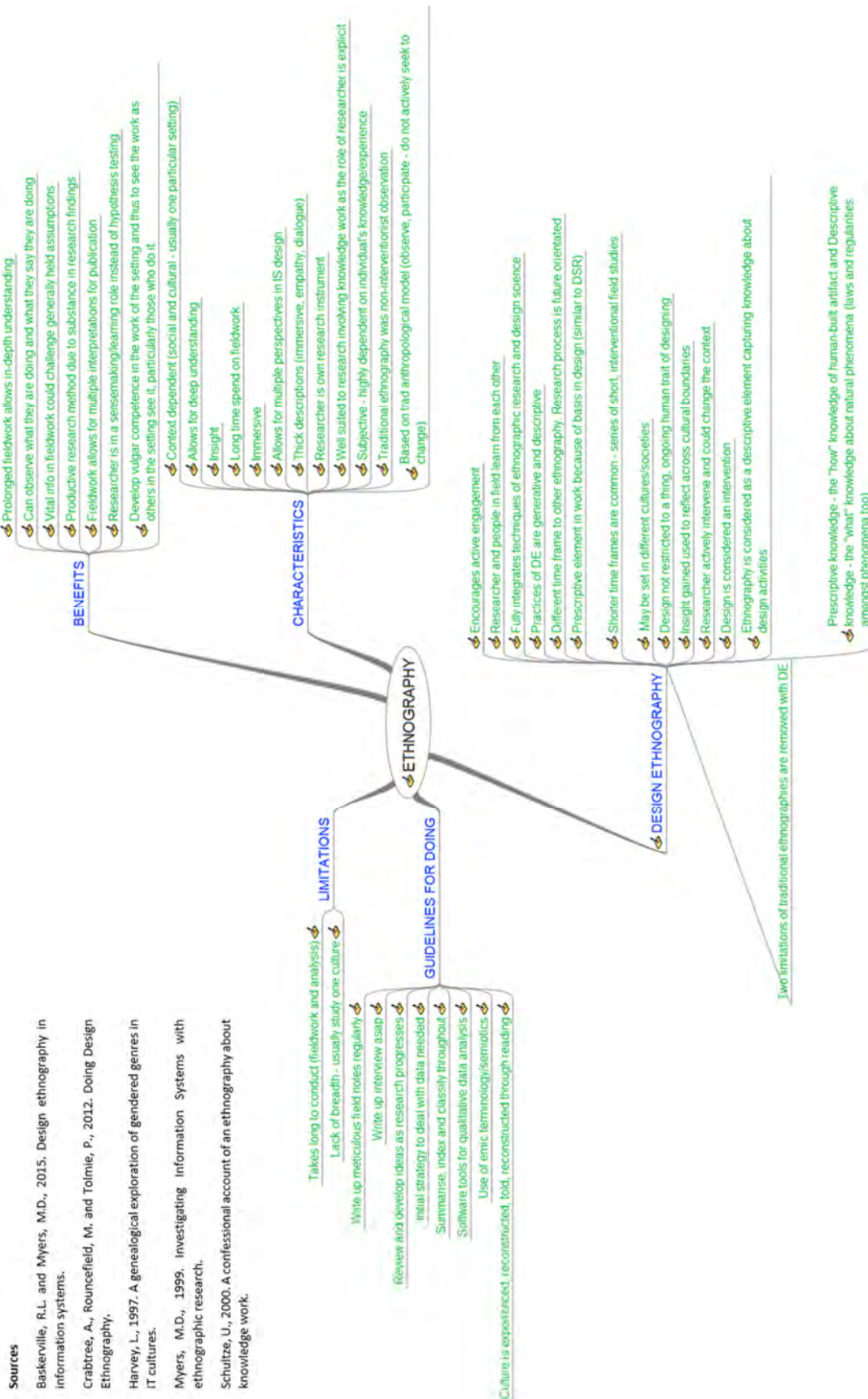


APPENDIX E: MIND MAPS – CONTENT MANAGEMENT SYSTEMS

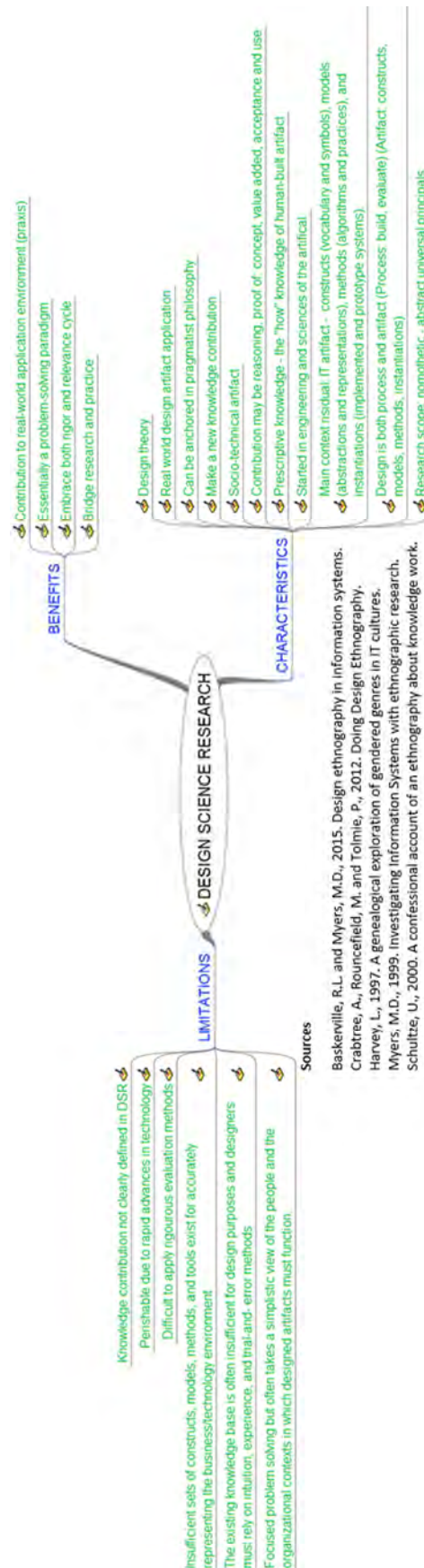




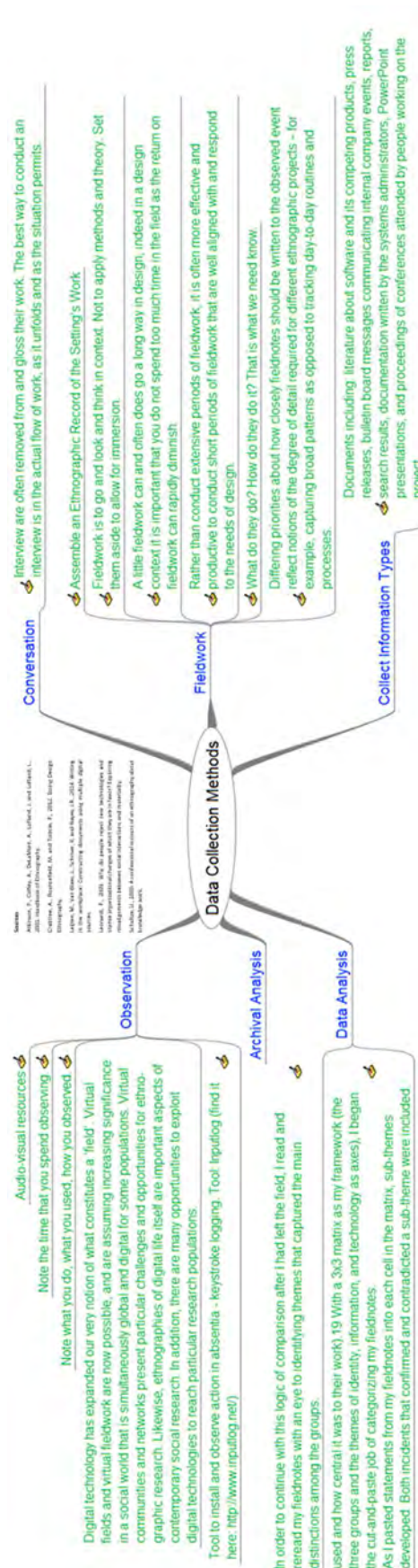
APPENDIX F: MIND MAP – DESIGN-ETHNOGRAPHY

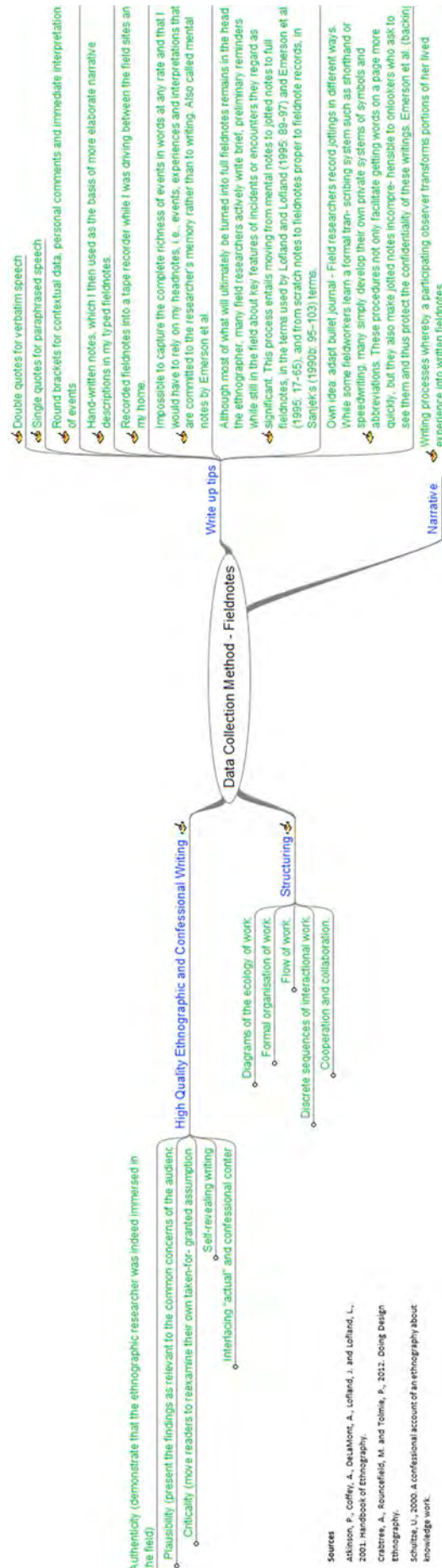


APPENDIX G: MIND MAP – DESIGN SCIENCE RESEARCH

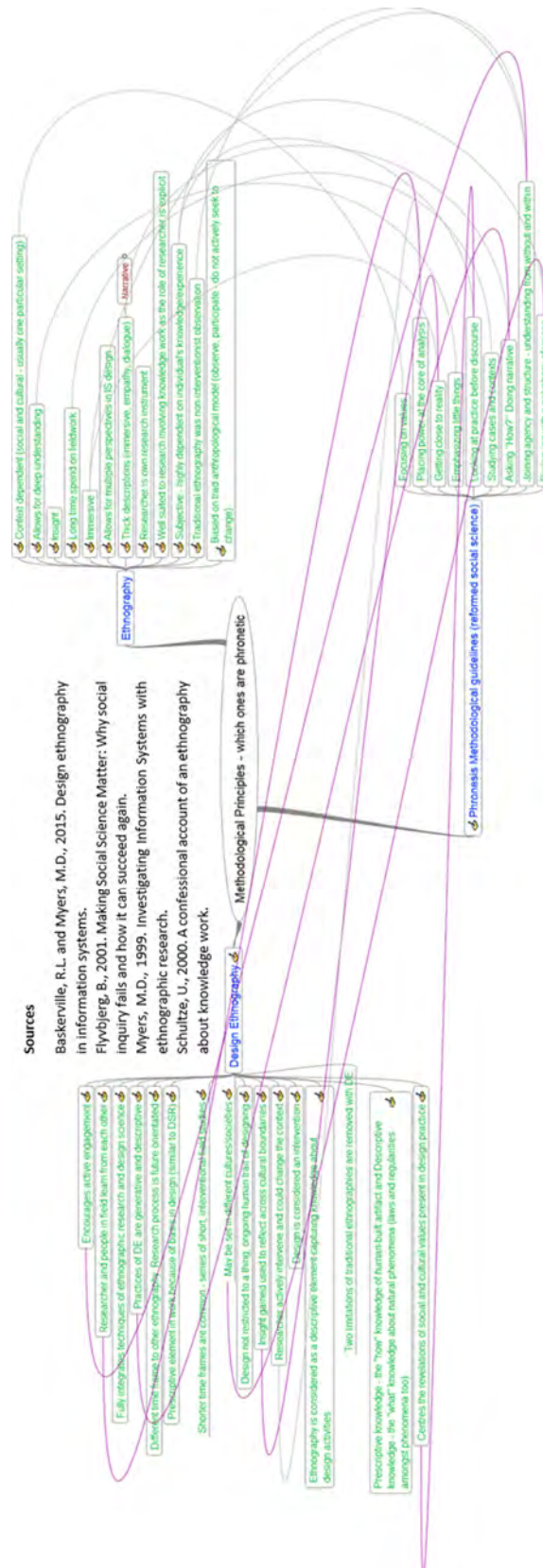


APPENDIX H: MIND MAPS – DATA COLLECTION METHODS





APPENDIX I: MIND MAP – METHODOLOGICAL GUIDELINES AND D-E – WHICH ONES ARE PHRONETIC?



APPENDIX J: CMS LITERATURE REVIEW (TECHNO-CENTRIC FOCUS IN RESEARCH)

LITERATURE REVIEW: CONTENT MANAGEMENT AND RELATED TOPICS				Three actors in studying technology			
Author(s), year	Method/Theory/Model/Framework	Reason for its selection	Main focus	Techno-centric	Organisation	Individuals	Culture
Wood, Foster, Averback, Boe, Katz, 2011	Not addressed	Authoring; Content Management Systems; Context; Medical writing; practical study	A Content Management Paradigm for Accurate, Consistent Regulatory Documents (Topic-based Authoring)	✓	x	x	X
White, 2004	Not addressed	content management system; document management; reuse; single-sourcing; unified content	Success Factors for Content Management Software Selection and Implementation	✓	x	x	X
vom Brocke, Herbst, Urbach, 2014	ECM acceptance factors	ECM lit review; content management practices	How to Measure ECM Success	✓	✓	x	x
vom Brocke, Simons, Clevén, 2011	Design science	ECM; unstructured data; content management	ECM adoption framework	✓	✓	x	x

vom Brocke, Seidel, Simons, 2010	Functionalist theory, design-oriented research	ECM; CMS; creativity	Bridging the Gap between Enterprise Content Management and Creativity: A Research Framework	✓	✓	x	x
Rockley, Cooper, 2012	Book	Content strategy, intelligent content, content reuse	Managing Enterprise Content: A Unified Content Strategy	x	✓	x	x
Rickenberg, Neumann, Hohler, Breitner, 2012	Lit review	ECM lit review; content	ECM literature review	✓	✓	x	x
Pérez-Montoro, 2011	Overview	CMS a suite of applications; Content Management; capturing knowledge; products	Theoretical perspectives on content management	✓	✓	x	x
Mina, 2010	Not addressed	Communication; creativity; message, knowledge production; knowledge exchange; information;	Knowledge and the Evolving Economy	x	✓	x	x
McNally, 2010	Conceptual research	CMS; disastrous to intellectual workers; deskilling; work practice;	ECMS and the application of Taylorism and Fordism to intellectual labour	x	✓	x	x

		information value; workflow					
Maican, Lixandroi, 2016	Not addressed	enterprise content management; open source software	A system architecture based on open source ECMS for supporting educational institutions	✓	✓	x	x
Loebbecke, Myers, 2016	Lit review	Knowledge Management Lit Review	Deploying Internal Knowledge Portals	x	✓	x	x
Katuu, 2013	Maturity models	enterprise content management; enterprise content management maturity; generally accepted recordkeeping; model; enterprise content management; South Africa	The ECM Maturity Model within a South African context	✓	✓	x	x
Katuu, 2012	Systemic research	context; enterprise content management; South Africa	ECM implementation in South Africa	✓	✓	x	x
Herbst, Simons, vom Brocke, Derungs, 2014	Action theory, technology acceptance model	Content assets; IT outsourcing	Studied critical success factors in ECM	✓	✓	x	x

Grahlmann; Hilhorst; Van Amerongen; Helms; Brinkkemper, 2010	Case study	Enterprise content management systems; IS evaluation; IS impact; IS impacts; IS success; IS success/failure; Industry; Information systems; Queueing networks; Research; Work simplification; Workflow managements	Impacts of implementing enterprise content management systems	✓	✓	x	x
Grahlmann; Helms; Hilhorst; Brinkkemper; van Amerongen; 2012	Lit review, framework	ecm; ecm framework; enterprise content management; enterprise systems; functional; literature study	Reviewing Enterprise Content Management, framework	✓	✓	x	x
Clark, 2007	Genre theory and genre-based methods	Intelligent content, creative writing influenced; content management; genre theory; xml	Studied CM and the production of genres	✓	✓	x	x

Clark, 2007	Substantivist viewpoint, affordance theory	Intelligent content, Separation of design and content; Design from content; Form from content; Information design; Semantics from presentational markup; content management; classification	Content Management and the Separation of Presentation and Content	✓	✓	x	x
Boiko, 2001, 2005	Book	Content Management, CMS	The task of building, implementing, running, and managing a CMS; and understanding CM	✓	✓	x	x
Balnaves, 2004	Model-based approach (Thesis)	Proximity of author to publishing; CMS; Info retrieval; content transformation; reuse	Regeneration and Reuse of Content in the www	✓	x	x	x
Andersen, Batova, 2015	Integrative literature review	Component Content Management; literature review; content strategy;	Component Content Management field has evolved from a practice focused on single-sourcing and reuse strategies for product documentation to a mature discipline	✓	✓	x	x



Alalwan, Weistroffer, 2011	Lit review, framework	content lifecycle; enterprise content management to support decision-making; higher education	Decision Support Capabilities of Enterprise Content Management	✓	✓	x	x
Aktan, 2013	System justification theory	Social reality concerns; stereotype content model; phronesis; context sensitive	Review the strengths and weaknesses of the stereotype content model and by providing a context sensitive perspective	✓	✓	x	x
Tyrväinen; Päivärinta; Salminen; livari, 2006	Research framework	Enterprise content management; IRM; document management; information system; research framework; review	Characterizing the evolving research on enterprise content management	✓	✓	x	x
Munkvold, Bjørn, Päivärinta, Kristine, 2006	Case study	Enterprise content management, content management strategy, electronic document management, information resource management, knowledge management	Contemporary Issues of Enterprise Content Management	✓	✓	x	x



Hackos, 1997	Information Process-Maturity Model	technical communication, consistency, organisation, planning	Using the Information Process-Maturity Model as a Tool for Strategic Planning	x	✓	x	x
Breuninger, Hackos, 1997	Not addressed	Strategic planning; planning; questions; content strategy;	Strategic Planning: An Overview of This Special Issue	x	✓	x	x
Cheung, Chau, Au, 2008	Componential model of Amabile	Creative performance of individuals; ECM; intranet; knowledge management; knowledge reuse	Does knowledge reuse make a creative individual more creative?	✓	✓	x	x
McKenna, Myers, Newman, 2017	Qualitative research	Social networks lit review; qualitative research, netnography	Social media in qualitative research	✓	✓	x	x
Steele, 2012	Needs-analysis (Thesis)	Needs-analysis; content management; social network communication preferences; South Africa	An exploratory study to implement a content management system at the Stellenbosch University	✓	✓	x	x



Mokoma, 2015	Quantitative and cross-sectional (Thesis)	Electronic Document and Record Management Systems; Enterprise Content Management Systems; Technology adoption; Quantitative research; South Africa	Adoption of Enterprise Content Management System in the South African National Department of Science and Technology	✓	✓	x	x
Broadbent, 2009	Framework (Thesis)	Content management; content management systems; framework; conceptual functions;	A Functional Framework for Content Management	✓	x	x	x
Spinuzzi, 2009	Overview	Social networks; online forum; learn across org boundaries; professional communication practices;	Social networks and their potential impact on professional communication	x	✓	x	x



Cripps, 2011	Case study	CMS; OSS; Organisation; single-sourcing; tech communication practice; adoption of open source in developing countries; lit review	Technical Communications and open source CMS	✓	✓	x	x
Andersen, 2013	Phenomenology research design	Single-sourcing; best practices in content strategy; technical comm; technical communicator role; systems thinking; rhetorical work;	Rhetorical Work in the Age of Content Management	x	✓	✓	x
Andersen, 2007	Rhetoric	tc practices; tc industry; influence business decisions; DITA; component content management; ecm; enterprise content management systems; training; user adoption; xml tagging	The Rhetoric of ECM, Confronting the Assumptions Driving ECM Adoption and Transforming Technical Communication	✓	✓	✓	x

McCarthy, Grabill, Hart-Davidson, McLeod, 2011	Qualitative methods	CMS; writing practices; work practices; technology adoption; technical comm; theoretical framework of writer's reaction to tech changes; context; digital writing environment; example of writers migrating to CMS	Taking writers forward to a system – Content Management in the Workplace – organising writing	✓	✓	✓	x
Rockley, Gollner, Sutton, 2011	Not addressed	Content strategy, intelligent content	An intelligent content strategy for the enterprise	✓	✓	x	✓
O'Callaghan, Smits, 2005	Managed content object portfolio, case study, questionnaire, interviews	content management; document management; content strategy; ECM	Strategy Development Process for Enterprise Content Management	✓	✓	x	✓
Honkaranta, Lyytikäinen, 2003	Genre theory and genre-based methods	Content analysis, case study	Scrutinized content within small to medium size enterprises	✓	✓	x	✓

Brown, Jayakody, 2008	Technology acceptance model, expectation-confirmation theory	B2C, post-adoption of e-commerce; IS; practical study; South Africa	Investigated IS success in the post-adoption phenomenon of e-commerce	✓	x	x	✓
Bowker, Star, 2000	Book	Classification; Knowledge; Sociology; CM; South Africa	Classification in large-scale systems, biography and work practice	✓	✓	x	✓
Arola, 2010	Not addressed	Design; content management; visual rhetoric; identity; social networks	The Rise of the Template, The Fall of Design	✓	x	x	✓
Schrivver, 2014	Book	Plain language; strategy; word-level choices; controlled vocabulary; CM practices	On Developing Plain Language Principles and Guidelines	x	x	x	✓
Schrivver, 2012	Not addressed	Information professional; communicate professionally; writing; plain writing law; flexible access to content; multiple audiences; experience; deliberate practice; context	What we know about expertise in professional communication	x	x	✓	✓

Flower, Hayes, 1981	Not addressed	composition in writing; long-term memory; protocol; protocol analysis; rhetorical problem; short-term memory; writing model; writing processes; Aristotle	A Cognitive Process Theory of Writing	x	x	x	✓
Liew, 2013	DIKW hierarchy	Data info and knowledge; intelligence; wisdom; creativity dimension; intelligence dimension; wisdom dimension; practical wisdom	Data, information, knowledge, intelligence, wisdom and their interrelationships	x	x	x	✓
Sutton, 2001	Not addressed	Cost reduction; Enterprise content management; Content Management; Library and Information Sciences; Market strategy; Web content delivery	The weird rules of creativity	x	✓	x	✓

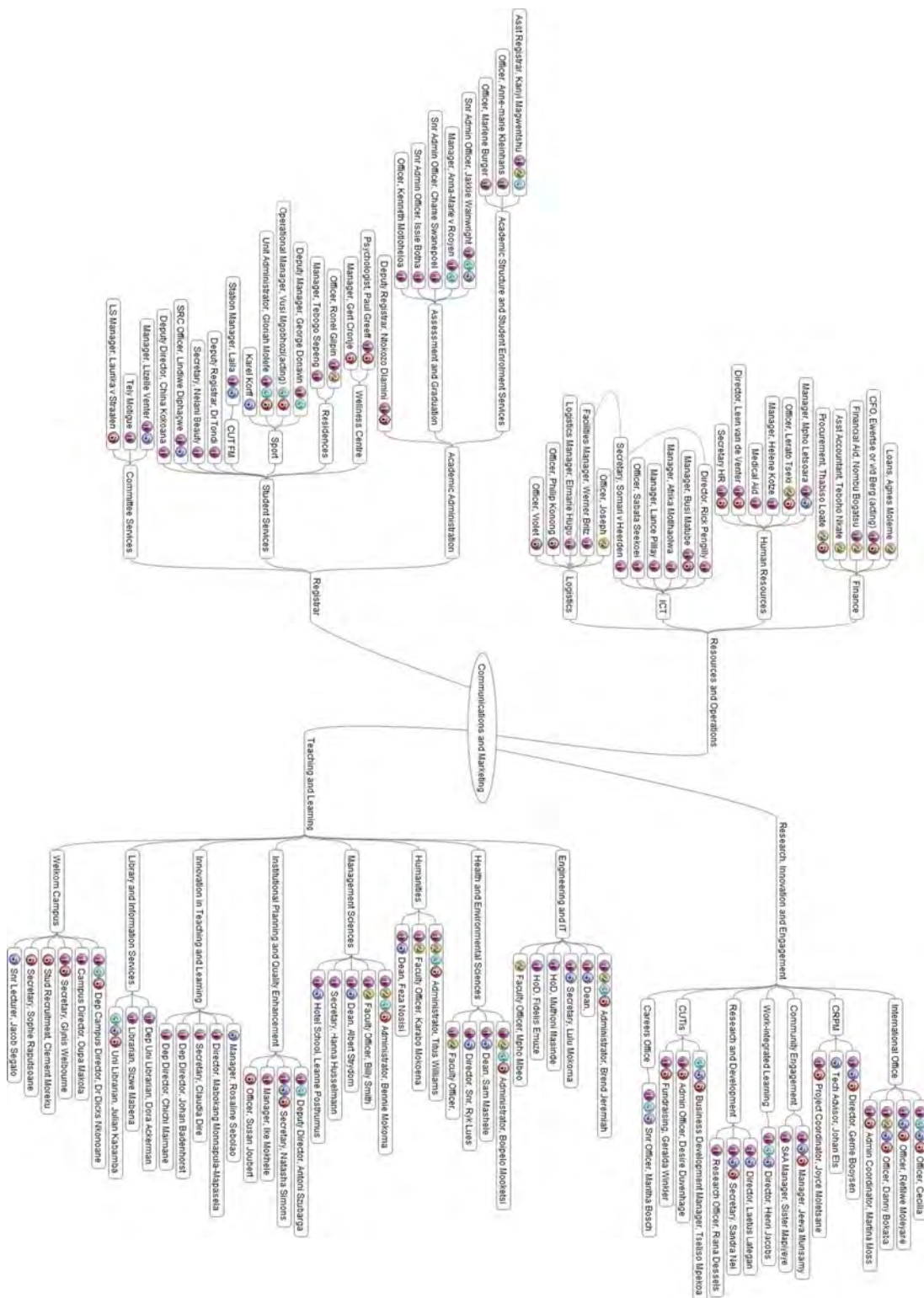
Pennington, 2007	System lifecycle	content management system; document management; reuse; single-sourcing; unified content; technical communication	Surviving the Design and Implementation of a Content Management System.	✓	✓	x	✓
Schrivers, 2015	Not addressed	information design; rhetorical work; organisation; power; organisational documents; analysis of content; case study; interview; cognitive response; emotional response; redesigned communication; value-judgement; experience; context	The Rhetoric of Redesign in Bureaucratic Settings	x	✓	x	✓
Lubart, 2005	Not addressed	Nature of creativity; how computer involved in creative work;	How can computers be partners in the creative process	✓	x	x	✓
Swarts, 2010	Single-sourcing methodology	Content reuse; organisational teams; technological objects; content	The reuse and single-sourcing of content	✓	✓	x	✓

		component; DITA; Camtasia					
Hart-Davidson, Bernhardt, McLeod, Rife, Grabill, 2007	Qualitative methods	Content Management as type of conduct; culture of writing in organisation; work practices; knowledge creation; content audit; Organisation comm; technical comm; user roles; Phronesis	Coming to Content Management: Inventing Infrastructure for Organizational Knowledge Work	x	✓	x	✓
Solomon, 1997	Ethnography of communication	Information management, communication, information behaviour, sensemaking	Discovering Information Behaviour in Sensemaking	x	✓	✓	✓
Arshad; Milton; Bosua; 2012	Case study	Qual study, Diversification-low levels of standardisation; ECM, process- related info, case study, SharePoint	Understanding the use of ECMS in diversification type of organisations	x	✓	✓	✓

Ngwenyama, Lee, 1997	Critical social reality	Computer mediated communication; media; critical social theory; interpretism; positivist; organisational communication	Communication Richness in Electronic Mail	x	✓	✓	✓
Leijten, Van Waes, Schriver, Hayes, 2013	Case study	Content; Textual coordination; information professional; models of writing; Cognitive processes; Information design; Multiple sources; Searching processes; Workplace writing;	Writing in the workplace by constructing documents using multiple digital sources	x	✓	✓	x
Shahlaei, Rangraz, Stenmark, 2017	Socio-technical system approach (Neo-STS)	Communicators; work practices; needed competences of communicators; effects of digitilisation of workspace	Transformation of Competence – the Effects of Digitalisation on Communicators' Work	x	✓	✓	x



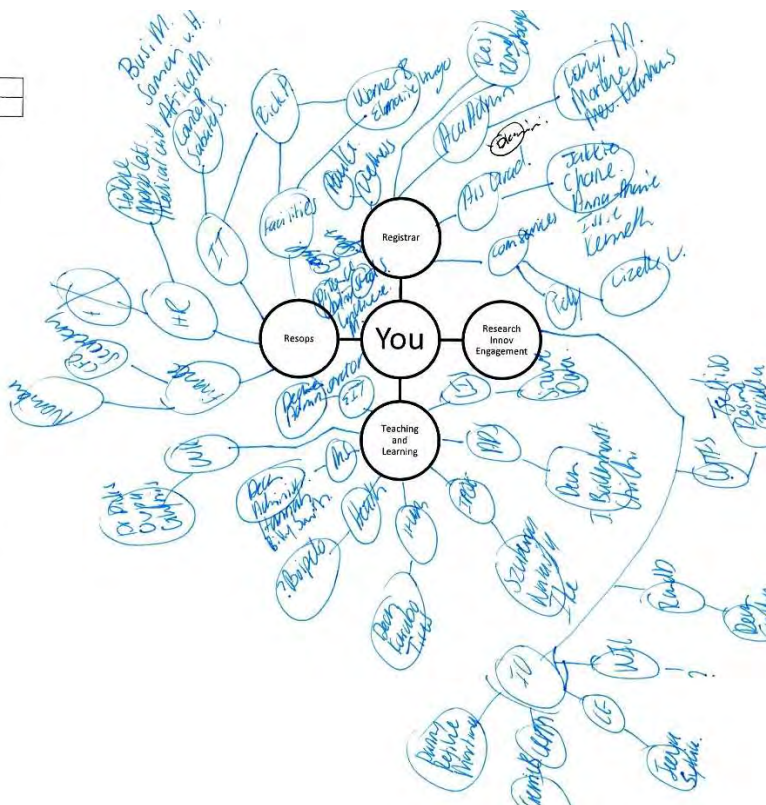
APPENDIX K: CORE NETWORK MAPPING: SOCIAL STRUCTURE OF PARTICIPANTS





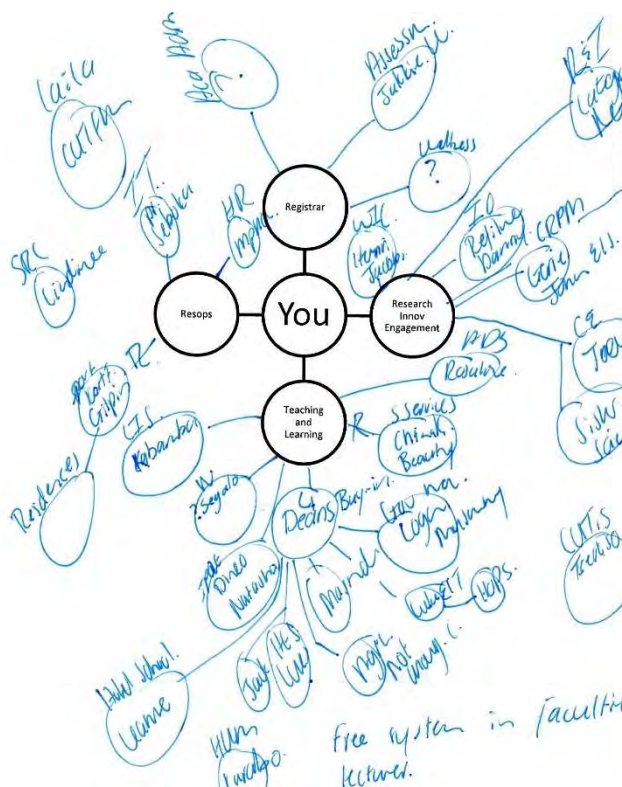
DATE: 26/01/2018
INTERVIEWEE: [redacted]

RESOURCES AND OPERATIONS	Finance HR IT Facilities
REGISTRAR	Academic Administration Assessment and Graduation Committee Services Wellness Centre Sport Student Services
TEACHING AND LEARNING	Engineering and IT Management Sciences Health and Environmental Sciences Humanities IPQE ADS Library Welkom campus
RESEARCH, INNOVATION AND ENGAGEMENT	International Office CRPM Community Engagement WIL Research and Development CUTis



DATE: 26/04/2017
INTERVIEWEE: [redacted]

RESOURCES AND OPERATIONS	Finance HR IT Facilities
REGISTRAR	Academic Administration Assessment and Graduation Committee Services Wellness Centre Sport Student Services
TEACHING AND LEARNING	Engineering and IT Management Sciences Health and Environmental Sciences Humanities IPQE ADS Library Welkom campus
RESEARCH, INNOVATION AND ENGAGEMENT	International Office CRPM Community Engagement WIL Research and Development CUTis



APPENDIX L: INTERVIEW GUIDE

DATE:	
INTERVIEWEE:	
GENDER, AGE, LEVEL OF EDUCATION, CULTURE GROUP:	
YEARS' EXPERIENCE AND YEARS' EXPERIENCE IN HIGHER EDUCATION:	
MORE THAN ONE INSTITUTION:	
COMFORT LEVEL WITH TECHNOLOGY:	
OTHER:	

INTRODUCTION

Communication has a strong link to emotion for us all. Being reactive, proactive, fearful, fearless, deceitful or honest and content is how we share these emotions through our stories, and information. Content in this study is seen as text, video, audio, images. You create content, manage, edit, store, retrieve and reuse your own as well as other people's content pieces. One of the university's primary goals is relevant, timely, and engaging content. The experience and needs of the community (employees, students, alumni, partners) served is central to our task but to better their experience means we need to better our understanding. We need assess our content practices, see how we do it, can we improve it, how does technology help or frustrate us. This research is trying to discover how we handle content in order to better support professionals who write.

PHRONESIS EXPLORATORY QUESTION 2	RESEARCH SUB- QUESTION 2	INTERVIEW QUESTION(S)	HAND NOTES (during interviews)
Is this development desirable? Section 3.2.2	What is the content management practices in a HE SA context if the D-E method is used to interrogate the performativity of corporate communication?	1. When we are young, we are taught right from wrong by adults guiding your actions (<i>don't hit your sister/brother</i>), your conduct (<i>say 'thank you'</i>). These actions build your character contributes to your habits. Who do you feel played the biggest role in building up who you are today? 2. Content in this study is seen as text, video, audio, images etc. You create content, manage, edit, store, retrieve and reuse your own other people's content pieces. One of the university's primary goals is relevant, timely, and engaging content. Considering our responsibility to the community's members (employees, students, alumni, partners) do you feel relevant and engaging content will contribute to the integrity and sensitivity with which we do so? Why do you say so? 3. In your judgement, do you think using the same catch phrases, messaging, and possibly having access to the same information centralised somewhere could benefit us as a team? If yes, how do you think we should do this? If no, why do you feel this is not needed?	

		4. Let's for a moment set aside content we want to offer, the stories we want to tell, the information we need to/want to share, and push towards the community we serve – employees, students, alumni, partners etc. The experience and needs of the community served is central to our task. Looking at how we do these tasks now, how can we in your view enhance branding, reputation, and competitive advantage of the university?	
PHRONESIS EXPLORATORY QUESTION 2	RESEARCH SUB- QUESTION 2	INTERVIEW QUESTION(S)	HAND NOTES (during interviews)
Is this development desirable? Section 3.2.2	What is the content management practices in a HE SA context if the D-E method is used to interrogate the performativity of corporate communication?	1. Let's chat about your experience as a professional in this field. You worked with other teams in other organisations and now you are here. Tell me about your years in the profession, perhaps share a frustration you have in this work, as well as the thing you find satisfying? Could you share a memorable moment with me? 2. How has your experience in public or private sector influenced your content creation, editing, management practices? 3. Communication has a strong link to emotion for us all. Being reactive, proactive, fearful, fearless, deceitful or honest. In your view, if you reflect for a moment on how HE communicates, how would you describe the organisational communication practices we apply?	



		4. Do you think having practical wisdom helps in this field of work and HE? Why do you say so? 5. Should we change our communication practices? If yes, how should we change practices and what plan of action are needed or should be in place to do this in your view? If no, explain why you feel we are doing the right thing in our communication practices?	
PHRONESIS EXPLORATORY QUESTION 3	RESEARCH SUB- QUESTION 3	INTERVIEW QUESTION(S)	HAND NOTES (during interviews)

Who gains, and who loses and by which mechanisms of power? Section 3.2.3	Given the phronetic perspective, how is the role of power supported in this research about practitioner's work practices?	1. Power is always a difficult topic which leads to the "haves and the have nots" and that contributes to frustration. I, however, cannot solve that particular frustration. So in this study, power is seen as a productive and positive entity to be applied to the benefit of the team. For instance, organisational documents such as policies, procedures, guidelines are there to manage some of the power struggles – if we can embrace the idea. Committees can give a voice to a group instead of struggling for support as an individual. How do you feel about this viewpoint of power? 2. Power produces knowledge and vice versa, it is a net of omnipresent relations. What has been your experience of power? Do you feel this is ok? 3. Do you think we can better our engagement within the team? Within organisation? Within HE? How would you suggest we do so? If not, why do you feel we are on the right road?o you think we can better our engagement within the team? Within organisation? Within HE? How would you suggest we do so? If not, why do you feel we are on the right road? 4. I would like to now turn to your profession as a writer and ask that you describe your writing practices as you would to someone with no experience in the field. What is your first step when you begin a writing project? <i>(Guide the level of detail if needed to get clarity. The example of making coffee, first check water level in kettle, check plug is in wall, switch on etc.)</i> Great, let's move forward, what is step 2? <i>(This</i>	
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		<i>continues to the end of the process i.e. content published or passed up for publication.) This question will be supplemented with participant-observation. Process Tools Resources.</i>	
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PHRONESIS EXPLORATORY QUESTION 3	RESEARCH SUB- QUESTION 3	INTERVIEW QUESTION(S)	HAND NOTES (during interviews)
Who gains, and who loses and by which mechanisms of power? Section 3.2.3	Given the phronetic perspective, how is the role of power supported in this research about practitioner's work practices?	1. What information resources do you consider invaluable in your content practices? 2. In your judgement, how important are people and their views, contributions to your content practices? Why do you say so? 3. Could you name some of the most important offices (position or person) in the university? <i>Follow-up question: Each one named the question: Why is X important to you? What do you get from him/her? Would you consider this your core network? Do you think it is important to have such a network? How do you identify important people to add to your network?</i> 4. We've covered an immense amount, thank you. Looking back at our conversation we chatted about relevant, timely and engaging content; our community; your experience and writing process; communications link to emotion; and power, also practical wisdom. Going forward, how do you think your experience will contribute to the development of a process for content management? 5. In your experience, do you feel systems that manage information (<i>student numbers, research projects, employee details, finance – ITS, not software you use to create information</i>)	



		<i>such as MS Word</i>) help or complicate your process? Have you ever been part of designing such a system? If yes, do you feel that your experience contributed to the purpose of the system?	
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settings, take place?	theoretical contribution to existing CM practices in HE organisational communication, as well as methodological development. This question seeks to describe how human capital supports change in culture through organisational communication. It also seeks to combine insight into the context, to provide the ability to highlight practices of the experts, consider their worldviews, value judgements and to devise a CM strategy in line with their practices.	satisfying? Could you share a memorable moment with me? 2.2 How has your experience in public or private sector influenced your content creation, editing, management practices? 2.3 Communication has a strong link to emotion for us all. Being reactive, proactive, fearful, fearless, deceitful or honest. In your view, if you reflect for a moment on how HE communicates, how would you describe the organisational communication practices we apply? 2.4 Do you think having practical wisdom helps in this field of work and HE? Why do you say so? 2.5 Should we change our communication practices? If yes, how should we change practices and what plan of action are needed or should be in place to do this in your view? If no, explain why you feel we are doing the right thing in our communication practices?	<i>F. Misinfo due to lack of context Satis: feedback, response Space as a writer Channel of authoring Love not damage of mind Fur: Mindset change of mind Short stuffed. Use panel & body us. Simple English. (Lack of) freedom of expression - integrity looking 2.2. Exposure enhance growth Management courses emphasis Micro-environment Diploma environment 2.3. HE → Campus Don't look at audience. Categorise content.</i>
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2.5. Flexibility
- Teach people how we
- Spreading
- Scoring, two forms.

2.4 Yes, apply logic.
Diploma angle.

- Advertising

Speers
People Interview
Internal student



THEMES			
RESEARCH QUESTION 4 How should CM practices support the information	PURPOSE OF THE QUESTION The research intends to create a practical space to partner with information	INTERVIEW QUESTION(S) 4.1 What information resources do you consider invaluable in your content practices?	NOTES people - want short version One doc, highlight changes 8 Circulate only sections info. Keep template. content
1. Reflect on the role of power. 2. Interrogate culture of engagement. 3. Focus on what information professional actually do.	<u>Tools</u> 1. MS Word 2. Outlook 3. Excel 4. Google 5. PPT - proposals 6. Email 7. Checklist ↳ Word → example	power? 3.2 Power produces knowledge and vice-versa, it is a net of omnipresent relations. What has been your experience of power? Do you feel this is ok? 3.3 Do you think we can better our engagement within the team? Within organisation? Within HE? How would you suggest we do so? If not, why do you feel we are on the right road? 3.4 I would like to now turn to your profession as a writer and ask that you describe your writing practices as you would to someone with no experience in the field. What is your first step when you begin a writing project? (Guide the level of detail if needed to get clarity. The example of making coffee, first check water level in kettle, check plug is in wall, switch on etc.) Great, let's move forward, what is step 2? (This continues to the end of the process i.e. content published or passed up for publication.) This question will be supplemented with participant observation. Process Tools Resources	→ Grades CM Practices not-ification All need to be in with new info stories, comments + share. Barriers: ability to respond and report People structure share. Messages not embraced? Why e-mail? Overlook, short hand against academic network IM → WhatsApp app. group email → head laptop collab tool. (mobile)



APPENDIX M: INTERVIEW NOTES TEMPLATE

Write-up Date(s):	
Date of happening/event(s):	
Location:	
Project Phase:	
Main Event(s):	
Small/Odd Event(s):	
Main Player(s):	
What I Learned :	
Calendar of Today's Events:	
About My Research	
People:	
Process:	
Academic Thoughts:	
Mistakes I Made:	

Detailed Description of Activity {
Preinterview self-assessment
Interview self-assessment
My thoughts/Reflections [[
Emerging Questions/Analysis \{

TO DO's:	
-----------------	--



APPENDIX N: FIELD NOTES, RECIPROCITY NOTES TEMPLATE

Write-up Date(s):	
Date of happening/event(s):	
Location:	
Project Phase:	
Main Event(s):	
Small/Odd Event(s):	
Main Player(s):	
What I Learned :	
Calendar of Today's Events:	
About My Research	
People:	
Process:	
Academic Thoughts:	
Mistakes I Made:	

Detailed Description of Activity {
My thoughts/Reflections [I
Emerging Questions/Analysis \{

TO DO's:	
Plans for tomorrow:	



APPENDIX O: INFORMED CONSENT FORM



RHODES UNIVERSITY

INFORMED CONSENT FORM

Department of Information Systems

Research Project Title:	Using Phronesis to put forward a Content Management practices framework for communication practitioners in Higher Education
Principal Investigator(s):	Leandra Jordaan

Participation Information



- I understand the purpose of the research study and my involvement in it
- I understand the risks of participating in this research study
- I understand the benefits of participating in this research study
- I understand that I may withdraw from the research study at any stage without any penalty
- I understand that participation in this study is done on a voluntary basis
- I understand that whilst information gained during the study may be published, I will not be identified and my personal results will remain confidential
- I understand that I will receive no payment for participating in this study

Information Explanation

The above information was explained to me by: Leandra Jordaan

Voluntary Consent

I, _____, hereby voluntarily consent to participate in the above-mentioned research.

Signature:	OR, right hand thumb print	Date: DD/MM/YYYY
	Witness signature:	

Investigator Declaration

I, Leandra Jordaan, declare that I have explained all the participant information to the participant and have truthfully answered all questions ask me by the participant.

Signature:	Date: DD/MM/YYYY
------------	------------------



APPENDIX P: LETTER OF INVITATION TO PARTICIPANTS



Department of Information Systems

Hamilton building, Prince Alfred Street, Grahamstown, 6139, South Africa

PO Box 94, Grahamstown, 6140, South Africa

t: +27 (0) 46 603 8244

f: +27 (0) 46 603 7608

Central University of Technology, Free State (CUT)

Private Bag X20539

Bloemfontein

9300

Dear Participant

Re: Invitation to participate in research study

You are invited to participate in a research study entitled 'Using a Phronetic perspective to put forward a content management practices framework for Information professionals in Higher Education'. The aim of this research is to describe the organisational culture of engaging in the design of Content Management Systems (CMS) and Content Management (CM) practices. Furthermore, the study intends to understand how one can allow information professionals (communicators) the space to adequately achieve their goals and acknowledge their processes. This goal intends to shift from the traditional techno-centric focus of CMS developments by focusing more on using sensemaking practices, different worldviews, and the experiential insight of the information professional who is the beneficiary of such a system. A final aim is to advance information practices in higher education CM. Your participation and cooperation is important so that the results of the research are accurately portrayed.

The research will be undertaken utilising unstructured observation, interviews, archival analysis. The data to be collected from this research will be qualitative in nature; especially ethnographic data – video, audio, picture, and text. The researcher will attempt to protect you and the university from harm by sharing findings before publication. Interviews will require no more than 240 minutes of your time.



We will provide you with all the necessary information to assist you to understand the study and explain what would be expected of you (the participant). These guidelines would include the risks, benefits, and your rights as a study subject. Furthermore, it is important that you are aware that this study has been approved by a Research Ethics Committee of the university. Participation in this research is completely voluntary and this letter of invitation does not obligate you to take part in this research study. To participate, you will be required to provide written consent that will include your signature, date and initials to verify that you understand and agree to the conditions. Please note that you have the right to withdraw at any given time during the study without penalty.

Thank you for your time and I hope that you will find our request favourable.

Yours sincerely,

Leandra Jordaan
Research Student

Prof. Kirstin Krauss
Supervisor



APPENDIX Q: PERMISSION LETTER TO CONDUCT STUDY BY CUT



Central University of
Technology, Free State

ACADEMIC PLANNING

MS. LEANDRA JORDAAN

5 Dieppe Street

Bayswater

Bloemfontein

9310

ljordaan@cut.ac.za

Permission to conduct unstructured observation, archival analysis and interviews at Central University of Technology (CUT) campuses for her PhD studies entitled "Using a Phronetic perspective to put forward a content management practices framework for Information professionals in Higher Education"

Dear Ms Jordaan

This is to confirm that you have been granted permission to conduct unstructured observation, archival analysis and interviews at the Central University of Technology (CUT) campuses for your PhD studies entitled "Using a Phronetic perspective to put forward a content management practices framework for Information professionals in Higher Education"

The conditions of the permission are:

- The survey will not interrupt any of the official activities at the CUT;
- You will supply us with the copy of your report;
- The cost of all related activities will be covered by yourself;
- Recruitment of participants is the sole responsibility of yourself;
- Voluntary nature of the potential participant's decision to consent to participate should be strictly observed;
- You should not disclose a potential participant's decision to participate or otherwise to any other party;
- Permission does not compel, in any sense, participation of staff members or students in your survey.

DIRECTOR: ACADEMIC PLANNING

DR DM BALIA

20 April 2017



APPENDIX R: RHODES UNIVERSITY – RESEARCH ETHICS APPROVAL FEEDBACK



Department of Information Systems
Education building, Private Alfred Street, Grahamstown, 6139, South Africa
PO Box 94, Grahamstown, 6140, South Africa
t: +27 (0) 46 613 8044
f: +27 (0) 46 613 7608
e: information@rhodes.ac.za
www.ru.ac.za

NUMBER: CIS17-02
(for office use)

4 April 2017

Dear Leandra

Re: Research Ethics Approval Feedback

Research Title: Using a Phronetic perspective to put forward a content management practices framework for information professionals in Higher Education
Principal Investigator: Leandra Jordaan

This letter confirms that the ethical application was:

Recommended for approval for ethical clearance	☒
Recommended for approval with modifications for ethical clearance	☐
Deemed to need modifications and to be resubmitted for ethical clearance	☐
Not recommended for approval for ethical clearance	☐
Deemed to not require ethical approval	☐
Recommended for approval for ethical clearance of high risk research AND applicant required to submit application to RUESC via "Submittable"	☐

IN THE EVENT THAT THE APPLICATION IS APPROVED FOR ETHICAL CLEARANCE:

Please ensure that the ethical standards subcommittee is notified should any substantive change(s) be made, for whatever reason, during the research process. This includes changes to the investigators. Please also ensure that a brief report is submitted to the Ethics Subcommittee on completion of the research

Note:

- * This clearance is valid from the date of this letter until the time of completion of the data collections.
- * The Ethics Subcommittee cannot grant retrospective ethics clearance.
- * Progress reports should be submitted annually unless otherwise specified.

IN THE EVENT THAT THE APPLICATION IS RECOMMENDED FOR APPROVAL WITH MODIFICATIONS FOR ETHICAL CLEARANCE:

Modifications required are set out in the attached documentation and reviews. Please contact the Chair of the Ethics subcommittee for clarification of the stipulations where necessary. There is no need to submit the application for further review.



Please ensure that the ethical standards subcommittee is notified should any substantive change(s) be made, for whatever reason, during the research process. This includes changes to the investigators. Please also ensure that a brief report is submitted to the Ethics Subcommittee on completion of the research.

Note:

- This clearance is valid from the date of this letter until the time of completion of the data collections.
- The Ethics Subcommittee cannot grant retrospective ethics clearance.
- Progress reports should be submitted annually unless otherwise specified.

IN THE EVENT THAT THE APPLICATION WAS DEEMED TO NEED MODIFICATIONS AND TO BE RESUBMITTED FOR ETHICAL CLEARANCE:

Modifications required are set out in the attached documentation and reviews. Please contact the Chair of the Ethics subcommittee for clarification of the stipulations where necessary.

When you submit a revised version of your ethics application, please add a short report where you indicate how the concerns of the committee were addressed and how the application was modified.

IN THE EVENT THAT THE APPLICATION WAS NOT RECOMMENDED FOR APPROVAL FOR ETHICAL CLEARANCE:

Please see the attached documentation and reviews outlining the reasons for not recommending this application for approval. Please note that you are entitled to submit a new application on the same title but it must be accompanied by a short report where you indicate how the application differs from the initial application. Please note that you are also entitled to appeal the decision of this committee by submitting an application (on Submittable) to the main Rhodes University Ethics Committee.

IN THE EVENT THAT THE APPLICATION WAS DEEMED TO NOT REQUIRE ETHICAL APPROVAL:

[No more information is required here].

IN THE EVENT THAT THE APPLICATION IS RECOMMENDED FOR APPROVAL FOR ETHICAL CLEARANCE OF HIGH RISK RESEARCH AND APPLICATION REQUIRED TO SUBMIT APPLICATION TO RUESC VIA THE SUBMITTABLE OPERATING SYSTEM

Please submit an application to the RUESC committee for clearance of your high risk research. Please also ensure that the ethical standards subcommittee is notified should any substantive change(s) be made, for whatever reason, during the research process. This includes changes to the investigators. Please also ensure that a brief report is submitted to the Ethics Subcommittee on completion of the research.

Note:

- This clearance is not valid until RUESC approves the application.
- The Ethics Subcommittee cannot grant retrospective ethics clearance.
- Progress reports should be submitted annually unless otherwise specified.

Yours sincerely

Alfredo Terzoli

Chairperson: Department of Information Systems Ethical Standards Sub-Committee

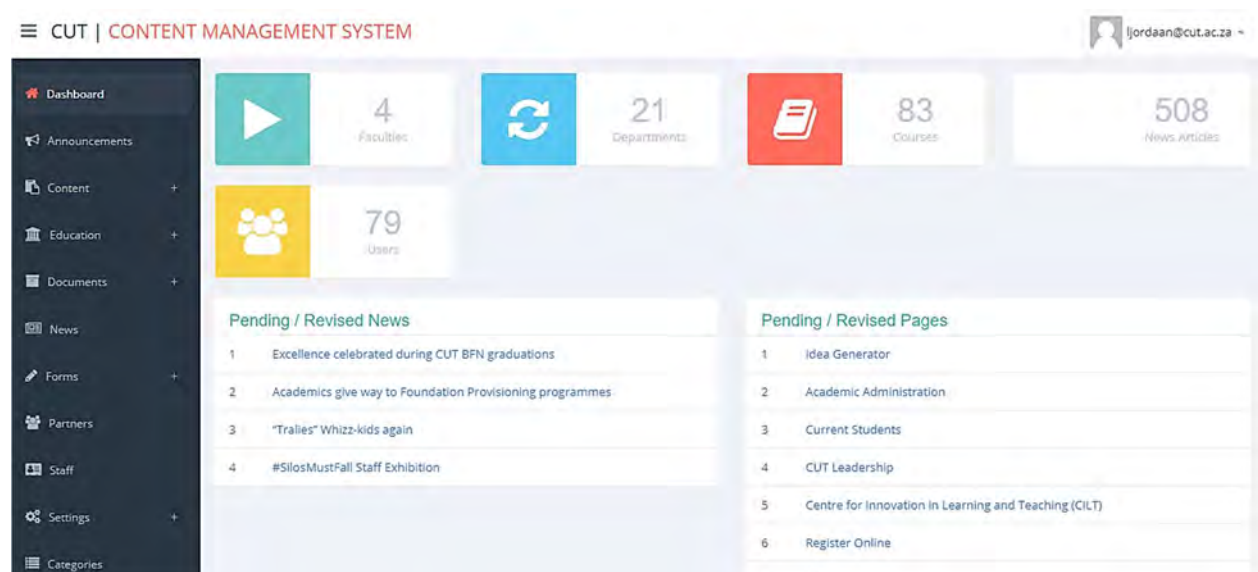


APPENDIX S: CMS PROJECT C – SCREENSHOTS

BACK-END OF THE CONTENT MANAGEMENT SYSTEM

The functionality of the CMS is for the public website of the University, www.cut.ac.za. The area of the CMS where the communication practitioners are experiencing streamlined processes, better access to information, functionalities to drive engagement, reduced time searching for information, and improved reusability of content.

DASHBOARD



System navigation is located on the left.

The central console (dashboard) contains information intended to inform the user about their profile and areas of access.



CONTENT PAGES: THE WEBSITE

≡ CUT | CONTENT MANAGEMENT SYSTEM

lJordaan@cut.ac.za

Dashboard
Announcements
Content
Pages
Banners
Events
FAQ
Campus
Projects
Careers
Education
Documents
News

Pages List

Status: Active

+ Create

Copy CSV PDF Print Column visibility

Search:

Show 10 entries

Title	Subtitle	Link	Date Created	Date Modified	Show on homepage	Options
Assessment and Graduation		https://www.cut.ac.za/assessment-and-graduation	2019/06/12 09:10	2019/06/17 08:20	No	Edit
Academic Structure and Student Enrolment Services		https://www.cut.ac.za/academic-structure-enrolment-services	2019/06/12 09:01	2019/06/17 07:20	No	Edit
4th Industrial Revolution and Circular Economy (4IR+CE)		https://www.cut.ac.za/4ir-ce	2019/03/14 10:14	2019/06/16 19:41	No	Edit
CUT Gaming		https://www.cut.ac.za/cut-gaming	2019/03/14 09:43	2019/06/16 12:53	No	Edit
Registrar		https://www.cut.ac.za/registrar	2019/03/13	2019/06/17	No	Edit

When you open one of the areas, for instance, content, the webpages are listed. The title, subtitle (if any), the link of the webpage, creation date, the date the pages were modified are displayed in a tabular format.

The option to show the webpage on the homepage of the CUT site is also indicated, and the final column allows you access to edit the page.

Top left is a drop-down box from which you can select to view active, deleted, draft, revision pages.

Top right is the +Create button should you have access to the feature and need to create a new webpage.

The search function allows you to find a webpage faster by giving you the option to search for keywords in the title or URL of the webpage.

In the content section (system navigation on the left), there are content areas including the banners that display at the top of the web pages, events listed on the homepage, projects taking place at the University, and the Careers webpage (see below).



OPEN CONTENT PAGE

CUT | CONTENT MANAGEMENT SYSTEM

Dashboard

Announcements

Content

Education

Documents

News

Forms

Partners

Staff

Settings

Categories

Tutorials

Menu

Page body

Image

Drop images here or click to upload

Title

Risk Management and Strategic Projects

Teaser

Type something

Permalink

riskmanagementandstrategicprojects

Banner

ZK Mahabane Fountain

Documents

Select documents

News categories (Displays news from this category)

(+Leadership) (+Support Services)

Permission categories

Select permissions

Location

Latitude

Longitude

Clear all coordinates

Search Box

Map

Satellite

More Info

CUT Leadership

Vision 2020 and beyond

Policies and Forms

CUT at a Glance

Permalink

riskmanagementandstrategicprojects

Subtitle

The portfolio adds meaningful value by assisting the University to achieve its strategic objectives, facilitating risk governance and capitalise on key oppo

Body

Ethics and Fraud Prevention

The unit promotes the practice of ethical leadership and for the governing body to govern the ethics of the organisation in a way that supports the establishment of an ethical culture in the University. Those charged with governance, management, employees and students are expected to operate to high moral, ethical and legal standards that form collectively the code of ethics.

The whistleblower hotline serves as an adequate platform to report incidents of ethical violations anonymously.

How to report

Toll free: +270800 222 225

Fax: +27086 522 2816

E-mail: cut@whistleblowing.co.za

www.whistleblowing.co.za

REPORT

Show on home page

Show page title over banner

Events

Select events

Projects

Select projects

Partners

Select partners

The middle of the screen in each area of the system contains the content sections.

The right side of the screen holds the settings that you can change, and add or apply to the particular content.



CAREERS PAGE

≡ CUT | CONTENT MANAGEMENT SYSTEM jordan@cut.ac.za

Dashboard
Announcements
Content
Education
Documents
News
Forms
Partners
Staff
Settings
Categories

Careers List

Status: Active + Create

Copy CSV PDF Print Column visibility

Show 10 entries

Title	Start date	Closing date	Reference	Options
Administrative Officer: Research Development & Postgraduate Studies	2019/01/11 07:00	2019/01/25 17:00	265	Edit
Assistant Artisan: General maintenance	2019/05/10 09:00	2019/05/24 23:59	4542	Edit
Assistant Artisan: Plumber	2019/05/10 09:00	2019/05/24 23:59	4290	Edit
Assistant Manager: Primary Health Care Centre	2019/02/15 08:00	2019/03/01 23:59	504	Edit
Assistant Registrar: Academic Structure and Student Enrolment	2019/04/05 08:00	2019/04/26 23:59	344	Edit

Listed are the current positions CUT is advertising. The columns displayed include the start date (when the position begins to display on the website), closing date (removed from view), reference (each position has a unique number).

≡ CUT | CONTENT MANAGEMENT SYSTEM jordan@cut.ac.za

Dashboard
Announcements
Content
Education
Documents
News
Forms
Partners
Staff
Settings
Categories

Edit Career

Title: Administrative Officer: Research Development & Postgraduate Studies

Reference Number: 265

Body:
Research Development and Postgraduate Studies

Contacts:
Select user:
Add

Date range

Start Date: 1/11/2019 7:00:00 AM

Closing Date: 1/28/2019 8:00:00 PM

Department:
General Department

Document

PDF Remove

Save Save draft Back to List Delete

Opening a position will give you the previous screen.

Again, the middle of the screen in each area of the system contains the content sections.

The right side of the screen holds the settings that you can change and add or apply to the particular content.



EDUCATION

Title	Link	Date Created	Date Modified	Options
Faculty of Engineering, Built Environment and Information Technology	https://www.cut.ac.za/Faculty/faculty-of-engineering-information-technology	2018/06/27 07:16	2019/02/26 10:52	Edit
Faculty of Health and Environmental Sciences	https://www.cut.ac.za/Faculty/health-and-environmental-sciences	2018/06/26 13:00	2019/04/03 10:03	Edit
Faculty of Humanities	https://www.cut.ac.za/Faculty/humanities	2018/05/31 14:00	2019/04/03 10:03	Edit
Faculty of Management Sciences	https://www.cut.ac.za/Faculty/management-sciences	2018/07/31 06:19	2019/04/03 10:03	Edit

The education section has the four faculty pages, the departments for each faculty, the programmes (courses) that are offered.

A list of school learner subjects that are used in the course calculator to assist school learners in determining which programmes they qualify and can consider, <https://www.cut.ac.za/Course-calculator> is managed as part of the education content.

SHORT TUTORIAL VIDEOS

Rather than lengthy text descriptive that would show users how to use the system, the team created short video clips and placed the assistive tools into the system itself.



FRONT-END DISPLAY: THE WEBSITE

To demonstrate, I will select the areas used in the back-end section as the examples below.

CONTENT PAGE: RISK MANAGEMENT AND STRATEGIC PROJECTS

<https://www.cut.ac.za/risk-management-and-strategic-projects>

Risk Management and Strategic Projects
The portfolio adds meaningful value by assisting the University to achieve its strategic objectives, facilitating risk governance and capitalise on key opportunities.

The unit has the following primary functions:

Risk Management
The portfolio drives the enhancement of the risk maturity level of the organisation, which requires the improvement of the processes of identifying, assessing, evaluating, controlling and monitoring of risks and exploiting opportunities. The involvement of key stakeholders, training and communication are key imperatives to facilitate integrated risk management.

Compliance Management
The compliance function promotes compliance with applicable laws and adopted, non-binding rules, codes and standards, as well as assists in the fostering of a compliance culture within the organisation. This includes the promotion of a culture that engenders an awareness and recognition of the value of compliance risk management, monitoring and reporting as part of daily business.

Combined Assurance
The unit provides support and oversight over activities of the independent assurance providers. The internal audit process assists with obtaining reasonable assurance that objectives are achieved regarding effectiveness and efficiency of operations and programs, reliability and integrity of financial information and compliance with laws and regulations in relation to the areas on which internal audits will be conducted.

Ethics and Fraud Prevention
The unit promotes the practice of ethical leadership and for the governing body to govern the ethics of the organisation in a way that supports the establishment of an ethical culture in the University. Those charged with governance, management, employees and students are expected to operate to high moral, ethical and legal standards that form collectively the code of ethics.

The whistleblower hotline serves as an adequate platform to report incidents of ethical violations anonymously.

How to report
Tel (toll free): +27 (0)800 222 225
Fax: +27 (0)86 522 2816
E-mail: cut@whistleblowing.co.za
www.whistleblowing.co.za

Report Fraud or Irregular Activities at CUT Anonymously
How do I know I will not be victimised? Whistle Blowing (Pty) Ltd is an independent service.
Your voice matters

Contact Us
Acting Director: Risk Management and Strategic Projects (CRO) & Chief Audit Executive (CAE)
Raseleka Tshepo
Tel: +27 (0)51 507 4350
raseleka@cut.ac.za

Unit Administrator (Temp)
S Kobi
Tel: +27 (0) 51 507 3015
skobi@cut.ac.za

More Information
CUT Leadership
Vision 2020 and beyond
Policies and Forms
CUT at a Glance

News
CUT UNITES TO CELEBRATE AFRICA DAY
[CUT News](#) [International](#) [Support](#) [Services](#) [Students](#) [Research and Innovation](#)
The Central University of Technology,
P.O. Box 147, Matriculation, Pietermaritzburg



CONTENT PAGE: CAREERS (VACANCIES)

<https://www.cut.ac.za/careers>

STUDENTS

SHORT COURSES

ALUMNI

LIBRARY

NEWS

CONTACT US

SUPPORT SERVICES

A-Z

Search



STUDY AT CUT

RESEARCH & INNOVATION

FACULTIES

ABOUT CUT

Thinking beyond

2019 SECOND SEMESTER REGISTRATION

Central University of Technology

Calendars for 2019

Read More

CUT Vacancies

Use our filters to find your ideal career opportunity

Type your Search

More Information

CUT at a Glance
Reimagining CUT: Living our values
CUT Publications
Contact Human Resources section

Download the application form

CUT CAREERS

Title	Description	Reference	Closing date	Download
Director: Financial Operations	Resources and Operations: Finance	67	2019/06/28 23:59	Download
Chief Audit Executive (CAE)	Office of the Vice-Chancellor and Principal	139	2019/06/28 23:59	Download
Associate Professor / Senior Lecturer: Tourism and Events Management	Faculty of Management Sciences: Department of Tourism and Events Management	1385	2019/06/21 23:59	Download
Creditors Officer	Resources and Operations: Finance	4855	2019/06/21 23:59	Download

Download the Application Form

CAMPUS

Explore our campuses

- Visit CUT (Maps)
- Units & Centres
- Centre for Rapid Prototyping and Manufacturing (CRPM)
- Product Development Technology Station

ADMINISTRATIVE

Administrative services and links

- Vacancies
- Tenders
- Register as a supplier
- Visiting of CUT venues
- E-mail access

USEFUL LINKS

Get quick access to useful information

- Calendar / Year Programme
- Official CUT Social Networks
- CUT FM
- Conferences / Seminars / Workshops
- FAQs

CONTACT US

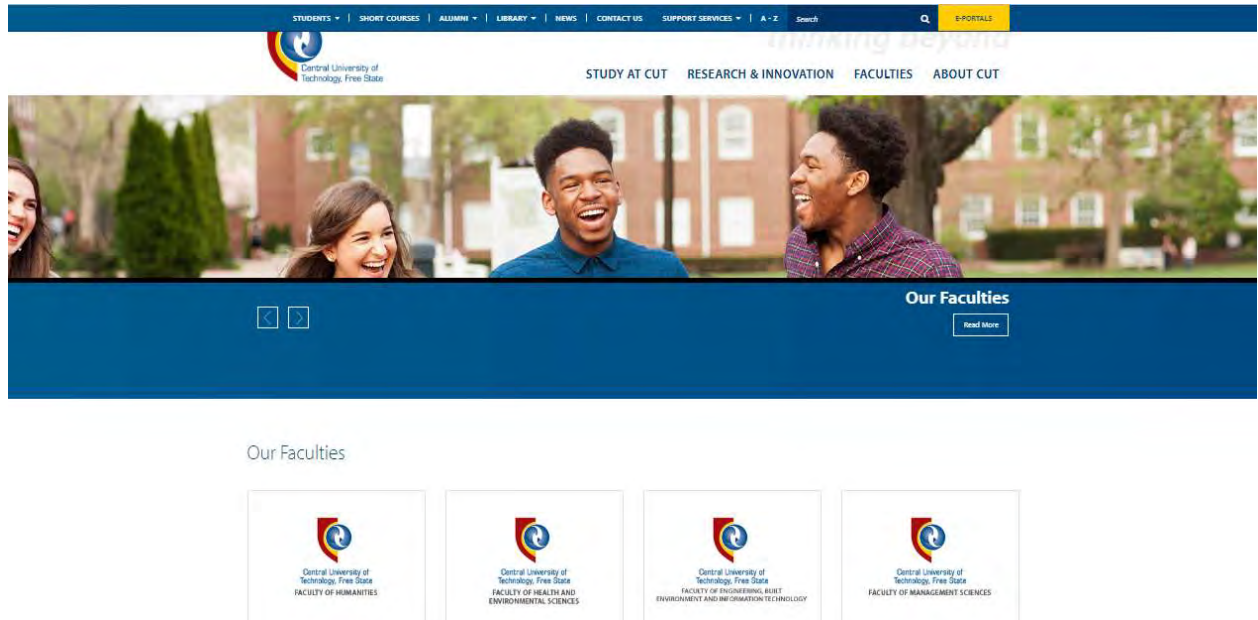
Contact us for information about CUT

- Bloemfontein Campus: +27 (0) 51 507 3911
- Wellness Campus: +27 (0) 57 910 3500
- Please address all correspondence to: The Registrar, Central University of Technology, Free State



CONTENT PAGES: FACULTIES

<https://www.cut.ac.za/faculty>



After completion of the CMS, the Faculty of Engineering, and Information Technology had a name change. This was an opportunity to see the effect of the change to the website. The faculty page in the education section was amended, and the change Faculty of Engineering, Built Environment and Information Technology pulled through on the menus, A – Z section and other linked to the page areas. The previous graphics had to be manually adapted, and content within the pages needed to be checked. However, it was already a big step in the right direction in terms of the reusability of content.



CONTENT PAGES: COURSE CALCULATOR

<https://www.cut.ac.za/Course-calculator>

STUDENTS | SHORT COURSES | ALUMNI | LIBRARY | NEWS | CONTACT US | SUPPORT SERVICES | A-Z Search
E-PORTAL

Subject codes for tables below

M	Mathematics	1 (0-29%)
ML	Mathematic Literacy	1 (0-29%)
PS	Physical Sciences	1 (0-29%)
LS	Life Sciences	1 (0-29%)
E	English	1 (0-29%)
LO	Life Orientation	1 (0-29%)
L	Languages	1 (0-29%)
A	Accounting	1 (0-29%)
AS	Agricultural Sciences	1 (0-29%)
E	Economics	1 (0-29%)
BS	Business Studies	1 (0-29%)
IT	Information Technology	1 (0-29%)
CS	Consumer Sciences	1 (0-29%)
HS	Hospitality Studies	1 (0-29%)

Submit

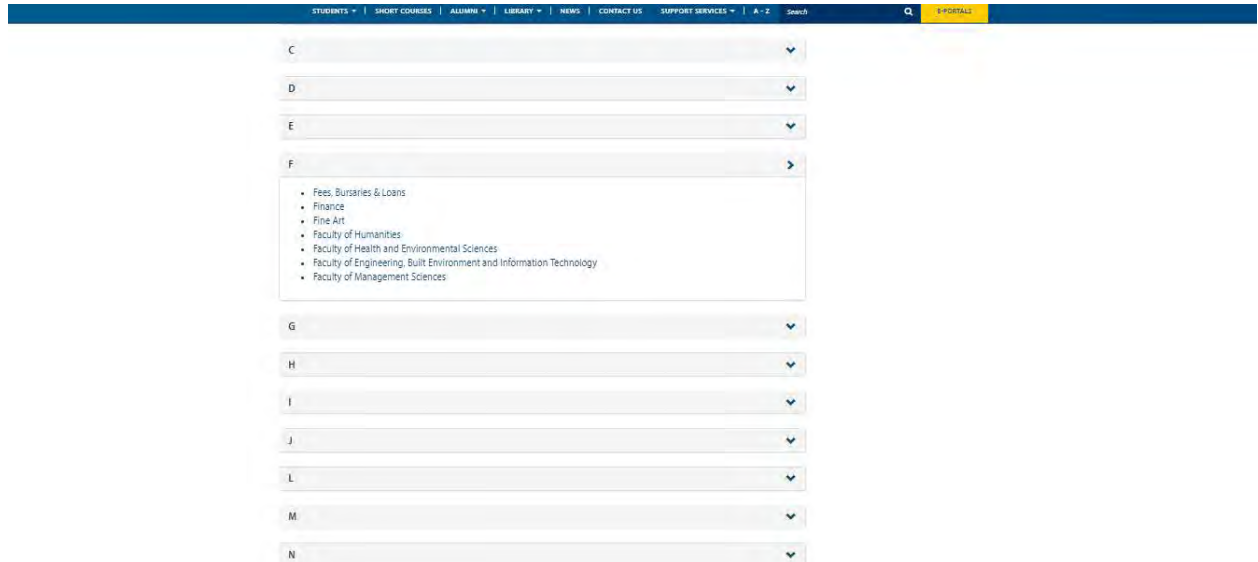
Enter your school subject marks on the page, and then a list of programmes for which you qualify will be given (see below).

Programme	Minimum Level of Achievement in Subject														Minimum Points
	1 (0-29%) 2(30-39%) 3 (40 -49%) 4 (50-59%) 5 (60-69%) 6 (70-79%) 7 (80-100%)														
	Life Orientation will be given a score of 1 point. See Admission Points														
	M	ML	PS	LS	E	LO	L	A	AS	E	BS	IT	CS	HS	
HUMAN RESOURCES MANAGEMENT					4	4								27	
Human Resources Management					4	4								27	
Marketing					4	4								27	
OFFICE MANAGEMENT AND TECHNOLOGY					4	4								27	
BUSINESS ADMINISTRATION					4	4				4	4			27	
PROJECT MANAGEMENT					4	4				4	4			27	
COMMUNITY DEVELOPMENT WORK					4									27	
PUBLIC MANAGEMENT					4	4								27	
PUBLIC MANAGEMENT					4	4								27	
PUBLIC MANAGEMENT					4	4								27	
HOSPITALITY MANAGEMENT					4	4								27	
TOURISM MANAGEMENT					4									28	
TOURISM MANAGEMENT					4									28	



CONTENT PAGES: A TO Z LIST

<https://www.cut.ac.za/a-to-z>



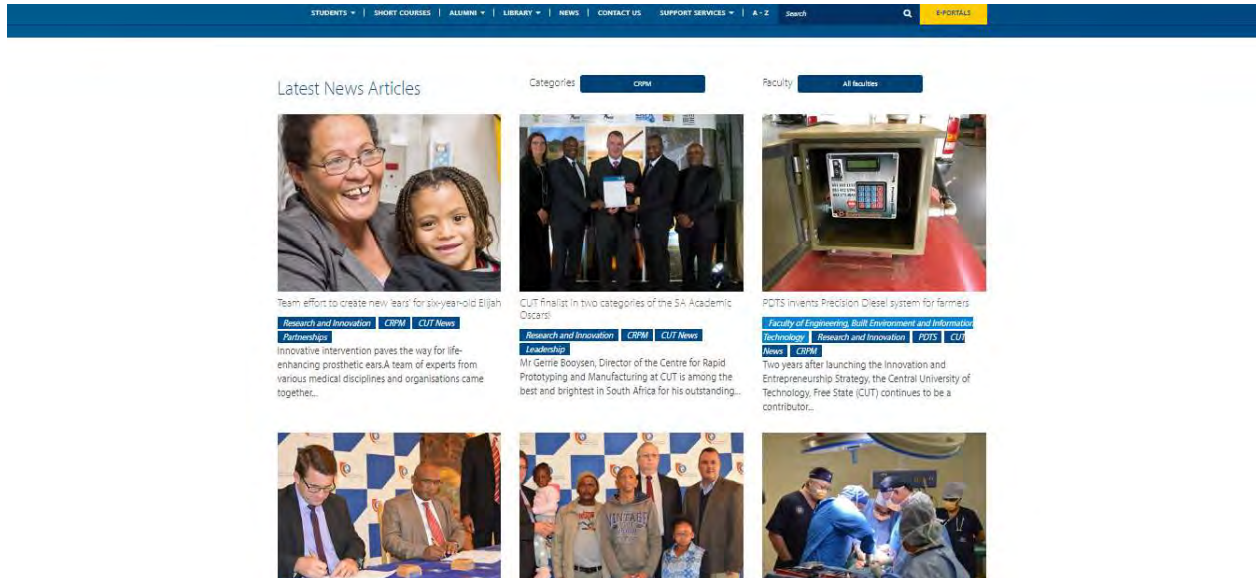
The A to Z list is updated by the system with new or changed content pages, not needed intervention by users.

CONTENT PAGES: NEWSROOM

<https://www.cut.ac.za/news>



Authors of the news articles choose the categories that are relevant to the article, and the article will then appear in the particular sections that are chosen. For instance, an article tagged with Sport will display in all areas where the category has been selected for display.



You can select a particular category, Centre for Rapid Prototyping and Manufacturing (CRPM) and view all articles that were categorised for CRPM streamlining content, see the previous screen.

Last updated: 17 June 2019