

## TABLE OF CONTENTS

<b>1</b>	<b>General Introduction</b>	<b>9</b>
<b>1.1</b>	<b>Research aims and question</b>	<b>12</b>
1.1.1	<i>Studying the complexity of ‘routine’ work</i>	12
1.1.2	<i>Defining infrastructure breakdowns</i>	14
1.1.3	<i>Breakdowns as ‘daily disruptions’: a focus on concrete practices</i>	17
<b>1.2</b>	<b>Research context</b>	<b>21</b>
1.2.1	<i>A (very) brief historical overview</i>	22
<b>1.3</b>	<b>General methodology</b>	<b>23</b>
1.3.1	<i>An interpretive ethnographic approach</i>	24
1.3.2	<i>A practice-based approach</i>	28
1.3.3	<i>Methods and analysis</i>	31
<b>1.4</b>	<b>Travelling through the dissertation</b>	<b>36</b>
<b>1.5</b>	<b>Chapter background and some more</b>	<b>40</b>
<b>2</b>	<b>Coping with complexity: Drawing distinctions or weaving relations?</b>	<b>45</b>
<b>2.1</b>	<b>Complex infrastructures: Beyond stable representations</b>	<b>46</b>
<b>2.2</b>	<b>What is complexity?</b>	<b>49</b>
<b>2.3</b>	<b>From complexity science towards organizational complexity</b>	<b>52</b>
2.3.1	<i>A brief note on maps and territories</i>	55
<b>3</b>	<b>Charting the territory: Seeing and sensing infrastructure breakdowns</b>	<b>57</b>
<b>3.1</b>	<b>Understanding dispatching practices – the role of the body and senses</b>	<b>60</b>
<b>3.2</b>	<b>A phenomenological understanding of sensible knowledge</b>	<b>61</b>
3.2.1	<i>Learning sensible knowledge as a matter of attunement</i>	63
<b>3.3</b>	<b>Methodology</b>	<b>65</b>
3.3.1	<i>Methods and analysis</i>	66
<b>3.4</b>	<b>Dispatching through the body and senses</b>	<b>67</b>
<b>3.5</b>	<b>Learning attunement in practice – the role of the senses</b>	<b>71</b>
3.5.1	<i>‘Know your equipment’</i>	72
3.5.2	<i>‘Read your equipment’</i>	73
3.5.3	<i>‘Imagine your equipment’</i>	74
<b>3.6</b>	<b>Discussion</b>	<b>75</b>
<b>3.7</b>	<b>Conclusions</b>	<b>78</b>

<b>4</b>	<b><u>When maps are not enough: Coping with the potential breakdown</u></b>	<b>79</b>
4.1	Sensemaking as enactment in an ambiguous reality	82
4.2	Understanding the potential breakdown through an ambiguity lens	84
4.3	Methodology	85
4.3.1	<i>Data Collection</i>	86
4.3.2	<i>Data Analysis</i>	87
4.4	Findings	88
4.4.1	<i>Episode 1: ‘Let’s manage this storm!’ December 3, 13h30 until December 5 8h00</i>	89
4.4.2	<i>Episode 2: ‘When is a storm a storm?’ December 5, 8h00 – 12h00</i>	91
4.4.3	<i>Episode 3: ‘A hurricane is coming...’ December 5, 12h00-14h00</i>	93
4.5	Discussion	94
4.6	Conclusions	96
<b>5</b>	<b><u>Resisting maps: The performativity of maps on the territory</u></b>	<b>99</b>
5.1	Maps as a disciplinary apparatus	102
5.2	The performativity of maps: Entanglements and ‘intra-actions’	105
5.3	Methodology	107
5.3.1	<i>Data collection and analysis</i>	108
5.4	Installing the apparatus of punctuality	109
5.5	Resisting the performativity of the map	111
5.5.1	<i>Cutting up complexity</i>	112
5.5.2	<i>Turning a blind eye to the map</i>	114
5.5.3	<i>Subverting the meaning of the map</i>	115
5.5.4	<i>Sabotaging the materiality of the map</i>	116
5.6	Discussion and conclusions	118
5.6.1	<i>Entanglements of ‘apparatus of observation’ and ‘observed phenomenon’</i>	119
5.6.2	<i>Entanglements of ‘human’ and ‘non-human’ actors</i>	121
5.6.3	<i>Entanglements of ‘meaning’ and ‘matter’</i>	122
5.6.4	<i>Resistance that matters</i>	122
<b>6</b>	<b><u>Building collaboration? Territorial struggles in the OCCR</u></b>	<b>125</b>
6.1	Changing collaboration by changing space	128
6.2	The map... Or the territory?	130
6.3	Methodology	132
6.3.1	<i>Research Context</i>	132
6.3.2	<i>Methods and Analysis</i>	134
6.4	Findings: Co-location or ‘dis-location’?	135
6.4.1	<i>The Kitchen – Do not enter</i>	136
6.4.2	<i>Preserving existing territorial boundaries</i>	137
6.5	The Control Room – On traitors, friends and foes	139
6.5.1	<i>Enacting territorial boundaries</i>	141
6.5.2	<i>Situational use of territorial boundaries</i>	143
6.6	Discussion and conclusions	145

<b>7</b>	<b>A dead body on the tracks: Managing and coping with the horrid</b>	<b>149</b>
7.1	Dirty work theory	152
7.2	'Dirt' and 'clean': Two sides of the same organization?	155
7.3	Methodology	157
7.3.1	<i>Ethnographic methods</i>	158
7.3.2	<i>Analysis and ethnographic writing</i>	160
7.4	Findings: From suicidal person to T.I.S. 3.1	161
7.4.1	<i>Experiencing the suicide: Between tragedy and cold procedures</i>	162
7.4.2	<i>From train to dispatching post</i>	164
7.4.3	<i>From dispatcher to Alarm Form – writing the body into text</i>	166
7.4.4	<i>From dispatching post to OCCR – from death to disruption</i>	167
7.5	Back to reality – re-embodiment of the body	169
7.5.1	<i>Putting the code 'back on track'</i>	170
7.5.2	<i>Arriving at the scene: The harsh reality behind the code</i>	170
7.5.3	<i>A 'cleaned up' scene and some residual dirt</i>	174
7.6	Discussion and conclusion	175
<b>8</b>	<b>Discussion and conclusions</b>	<b>179</b>
8.1	From distinctions towards relations	181
8.1.1	<i>Scenario 1: Maps as heuristics</i>	183
8.1.2	<i>Scenario 2: Maps as (inaccurate) representations</i>	185
8.1.3	<i>Scenario 3: Maps, maps, maps...</i>	188
8.1.4	<i>Wrapping it up: from infrastructure towards infrastructures</i>	191
8.2	Theoretical implications for the complex systems literature	195
8.2.1	<i>The temporality of infrastructures and systems</i>	197
8.3	Theoretical implications for organizational complexity	198
8.3.1	<i>Entanglements of complexity in practice</i>	198
8.4	Implications for practice	201
8.4.1	<i>Design more complex maps that leave room for professional judgment</i>	202
8.4.2	<i>Learn to reflect on new dynamics introduced by maps</i>	203
8.4.3	<i>Do not forget to focus on 'daily disruptions'</i>	204
8.4.4	<i>Governing bodies and regulating authorities: your efforts also create complexity</i>	206
8.5	Directions For future research	207
<hr/>		
	<b>Bibliography</b>	<b>210</b>
	<b>Summary</b>	<b>223</b>
	<b>Samenvatting</b>	<b>227</b>
	<b>Acknowledgement</b>	<b>232</b>
	<b>About the author</b>	<b>234</b>

### **List of Tables**

Table 1. An overview of visits to the field	34
Table 2. Overview of interviews conducted	35
Table 3. Some characteristics of maps and territories	56
Table 4. The temporality of learning sensible knowledge	77
Table 5. Temporal development of ambiguity and collective sensemaking	95
Table 6. Territorial practices and their effects	144
Table 7. Summary of interviews for chapter 7	159
Table 8. Summary of the three map-territory scenarios	194

### **List of Figures**

Figure 1. The layout of the OCCR	133
Figure 2. Intended sightlines (left) and used sightlines (right) in the OCCR	141

### **List of Photos**

Photo 1. The ethnographer – disguised in a Prorail uniform – in action	27
Photo 2. The abandoned kitchen of the OCCR	137
Photo 3. Nametags on the fridges	138
Photo 4. The control room at the OCCR	140
Photo 5. The hearse-trolley used to collect body parts	173