

# **PERFORMING ALGORITHMIC POWER:**

*'DYSCONNECT'* AS DIGITAL POLITICAL DRAMATURGY

By

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## *Abstract*

This Practice-led PhD conducts a research enquiry into how dramaturgical practices can be used to challenge the ‘power of algorithms’ and facilitate political agency. The central argument is that algorithmic power can be challenged through a dramaturgical form that itself ‘performs algorithmically’. By entering into the networks and deploying the same coding structures through which algorithmic power operates, such a dramaturgical form seeks to provide audiences with discomfiting experiences that illuminate power structures, invite reflection and provoke action. This thesis is pursued through the development and analysis of *Dysconnect*, an interactive theatre app that acts as a playing device for seven individual ‘podplays’. The app generates algorithmically constructed ‘digital side effects’ that mimic and enact algorithmic power over the listener in order to invite reflection and action. *Dysconnect* instantiates a ‘digital political dramaturgy’. This is presented as a novel dramaturgical framework that combines a dispersed dramaturgy, a dramaturgy of visibility, political dramaturgies and digital side effects. The thesis contributes to knowledge by developing and defining the concept of a ‘podplay’, developing a ‘digital political dramaturgy’ as a way of challenging algorithmic power, and creating *Dysconnect*, a new form of app theatre.

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## Table of Contents

|   |            |
|---|------------|
| <b>PART I: Objectives and approach</b> .....  | <b>8</b>   |
| <b>1. Introduction</b> .....  | <b>9</b>   |
| 1.1 The research enquiry: algorithmic power and political theatre.....                  | 9          |
| 1.2 The method of discovery: 'Practice-led Research'.....                               | 17         |
| 1.3 The structure in brief.....   | 24         |
| <b>PART II: Research context and theoretical framework</b> .....                        | <b>33</b>  |
| <b>2. Towards a macro dramaturgy</b> .....  | <b>33</b>  |
| 2.1 Introduction.....   | 33         |
| 2.2 Conceptualizing algorithmic power.....  | 34         |
| 2.2.1 Reflections towards practice: a 'dispersed dramaturgy'.....                       | 41         |
| 2.3 Theatre and algorithms.....   | 43         |
| 2.3.1 Reflections towards practice.....   | 48         |
| 2.4 Agency: uncomfortable interactions, strategic penetration and embeddedness...<br>50 |            |
| 2.4.1 Reflections towards practice.....   | 62         |
| 2.5 Podplays vs. radio/audio drama – towards a definition.....                          | 64         |
| 2.5.1 Reflections towards practice.....   | 75         |
| 2.6 Theatre and mobile apps.....  | 76         |
| 2.6.1 Reflections towards practice.....   | 86         |
| 2.7 Chapter summary.....  | 89         |
| <b>3. Constructing micro dramaturgies</b> .....   | <b>92</b>  |
| 3.1 Introduction.....   | 92         |
| 3.2 Rethinking dramaturgical structures.....  | 93         |
| 3.3 Postdigital performance.....  | 104        |
| 3.4 Absurdist dystopias.....  | 108        |
| 3.5 Chapter summary.....  | 113        |
| <b>PART III: The 'Practice as Research' Process</b> .....                               | <b>116</b> |
| <b>4. From stage to app</b> .....   | <b>116</b> |
| 4.1 Verbatim and site-specific.....   | 116        |
| 4.2 Listening Stations.....   | 119        |
| 4.2.1 The FitChip Room.....   | 119        |
| 4.2.2 The Audio Trail.....  | 120        |
| 4.3 App development.....  | 123        |
| 4.3.1 Funding constraints.....  | 123        |
| 4.3.2 Early prototyping.....  | 127        |
| 4.3.3 Dysconnect as 'Computer engineering project'.....                                 | 129        |
| 4.4 Chapter summary.....  | 136        |
| <b>PART IV: Practices Towards a Digital Political Dramaturgy</b> .....                  | <b>138</b> |
| <b>5. Critical reflections on practice</b> .....  | <b>138</b> |
| 5.1 Introduction.....   | 138        |
| 5.2 Drowning.....   | 139        |
| 5.2.1 Text/audio.....   | 139        |
| 5.2.2 Visual and side effects.....  | 144        |
| 5.3 FitChip.....  | 147        |
| 5.3.1 Commentary and analysis of text/audio.....  | 147        |
| 5.3.2 Visual and side effects.....  | 151        |
| 5.4 Trapped.....  | 154        |
| 5.4.1 Commentary and analysis of text/audio.....  | 154        |
| 5.4.2 Visual and side effects.....  | 158        |
| 5.5 Falling.....  | 161        |
| 5.5.1 Commentary and analysis of text/audio.....  | 161        |

|   |            |
|---|------------|
| 5.5.2 Visual and side effects.....  | 168        |
| 5.6 Let's Google it! .....  | 170        |
| 5.6.1 Commentary and analysis of text/audio.....  | 170        |
| 5.6.2 Visual and side effects.....  | 177        |
| 5.7 High Risk.....  | 180        |
| 5.7.1 Commentary and analysis of text/audio.....  | 180        |
| 4.7.2 Visual and Side effects .....   | 184        |
| 5.8 Safe .....  | 190        |
| 5.8.1 Commentary and analysis of text/audio.....  | 190        |
| 5.8.2 Visual and side effects.....  | 195        |
| <b>6. Extra podplays.....</b>   | <b>197</b> |
| 6.1 Ulysses 2.0.....  | 197        |
| 6.2 Connected.....  | 200        |
| 6.3 Chapter summary .....   | 206        |
| <b>Part V: Discussion and Conclusions .....</b>   | <b>208</b> |
| <b>7. Dysconnect as Digital Political Dramaturgy.....</b>   | <b>208</b> |
| 7.1 Introduction .....  | 208        |
| 7.2 The components of a 'digital political dramaturgy' .....  | 208        |
| 7.2.1 'Dispersed dramaturgy' and a 'dramaturgy of visibility' .....                                     | 210        |
| 7.2.2 Generating political agency through 'digital side effects' .....                                  | 213        |
| 7.2.3 Provoking reflection through 'political dramaturgies' .....                                       | 217        |
| 7.3 Challenging algorithmic power by combining the components.....                                      | 220        |
| 7.4 Contribution to knowledge defined.....  | 222        |
| 7.5 Closing reflections: The future shape of algorithmic power and 'digital political dramaturgy' ..... | 222        |
| <b>8. Bibliography .....</b>  | <b>225</b> |
| <b>9. Appendices:.....</b>  | <b>252</b> |
| Appendix A: Drowning (Final script).....  | 252        |
| Appendix B: FitChip (Final script).....   | 270        |
| Appendix C: The Making of a Fly (Early/discarded script) .....  | 286        |
| Appendix D: Falling (Final script) .....  | 300        |
| Appendix E: Trapped (Final script) .....  | 317        |
| Appendix F: Infinity. Google it! (Early script/Precursor to 'Let's Google it!') .....                   | 335        |
| Appendix G: Let's Google it! (Final script).....  | 344        |
| Appendix H: High Risk (Final script) .....  | 357        |
| Appendix I: Safe (Early draft of script).....   | 380        |
| Appendix J: Safe (Final script).....  | 389        |
| Appendix K: Ulysses 2.0 (Incomplete draft script) .....   | 397        |
| Appendix L: Connected (Final script - Unused) .....   | 403        |

## List of Tables

|  |    |
|--|----|
| TABLE 1: A SYSTEMATIC SEARCH FOR ‘ALGORITHM’ .....               | 44 |
| TABLE 2: A SYSTEMATIC SEARCH FOR RESEARCH ON ‘THEATRE APPS’..... | 77 |

## List of Figures

|   |     |
|---|-----|
| FIGURE 1: VISUALISING AN ALGORITHM.....   | 12  |
| FIGURE 2: MODEL OF THE PAR-PROCESS.....   | 21  |
| FIGURE 3: THE PROCESS OF DISCOVERY.....   | 22  |
| FIGURE 4: SCREENSHOT OF INTERACTION WITH DI SLEET BOT.....                                    | 67  |
| FIGURE 5: SCREENSHOT FROM KAREN.....  | 82  |
| FIGURE 6: SCREENSHOT OF AN EARLY DEVELOPMENT STAGE.....                                       | 117 |
| FIGURE 7: EXTRACT FROM DIARY - EXPLORING SITE-SPECIFIC.....                                   | 118 |
| FIGURE 8: LISTENING STATION: THE FITCHIP ROOM.....  | 120 |
| FIGURE 9: MAN LISTENING TO ULYSSES 2.0 (LEFT) AND LISTENING STATION FOR DROWNING (RIGHT)..... | 121 |
| FIGURE 10: DIARY EXTRACT - EXPLORING IDEAS OF INTERACTIVITY.....                              | 122 |
| FIGURE 11: THE MASTER ADVERTISEMENT SENT TO STUDENTS.....                                     | 125 |
| FIGURE 12: DIARY EXTRACTS - REFLECTIONS REGARDING ENGAGEMENT.....                             | 128 |
| FIGURE 13: PROTOTYPE FRONT IMAGE OF THE PODPLAY CONNECTED.....                                | 128 |
| FIGURE 14: TIMELINE FOR COLLABORATION WITH KARLSTAD UNIVERSITY.....                           | 130 |
| FIGURE 15: EXTRACT FROM THE COLLABORATIVE PROCESS (EMAIL) 1.....                              | 131 |
| FIGURE 16: EXTRACT FROM THE COLLABORATIVE PROCESS (EMAIL) 2.....                              | 133 |
| FIGURE 17:EXTRACT FROM THE COLLABORATIVE PROCESS (EMAIL) 3.....                               | 134 |
| FIGURE 18:EXTRACT FROM THE COLLABORATIVE PROCESS (EMAIL) 4.....                               | 135 |
| FIGURE 19: IMAGE LINKED TO IZZY’S WORDS.....  | 145 |
| FIGURE 20: A DIVERSIONARY NOTIFICATION.....   | 146 |
| FIGURE 21: PROVIDING AN EXPERIENCE OF PLEASURABLE SURVEILLANCE.....                           | 152 |
| FIGURE 22: ‘YOU NEED TO WALK TO LISTEN’.....  | 153 |
| FIGURE 23: SCREENSHOT OF TRAPPED - OPENING PAGE (LEFT) & LOCATION/ WEATHER (RIGHT).....       | 159 |
| FIGURE 24: IMAGE OF THE FLASH CRASH.....  | 164 |

|   |            |
|---|------------|
| <b>FIGURE 25: LOOPING DIALOGUE.....</b>   | <b>165</b> |
| <b>FIGURE 26: SCREENSHOT OF THE VIDEO SHOWN DURING FALLING.....</b>                   | <b>169</b> |
| <b>FIGURE 27: GOOGLE AUTOCOMPLETE.....</b>  | <b>171</b> |
| <b>FIGURE 28: UN WOMEN CAMPAIGN.....</b>  | <b>172</b> |
| <b>FIGURE 29: SCREENSHOT OF A GOOGLE SEARCH CONDUCTED ON MARCH 2D 2016.<br/>.....</b> | <b>174</b> |
| <b>FIGURE 30: DON'T GOOGLE!.....</b>  | <b>178</b> |
| <b>FIGURE 31: INTERACTIVE QUIZ.....</b>   | <b>179</b> |
| <b>FIGURE 32: 'TRAFFIC' (LEFT); AND 'SELFIE OF EMMA AND ANNA' (RIGHT).....</b>        | <b>185</b> |
| <b>FIGURE 33: SAMPLE QUESTIONNAIRE FROM COMPAS RISK ASSESSMENT, 2016.....</b>         | <b>187</b> |
| <b>FIGURE 34: SCREENSHOT OF MESSAGE SENT TO AMANDA FROMELL'S PHONE.....</b>           | <b>188</b> |
| <b>FIGURE 35: 'PRAISE/REPRIMAND REGARDING THE SECRET CODE'.....</b>                   | <b>196</b> |
| <b>FIGURE 36: DIARY EXTRACT - ULYSSES 2.0.....</b>                                    | <b>198</b> |
| <b>FIGURE 37: EXTRACT FROM ULYSSES 2.0 (PLAY SCRIPT).....</b>                         | <b>199</b> |
| <b>FIGURE 38: SIMULTANEOUS TEXT.....</b>  | <b>203</b> |
| <b>FIGURE 39: THE COMPONENTS OF A DIGITAL POLITICAL DRAMATURGY.....</b>               | <b>221</b> |

### **List of Excerpts**

|  |            |
|--|------------|
| <b>EXCERPT 1: DEPICTING 'ALGORITHMIC TARGETING' 1.....</b>               | <b>142</b> |
| <b>EXCERPT 2: DEPICTING 'ALGORITHMIC TARGETING' 2.....</b>               | <b>142</b> |
| <b>EXCERPT 3: DEPICTING 'ALGORITHMIC TARGETING' 3.....</b>               | <b>143</b> |
| <b>EXCERPT 4: DEPICTING 'PLEASURABLE SURVEILLANCE'.....</b>              | <b>149</b> |
| <b>EXCERPT 5: DEPICTING 'VERBALISATION OF DIGITAL PRESENCE'.....</b>     | <b>155</b> |
| <b>EXCERPT 6: DEPICTING 'ABSURDIST MONOLOGUE'.....</b>                   | <b>156</b> |
| <b>EXCERPT 7: DEPICTING 'SURVEILLANCE AND PLEASURE INTERTWINED'.....</b> | <b>157</b> |
| <b>EXCERPT 8: FIRST VERSION 'WHAT DO YOU CALL'.....</b>                  | <b>173</b> |
| <b>EXCERPT 9: SECOND VERSION 'WHAT DO YOU CALL'.....</b>                 | <b>175</b> |
| <b>EXCERPT 10: CEMENTING 'CRIMINAL JUSTICE ALGORITHM'.....</b>           | <b>182</b> |
| <b>EXCERPT 11: A DIALOGUE OF REPETITIONS AND STUTTERS.....</b>           | <b>183</b> |
| <b>EXCERPT 12: DIALOGUE WHERE THE OBJECTS INFORM ON THE SUBJECT.....</b> | <b>193</b> |
| <b>EXCERPT 13: NOTES ON ULYSSES 2.0.....</b>                             | <b>203</b> |



## **PART I: Objectives and approach**

## 1. Introduction

### 1.1 The research enquiry: algorithmic power and political theatre

In 2011, a woman, standing outside an abortion clinic in Manhattan, was reported to have asked Siri, the algorithmic intelligent software assistant on Apple's iPhone, where she could find an abortion clinic. 'Sorry', Siri replied, 'I couldn't find any abortion clinics'. The exchange triggered outrage online, as bloggers expressed their dismay at what appeared to be a cultural politics coded into Siri (Keizer, 2011; Keenan, 2014: 159-160). Abortion rights advocates joined forces with the American Civil Liberties Union, and the National Abortion Rights Action League, to create an online petition demanding that Apple rectify the issue (Potter, 2011). Apple replied by explaining that Siri was not anti-abortion at all. 'She' had merely failed to locate abortion clinics because they went under different names, such as 'Planned Parenthood' (Sullivan, 2011; Sutter, 2011). The difference in labels, they claimed, meant that the algorithm was unable to match the question with the result. This response, however, was proved somewhat disingenuous in the face of evidence that, if asked where one could dispose of a dead body, Siri would readily direct the user to 'dumps, swamps, mines, reservoirs or metal foundries' (Rivas, 2011). Despite Apple's effort to depoliticize its algorithm, it was apparent that somewhere, someone had (under) supplied Siri with knowledge. There was, in short, politics at play within the algorithm.

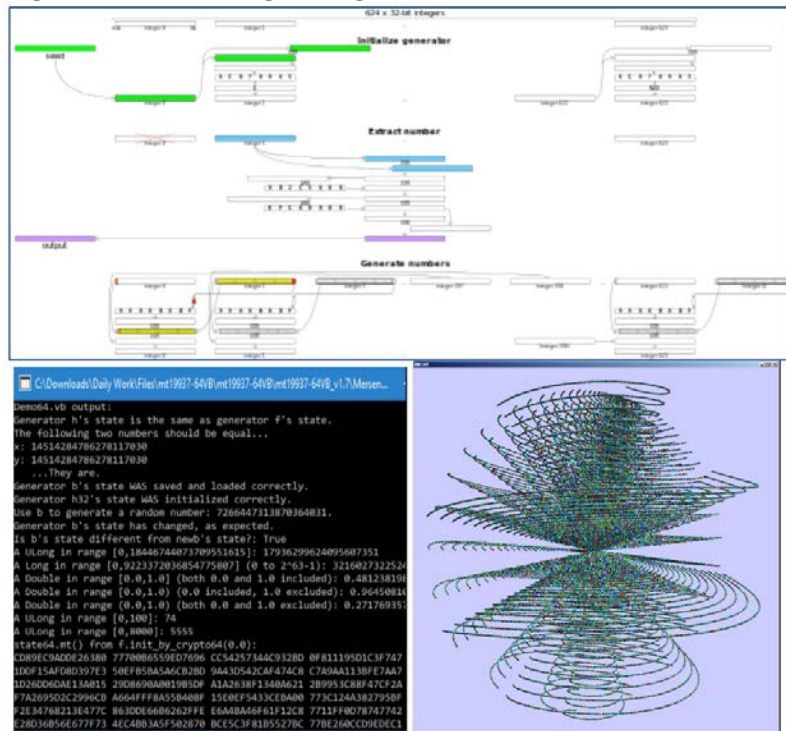
It is increasingly due to events such as the above that the word ‘algorithm’ has appeared with increasing prominence in mainstream news, not infrequently featuring on the front page of mass circulation newspapers (e.g. ‘*Algorithms assessing gang risk to children*’, Guardian, 18 September 2018). Paradoxically, however, for a word that has been in use (in English) since the Middle Ages, and which is mentioned with increasing frequency, ‘algorithm’ remains a concept shrouded in obscurity. Many people for whom I have described my research, have noted that the word ‘algorithm’ connotes little more than a vague sense of computers and clever maths. Others may understand an algorithm as a set of step-by-step instructions, which lead to a specific result: like a recipe for a cake (or IKEA furniture), where the instructions, if followed correctly, result in the desired output: the cake (or the bookcase).

However, simplifications of that kind are increasingly inadequate in the current era. There is a significant gap between the simple abstract idea and the complexity of actual algorithms as they become embedded in everyday activities. What is lacking is not merely a matter of semantics, since algorithms are not written in natural language, and so the remedy won’t be found by picking up a dictionary. The problem of knowledge, it is argued here, is much further reaching and concerns public awareness, understanding and the transparency of information (e.g. many algorithms are treated as industrial secrets). This thesis is concerned with this problem of hidden ‘algorithmic power’ and theatre’s potential relation to it.

Algorithms are operative in governmental decisions (Mittelstadt *et al.*, 2016; Gillespie, 2014), predictive policing, (Hickman, 2013) and surveillance (Introna and

Wood, 2004). They construct how people understand and form friendships with one another online (Beer, 2009; Bucher, 2012) and execute financial transactions in milliseconds (Millo and Beunza, 2015). However, despite having attained a near omnipresent status, people are generally unable to perceive the presence of algorithms or fully understand their operation. That is why scholars, such as Kathryn Hayles (2006), argue that in contemporary networked societies, ‘human awareness comprises the tip of a huge pyramid of data flows, most of which occurs between machines’ (2006:126). Deborah Lupton expresses a similar view, noting that: ‘[w]e have reached a point where digital technologies’ ubiquity and pervasiveness are such that they have become invisible’ (2016:2). The problem is especially acute in the case of algorithms, since they do not present themselves to the public in their raw form, as a complex series of commands written in an artificial language. For example, Figure 1, below, provides three different ways of visualizing a Mersenne Twister, or random number generating, algorithm.

Figure 1. Visualising an algorithm



Source: Google images, from search for 'Mersenne Twister algorithm'

As those images attest, even if algorithms did present themselves in raw form, there would be little prospect for understanding, except for those proficient in programming languages. Therefore, it is important to recognise that, as lines of code embedded within other technologies, algorithms are neither audible, visible nor intelligible to the public (Mackenzie and Vurdubakis, 2011). When we conduct a Google search, for example, or respond to content on Facebook, we do not see or hear how the algorithms arrive at their answers. What we receive is simply the end-product of their computation, and therein lies much of their danger.

One of Michel Foucault's best-known remarks on his reconceptualization of power was to point out that he did not hold the view that 'everything is bad, but that everything is dangerous' (Foucault, 1983: 231). Such a stance seems especially

suitable to addressing algorithms. It would be absurd to say that algorithms *per se* are bad, since there is ample evidence of their positive social value. (e.g. in optimizing energy consumption). However, as hinted above, one clear danger of their invisibility is that it forecloses the possibility of democratic accountability. We cannot hold to account, that which we know nothing of. Therefore, as algorithms make their way into our homes, our financial systems, our medical clinics and ultimately our minds, there is an ever-growing need to raise public awareness of the role they play in contemporary society. Without the knowledge of algorithmic operation, such systems will be able to enact a form of largely invisible control over citizens and society.

Within the social sciences, algorithms are increasingly understood as instruments of power and domination in networked society. Scott Lash, for example, sees algorithms as a new articulation of power, or as new ‘pathways through which capitalist *power* works’ (2017:71). He notes that a ‘society of ubiquitous media means a society in which power is increasingly in the algorithm’ (2017:71). Astrid Mager takes this view a step further, arguing that algorithms are not just inscribed with power but also with capitalist ideology, since they fuel consumption and surreptitiously capture labour power from their users (2012:769-787). The character and urgency of the need to challenge the power of algorithms is captured by David Beer, when he explains that the decision-making powers of emergent and established software algorithms now present a challenge to *human* agency (2009:987).

If, as such scholars suggest, algorithms do constitute a new face of power in the development of capitalism (Beer, 2009; Lash, 2017) then, echoing Thomas Parke

Hughes' (1995) sentiments regarding the 'shaping' of technology generally, the matter is 'far too important to leave only to engineers; humanists, social scientists, historians, and citizens should also have their say' (Hecht and Allen, 2001:20). This call to action can be extended to theatre scholars and practitioners, particularly in terms of creating an awareness and re-humanizing agency. Indeed, one of the traditional ideas of political theatre is that theatre *per se* has the capacity to raise consciousness of power and domination, in consequence of which, action aimed at resisting and overcoming power can then be taken (Boal, 1973). The idea rests on the principle that knowing power is prerequisite to challenging it, since, as mentioned above, we cannot challenge, nor hold to account, that which we know nothing of. However, given what has been suggested about the almost cryptic character of algorithmic power, it is not immediately obvious how this is to be achieved. How can theatre respond in the face of something that is largely invisible and incomprehensible in its raw form? This is the intellectual and practical problem addressed in this thesis. Specifically, through a process of practice-as-research (PaR), this thesis investigates how computerised algorithms in everyday life enact power over citizens and, in turn, explores how dramaturgical practices can be used to counteract such power effects.

The central argument of the thesis is that algorithmic power can be challenged through a dramaturgical form that itself 'performs algorithmically', since this helps to render the structures and effects of algorithmic power as more visible. Specifically, after establishing a conceptualization of algorithmic power as embedded, networked and multitudinous (i.e. as a largely invisible force that orders social life within and through a dense tapestry of technological devices); the thesis argues that a theatre-

based challenge to algorithmic power might find its efficacy in a dramaturgical form that enters into the very networks and deploys the same coding structures through which algorithmic power operates. Importantly, rather than *telling* its audience about algorithmic power, such a dramaturgical form would provide its audiences with a set of discomfiting experiences that illuminate the power structures where there are manifest, invite reflection and provoke action.

By developing that argument, the thesis takes seriously the view, finding increasing scholarly expression, that new forms of performance and new dramaturgies might be required to address those challenges. Turner and Behrndt (2008), for example, argue that new dramaturgies are required to understand new technologies (2008:201). Adams echoes this view, claiming that increased digitisation means new forms of interaction and participation, posing ‘new challenges for theatre that are only beginning to be understood. It offers new audiences and new communities. And it demands new forms of performance and new spaces to show it’ (Adams, 2014:ix). In her analysis of contemporary political theatre, Grochala (2017) argues in a similar direction. She suggests that political awareness and change is generated through dramaturgies that are able to rethink ‘representations of social structures that better enable the social subject to understand how to have political agency within the complex mechanisms of globalized society’ (Grochala, 2017:87).

Building upon those arguments, this thesis creates and examines one such form of performance: an interactive theatre app, *Dysconnect*, and its supporting dramaturgy. The dramaturgical form is preliminarily termed a ‘digital political dramaturgy’. A



central objective of the thesis is to provide a detailed discussion of how such a dramaturgy - which is instantiated in the performance *Dysconnect* - was formed. Through the creation of *Dysconnect*, I have sought to create a practice that not only incorporates algorithms as subject matter, but also writes algorithms into the dramaturgical structure, where they manifest themselves in (mainly unwelcome) digital side effects, which, in turn, provoke and/or invite reflection. The app, together with the concept of a *digital political dramaturgy*, is used to describe and commend a political dramaturgy that makes use of, and manipulates, digital technologies, rather than simply describing or dramatizing them.

The articulation of a *digital political dramaturgy* is not positioned as the only means by which theatre practice can challenge algorithmic power, but rather as a relatively distinctive and novel dramaturgical form with several potentially unique affordances. Its objective, in the case of *Dysconnect*, is to reveal the power effects of algorithms, through mimicking and manipulating part of their operation within a digitised theatre piece. The aim, more broadly, is to generate an experiential knowledge, where the audience is given the opportunity to act against algorithmic control, to recover a measure of agency, rather than being made passive viewers of a preconceived political message. Hence, the contribution to knowledge offered by this PaR thesis is the development of a new form of app theatre and the dramaturgical structure implemented within it which seeks to challenge the ‘power of algorithms’ and facilitate political agency.

In the following section the process through which the thesis (and practice) developed is outlined, focusing on the methodological basis in Practice-as-research (PaR). The main artistic collaborations are detailed in Chapter 4.3.

## 1.2 The method of discovery: 'Practice-led Research'

As indicated above, this Practice-led PhD follows the methodology of 'practice-as-research' (PaR) associated with Robin Nelson (2014). PaR is a relatively new form of research within academia and the concept itself remains subject to some debate and institutional uncertainty (Nelson and Andrews, 2009). Despite that debate, however, there is now a wide consensus that PaR involves, minimally, a 'research project in which practice is a key method of inquiry and where, in respect of the arts, a practice ...is submitted as substantial evidence of a research inquiry' (Nelson, 2014:8-9). Whereas traditional research starts by stating a precise research 'question', PaR defines a 'research enquiry', leading to 'insights rather than coming to such definite conclusions as to constitute answers' (Nelson, 2013:30). The practice is not an appendage to the thesis, but rather an integral component. Indeed, typically, the enquiry itself could be neither raised nor answered without the possibility of the practice being undertaken. As such, a PaR research enquiry typically asks *how* something might be 'done', and this elicits a response which generates knowledge by attempting to 'do so' and then reporting on the outcome. As mentioned above, in this thesis the research enquiry concerns how dramaturgical practices can be used to reveal the 'power of algorithms' and facilitate political agency.

In PaR, the practical component does not replace a scholarly apparatus, but rather rests upon and responds to it (Allegue *et al.*, 2009). Existing research, whether in the form of prevailing theoretical frameworks or other PaR studies, provides the research context and intellectual foundations for PaR. As such, a PaR thesis contributes to the enhancement of knowledge within one or more scholarly communities, allowing fellow researchers to relate the findings to relevant academic debates. This necessitates a literature review, which delineates a primary field of scholarship. In the case of this thesis, the research context is established through an interrogation of existing scholarship and practice in the areas of theatre and algorithms (Frieze, 2015; Causey, 2016; Eacho, 2018; Rosamond, 2015; Selvaggio, 2015; Dorsen, 2013), hacktivism and embeddedness (Giannachi, 2004; Causey, 2006), politics of dramatic structure (Grochala, 2017), postdigital aesthetics (Causey, 2016), and in the political potential of absurdist dystopias (Tönnies, 2016). In order to understand the nature and role of algorithms, the research context extends to research which helps establish an understanding of the relationship between power and algorithms (e.g. Lash, 2007). It also explores how algorithms play a role in supporting contemporary capitalism through, for example, search algorithms, automated trading, fitness tracking and algorithmic surveillance. To reflect the way in which algorithms appear within contemporary society, it uses and accounts for both popular and academic sources. Moreover, as the research enquiry is fundamentally concerned with how something can be done in practice, an additional dimension of the research context, which is no less essential, concerns relevant existing practice. This, too, is reflected in the literature review. Specifically, it provides a critical account of a wide selection of relevant practices, in particular around the development of theatre apps, such as Blast

Theory's *Karen* (2016) and Headlong's *Digital Double* (2014), as well as contemporary performances that stage algorithms, such as Lee's *Heartbeats and Algorithms* (2015) and Gregg's *Josephine K and the Algorithms* (2017).

In PaR, the artistic practice may stand by itself in the sense of engaging an audience that has no prior stake in the research context (e.g. in the form of a completed play, film, etc.). However, as a contribution to knowledge within a predefined research context, the practices must be spoken for, particularly in terms of what substantial new insights are afforded through them. It is by setting out those insights that knowledge embedded in and derived from practices becomes a form of knowledge that can be shared and evaluated within an audience of fellow researchers and practitioners. Nelson expresses this point more formally by characterizing PaR in terms of a 'logic of discovery' which follows the three different modes of knowing constitutive of praxis ('theory imbricated in practice'): know-how, know-what and know-that.

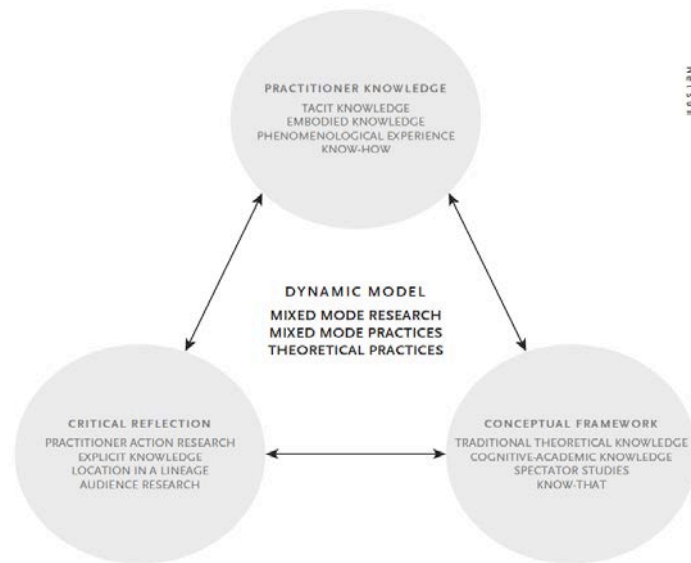
The know-how (Nelson, 2014:41-44) refers to those forms of knowledge that are embodied or tacit. It is the knowledge with which we routinely perform or practice, but without necessarily being able to explain why or how. 'Know-that', in contrast, is codified knowledge. It is typically the kind found in and acquired through theories or conceptual frameworks (i.e. the kind of knowledge I am now expressing with regards to Nelson's model). As noted above, it is also acquired through engaging with the kinds of practice intrinsic to the research enquiry. Finally, 'know-what' is the tacit or embodied knowledge that becomes explicit through a rigorous and iterative process of

critical reflection on practice. In the context of this PaR project, ‘know what’ concerns the creation of an explicit knowledge, which can be disseminated within the scholarly community, as to the various dramaturgical devices that work effectively in exposing algorithmic power and increasing the opportunity for political agency.

The final articulation of ‘know-what’ is expressed through the praxis of creating (and documenting the creation of) an interactive theatre app called *Dysconnect*. Specifically, by practically implementing a range of political dramaturgies, the podplays (the term given to the individual plays within the app) explore algorithms as instruments of power and control, and strive towards a facilitation of political agency. The different podplays, and their implementation within a theatre app, provide an opportunity to practice and explore different aspects of a ‘digital political dramaturgy’. Of central importance is the decision to make a series of shorter, individual podplays, each focusing on one particular algorithm or algorithmic system. This is accompanied by a process of documentation, critical reflection and analysis of practice. Potential limitations and possibilities are analysed with the objective of providing an answer to the research enquiry into how dramaturgical practices can be used to expose the ‘power of algorithms’ and facilitate political agency.

The outline of the three different modes of knowledge (know-how, know-what and know-that), as presented above, appear to follow a linear structure. However, in practice, they, and the logic of discovery more broadly, are intertwined and iterative, happening alongside and simultaneously to each other. This relationship is more adequately reflected by the arrows pointing back and forth in Figure 2 below.

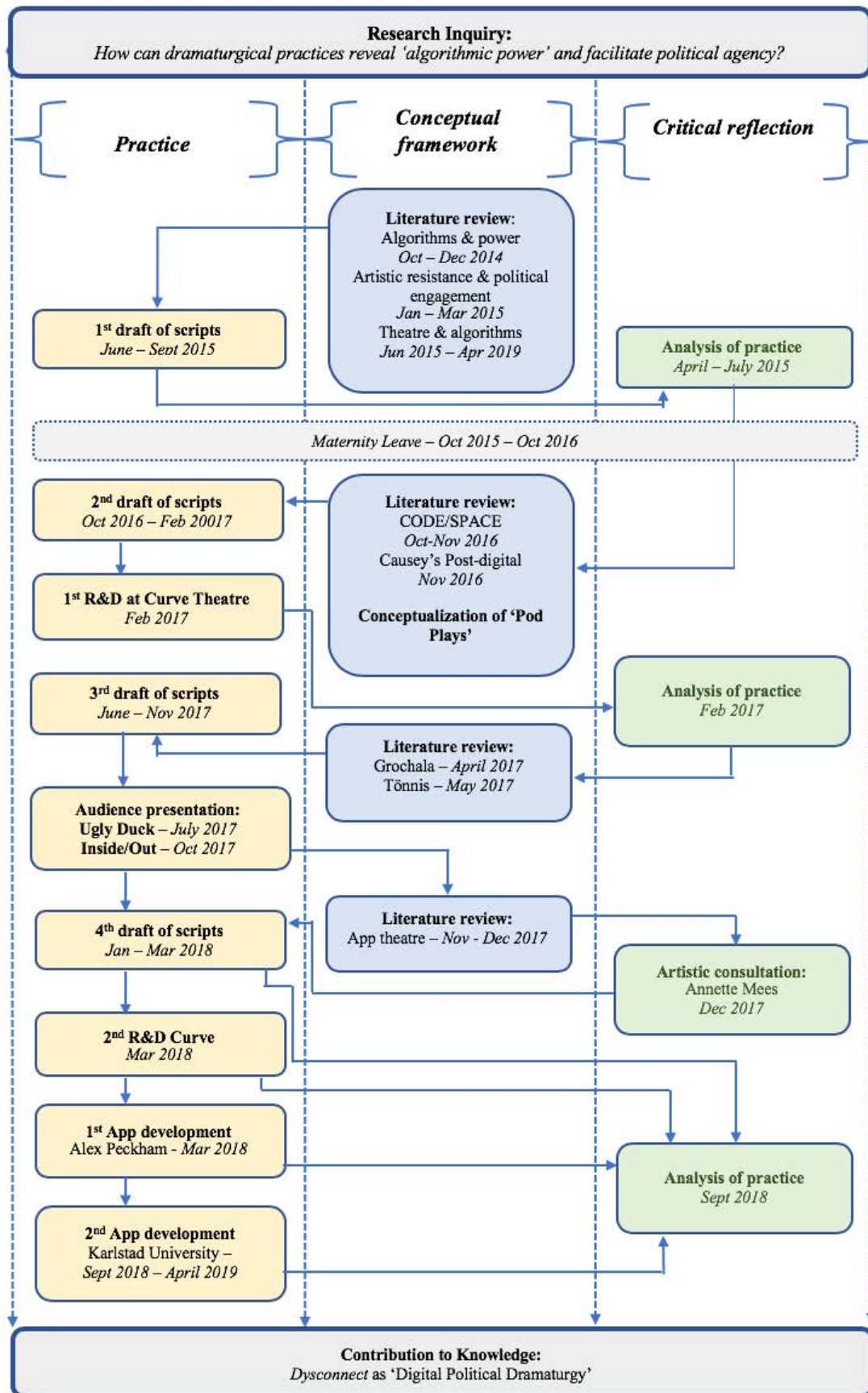
**Figure 2. Model of the PaR process**



*Source: Nelson, 2006:114*

The final artistic output emerges from the interplay between the three elements of knowledge in Figure 2 (Nelson, 2006:133). Specifically, the production of knowledge emerges from the process of moving between practice and research, and the articulation of insights found through the creative process as detailed in a written articulation (Nelson, 2006:115). It is within this relational encounter that knowledge generation occurs. The figure below (Figure 3) attempts to illustrate some of the main shifts between these forms of knowledge, and thus the process of discovery, in the case of this thesis.

Figure 3. The process of discovery



As seen in Figure 3, the columns ‘practice’, ‘conceptual framework’ and ‘critical reflection’, relate to the three modes of discovery. The arrows demonstrate the movement between the different modes and how they influenced each other. In brief, the process of discovery commenced with a literature review of algorithms and power, artistic resistance, political engagement, and theatre and algorithms. The insights gained from that mode influenced the first draft of scripts. The documentation and analysis of this process commended further research into how digital technology can transform public and private spaces. This, coupled with Causey’s theory of post-digital aesthetics, led to the conceptualisation of ‘podplays’ and informed the second draft of scripts. These scripts were rehearsed and recorded at Curve Theatre, a process detailed in the analysis of practice. Audience presentations, and an engagement with the works of Grochala (2017) and Tönnies (2017), informed a third draft of scripts, which generated the idea of *Dysconnect* as a theatre app. Research into ‘app theatre’, and an artistic consultation with Annette Mees (Head of Audience Labs at the Royal Opera House, London), then informed the fourth draft of scripts, which were subsequently rehearsed and recorded at Curve Theatre. This was followed by the development of the app, firstly with programmer Alex Peckham (lead programmer on Blast Theory’s *Karen*) and, secondly, together with a team of computer scientists at Karlstad University, Sweden. The collaborative process, essential to the development of the app, is described in detail in Part III: The PaR process.

Although Figure 3, above, does not portray the full dynamism of the research process (in particular it presents a linear process, when, in actuality, there were many about-



turns and reruns), it serves to illustrate how the process involved considerable iteration between the three modes of discovery; researching, practicing and reflecting. Whatever the particular path, the end result of the process is the knowledge generated in the form of *Dysconnect*, and in the articulation of the concept of a ‘digital political dramaturgy’. Together, these help illuminate how algorithmic power can be revealed and challenged through dramaturgical practice that seeks to provide a measure of agency to act against some elements of its control.

### 1.3 The structure in brief

In terms of structure and presentation, the thesis largely follows my artistic process of discovery as I was practicing towards a digital political dramaturgy. This stylistic decision is based, in large part, on the idea, articulated by Nelson (2013), that ‘practitioner-researchers do not merely “think” their way through or out of a problem, but rather they “practice” to a resolution’ (2013: 10) and ‘journey through a process’ (2013: 53). Discoveries happen within and alongside such ‘practices’; hence the narrative style was chosen so that the thesis might convey more faithfully how and when these discoveries were made. As such, it is useful to read this thesis as an account of a journey through a practice-as-research process, where the reader is invited to travel along the same path of discovery. However, to provide clarity for the reader the narrative is gathered into four main sections, which are detailed below.

Following Part I, which is presently introducing the objectives and approach (Chapter 1), Part II outlines the research context and theoretical framework that informs the ‘digital political dramaturgy’ instantiated in *Dysconnect*. Importantly, Part II, which is comprised of two chapters, is organised around the distinction between ‘macro’ (Chapter 2) and ‘micro’ (Chapter 3) dramaturgy. This distinction, which arose in the course of the thesis, as the concepts and practices constitutive of a ‘digital political dramaturgy’ took shape, is of largely heuristic value rather than implying a specific theory. The value of the distinction is primarily in elucidating the relationship between the dramaturgies of the seven individual podplays (micro-dramaturgy), and the overarching dramaturgical form (macro-dramaturgy) expressed in the development of an app and its various functions. Although the presentation places the macro before the micro, it should be noted that the macro and micro dramaturgies arose, both in conceptual and practical terms, in tandem. The decision to present them consecutively is a post-hoc ordering device that, it is hoped, spares the reader the kind of stream of consciousness experience that perhaps more accurately reflects their actual intellectual and practical emergence. A more detailed overview of the individual sections follows.

Chapter 2 (*Towards a Macro Dramaturgy*) provides an account of the various theories, practices and practical discoveries that led to the creation of an app as the primary performance unit (as opposed to plays written for stage or radio), the series of seven podplays (as opposed to a single play) and the dramaturgical device of digital ‘side effects’. Overall, the chapter illustrates how the form and function of *Dysconnect* grew out of research into algorithms, power, and artistic resistance.

Specifically, in Chapter 2.2 (*'Conceptualizing algorithmic power'*), I explore how the power of algorithms rests in their ability to construct and control how we experience the world, and how we interact with one another. The section also details how algorithms can be construed as being part of a new global, networked power structure, where production and exchanges are increasingly operating through flexible and multiple channels. This represents a move from the Foucauldian concept of a 'disciplinary society' (1975), towards a 'society of control' (Hardt, 1998; Hardt and Negri, 2001). In a society of control, machines directly enact control over citizens through networks driven largely by digital technology. This renders power more 'biopolitical', absorbing society within a power structure that underpins its social structures, as well as its processes of development. Domination becomes an active part of what we do, meaning that the power effects of algorithms cannot be fought outside the current power structure. As such, artists need to find ways of resisting such oppressive controls through 'a strategic manipulation of the virtual' (Causey, 2006:123), utilizing 'the very processes of...globalization and capitalist production' (Hardt and Negri, 2001:11) that the artist aims to critique. When power is present in the architecture within which we live our lives, artistic resistance has to learn how to manipulate and reshape this structure, exposing its power effects from the inside.

As I searched for a way of doing so, I found that little attention had been paid to this question within academic studies. Therefore, I began exploring theatrical practices that looked to investigate algorithms and power. Chapter 2.3 (*'Theatre and Algorithms'*) attempts both to evidence and fill in this gap by discussing and

synthesising theatre scholarship connected, though sometimes only tangentially, to the subject, and outlining how this thesis makes a unique contribution to current research. Extending outward from algorithms *per se*, Chapter 2.4 ('Agency, Hacktivism and Embeddedness') demonstrate how 'theatre as hacktivism' (Giannachi, 2007), in combination with Matthew Causey's concept of 'embeddedness' (2006), exemplifies the type of strategic manipulation envisaged by Causey and encouraged by Hardt and Negri. This evokes Trevor Griffiths's concept of 'strategic penetration', further explored in Chapter 2.4 (*Agency: uncomfortable interactions, strategic penetration and embeddedness*). With strategic penetration, Griffiths sought to write work for powerful cultural institutions, such as the National, RSC and the BBC, as a way of launching his social critique from within the very institutions that helped uphold and maintain cultural hegemony.

This thesis builds on such practices by embedding digital hacks within a theatre app. By doing so, there is no longer a division between 'the play' and the digital interventions. They are embedded within the same virtual space and happen simultaneously, reclaiming the contested, everyday space currently occupied by algorithms. This is explored further in chapters 2.4 and 2.5, where I demonstrate how the theatre app allows me to utilise the digital devices through which algorithms execute power, as a performance space for critical reflection. Chapter 2.6 (*Theatre and Mobile Apps*) outlines the creation of algorithmic 'side effects' that are generated through the theatre app. These side effects are construed as live enactments of algorithmic control, and 'hacks' embedded within the experience. Through different digital platforms, such as notifications and emails, the theatre app interacts with and

enacts control over the audience. Agency is thereby encouraged, not through *telling* the audience what they can do to protect themselves against such practices, but rather through *showing* them. Through their engagement with the theatre app, they are shown how to activate or deactivate functions, thus given tools to change their digital engagement. The way in which this is done is explored in detail in Part III (*'Practices Towards a Digital Political Dramaturgy'*).

The theatre app functions as a playing device for seven individual, 4-10 minutes long 'podplays'. This is a term used to describe short, individual pieces of audio theatre. The aesthetic differences between audio/radio plays, podcasts and podplays are defined in Chapter 2.5 (*PodPlays vs. Radio/Audio drama – towards a definition*). It also develops the concept of 'podplay' to illuminate a relatively novel way of practicing audio drama. Having set out the various podplays, the thesis then proceeds to discuss current developments of theatre apps, such as Blast Theory's *Karen* (2015) and Headlong's *Digital Double* (2014). This is detailed in Chapter 2.6 (*'Theatre and Mobile Apps'*). It also provides an analysis of current scholarship on theatre apps, their functions and their potential for generating political agency.

Chapter 3 ('Constructing Micro Dramaturgies') accounts for the specific political dramaturgies I drew on in developing the seven playpod. Chapter 3.2 (*'Rethinking dramaturgical structures'*) provides an overview of Sarah Grochala's (2017) concept of 'liquid dramaturgies', and her articulation of a politics of structure. Particular attention is given to exploring how a liquid dramaturgy aims to enable 'the social subject to understand how to have political agency within the complex mechanisms of

globalized society' (Grochala, 2017:87). In Chapter 3.3 ('*Postdigital Performance*'), I proceed to discuss Matthew Causey's 'postdigital aesthetics' (2016). This looks to incorporate the structures and strategies of the digital in order 'to resist, or at least understand, the systems of electronic and computational control' (Causey, 2016). Additionally, Chapter 3.4 ('*Absurdist Dystopias*') discusses how merging absurdist and dystopian aesthetics can capture a state or feeling of 'being stuck' within current capitalist power structures (Tönnies, 2017), thus creating a space for critical reflections.

Part III: (*The PaR process*) I account for the practical journey that led to the development of *Dysconnect*. Chapter 4.1 (*Verbatim and site-specific*) detail how my original intention of making verbatim theatre, confined the performance within personal accounts, which worked against the multiple and networked nature of algorithmic power. Attempts at making the work site-specific through listening stations also proved inadequate in challenging algorithmic power (Chapter 4.2). An interactive room (Chapter 4.2.1 *The FitChip Room*) engaged the audience in activities but drew attention away from the content explored in the audio, while listening stations (4.2.2 *The Audio Trail*), set throughout Curve Theatre, failed to engage the audience. These experiments, coupled with further research into the networked power of algorithms present within peoples's everyday devices, led to the concretization of the app idea in Chapter 4.3 (*App development*). Here, I account for funding restrictions and how these influenced the project (4.3.1 *Funding constraints*); ideas developed through early prototyping (4.3.2 *Early prototyping*); and how the collaboration with Karlstad University shaped and influenced the final development

of *Dysconnect* (4.3.3 *Dysconnect as 'Computer Engineering project'*).

In Part IV, Chapter 5 (*'Critical reflections on practice'*), I implement the political dramaturgies detailed in Chapter 3 within my practice. Specifically, in Chapters 5.3 (*'FitChip'*), 5.4 (*'Trapped'*) and 5.7 (*'High Risk'*) I detail how the podplays *FitChip*, *Trapped* and *High Risk* depict absurdist dystopias with unresolved endings in order to provoke the listener into becoming active in making sense of the play and drawing connections to their own digital practices. Algorithmically generated pleasurable and lateral surveillance is also made visible and accountable through both content and digital side effects. *High Risk* depicts criminal justice algorithms and generates a personalised risk score. *FitChip* narrates implications of wearable fitness trackers, while the app forces the listener to move by only playing as long as the phone is moving. *Trapped* raises issues of digital dependency and surveillance, incorporating the listener's location into the experience.

In addition, all three podplays implement absurdist and postdigital aesthetics, such as jarring sounds, repetition, glitches and un-naturalistic character responses. In this way, they aim to make the potential effects of algorithmic control visible. This seeks to enable the audience to adopt a more critical digital practice through, for example, detecting when digital 'games' are used to generate pleasurable and lateral surveillance. They may also be able to recognise the limitations of algorithmically produced recommendations and predictions and/or re-evaluating their current digital dependencies. Specific action is encouraged by asking the audience to activate functions, such as GPS-tracking, on their smart phones. Rather than telling the

audience what these functions could be used for, the app shows, through the side effects, how they can be (ab)used and how the listener can engage more consciously with his/her digital devices, affording him/her the agency to *allow* or *deny* access.

Chapters 5.2 (*Drowning*), 5.5 (*Falling*), 5.6 (*Let's Google it!*), and 5.9 (*Safe*) provide an analysis of how the podplays *Falling*, *Drowning*, *Let's Google it!* and *Safe* use algorithmically generated run-away systems, search algorithms, algorithmic management, Google's auto-complete algorithm, and the Internet of Things, as both content and dramaturgical form, incorporating or mimicking their behaviour within the dramaturgical structure. In *Falling*, the aesthetic of glitches is used in order to make visible the weaknesses inherent within the system, generating an experience of its inherent dangers. *Drowning* takes on the form of search algorithms through a characterisation of the system redirecting the protagonist's thoughts. *Let's Google it!* incorporates algorithmically generated content, while *Safe* structures the narration through an artistic interpretation of the Internet of Things. By incorporating some of the mechanics of these algorithms within the micro dramaturgies of the podplays, the listener may experience their inherent dangers. As such, *Falling*, *Drowning*, *Let's Google it!* and *Safe* exemplify dramaturgies that adopt, within their narrative structure, the way in which algorithms subject the user to control, in such a way that it reveals some of their political effects. Through a combination of content and digital intervention, similar to *FitChip*, *High Risk* and *Trapped*, the side effects offer a direct experience of the way in which algorithms are able to subject the listener to control, linking content to live, algorithmically generated, interaction. Chapter 5.8 (*Safe*)



describes one of these side effects, delivered as a secret code, hidden within the terms and conditions of the app, which is needed to unlock and play the podplay *Safe*.

The thesis concludes with Chapter 7 (*Discussion and Conclusion*). That chapter provides a summarizing account of how the macro and micro dramaturgies combine to expose ‘algorithmic power’, how they help generate critical awareness, and afford the audience increased agency to act against algorithmic control. I conceptualise the four dramaturgical elements emergent from the practice - *a dramaturgy of visibility*, a *dispersed dramaturgy*, *political dramaturgies* and *digital effects* - as a ‘digital political dramaturgy’, the full character of which is also elaborated in Chapter 7.

## **PART II: Research context and theoretical framework**

### **2. Towards a macro dramaturgy**

#### 2.1 Introduction

This section provides an outline of the various ways in which algorithms appear in contemporary society, how they can be conceived as forms of power, and how artistic practices might be used to challenge such power effects. From there, it offers a first assessment of how and when algorithms appear in theatre practice and research, demonstrating that this remains a relatively underdeveloped area of scholarship. In that way, both the research context and the theoretical framework begin to emerge into view. Having established a conceptualization of algorithmic power, and having assessed the ways in which theatre practice and research have dealt with algorithms, the chapter proceeds to discuss the character of the macro dramaturgy, including the notion of ‘podplays’ and ‘theatre apps’, two performance formats that resonate with the concept of ‘algorithmic power’ and emerging theatre practices. The chapter finishes by summarizing the main conceptual components that were drawn into my practice in the creation of *Dysconnect*, with some comments on how this furthers current theatrical practice and research in those areas.

As noted in the previous chapter, and as the current chapter title suggests, this phase of the research process is conceived in terms of a ‘Macro dramaturgy’. By that concept, I mean the overall structure of the performance, conceived as a whole, including the conception of the app, what it contains, and how it functions. This is in

contrast to the ‘micro dramaturgy’ (outlined in Chapter 3), by which I refer to the structure of the text, side effects, and the visual imagery of each individual ‘podplay’. As elaborated in Section 2.7, the macro dramaturgy culminates in the development of the ‘side effects’, each activated in relation to a specific podplay within the mobile app. ‘Side effects’ are construed as dramaturgical devices that, often utilizing algorithms, engineer moments of ‘digital effect’, when the listener is subjected to some degree of discomfoting provocation, much like a ‘digital hijack’ (Giannachi, 1996). In this way they are seen to hold the potential, when combined with the micro dramaturgy of the associated podplay, to expose algorithmic power and facilitate political agency.

## 2.2 Conceptualizing algorithmic power

In 2016, the New York Times ran an article (Duhigg, 2012) about algorithms that centred on the relationship between a daughter and her father within the private space of the family home. The father had barged into a store waving coupons for baby clothes and cribs. The coupons had been sent through the mail to his daughter, who was still in school. *‘Are you trying to encourage her to get pregnant?’* The father raged. The store manager looked at the papers in the man’s hand. They contained advertisements for maternity clothing, nursery furniture and pictures of smiling infants, all addressed to the man’s daughter. Puzzled, the manager apologized. They had clearly made a mistake. He even went to the trouble of calling a few days later to apologize again. This time, however, the Dad sounded muted and distressed: *‘Ehm...*

*I had a talk with my daughter. It turns out there's been some activities in my house that I haven't been completely aware of. She's due in August. I owe you an apology'.*

The story illustrated the way in which algorithms – in this case one belonging to the advertisement company, Target – can reach into intimate and private spaces to extract data that enabled them to find precise ways of targeting their sales and manipulating peoples' conscious and unconscious consumption patterns. However, there was more to the story. It soon became apparent that the incident with the teenage daughter had shone a negative light on the company's algorithmic practices. People didn't like the fact that they were being 'spied' on. *'So then', explained a sales executive, 'we started mixing in all these ads for things we knew pregnant women would never buy, so the baby ads appeared to be random. We'd put an ad for a lawn mower next to diapers. We'd put a coupon for wine glasses next to infant clothes. And we found that as long as people don't realize that they are being spied on, the campaign works'* (Duhigg, 2012).

The example above reveals both the role of algorithms in gathering information about people (often without their knowledge) and the potentially dubious ends to which they can be put, especially when their producer/owner is an enterprise principally driven by a profit motive. It also illustrates that algorithms are not neutral calculations, but rather inherently political, social and cultural processes (Lupton, 2015: 101). Not only are there 'end users', or subjects whose conduct is surreptitiously steered (i.e. the girl in the case above), but also producers, which are typically companies with salaried coders who go to work each day to generate the algorithms used in proprietary software. These algorithms then go on to 'shape the way in which digital data are

collected and classified' (Lupton, 2015: 102), playing an important part in the configuration of new data, such as credit scoring, which, in turn, impact on peoples' 'life chances' (Fourcade and Healy, 2013). In short, there is no sharp dividing line that can be drawn between a neutral line of code and the actual algorithm that reaches into everyday life in this way.

That is one important reason why scholars, such as Beer (2009), increasingly see the operation of algorithms in terms of power. One of the most basic ways in which power works through algorithms is in their ability to shape our experience of the world (Beer, 2009: 996). For example, if we rely on a search engine, such as Apple's Siri, to supply us with information that shapes the way in which we live our lives or view the world, we allow our consciousness to be shaped by its algorithmic logic. In addition, Cheney-Lippold argues that algorithmic processes of identification and categorisation structure and regulate our lives online (2011:116). The algorithms are able to control not only the content that we have access to, but also how our online identities are constructed. One way in which this is accomplished is through algorithms enacting 'marketing discrimination' (Beer, 2009:10). This is a process where companies divide their customers into different niches and target them according to the generated predictions. Women, as a category, could be shown jobs at a lower pay rate than the male category, because, according to statistics, the job with the lower pay rate would be where women are most likely to succeed. Alternatively, a young woman could be sent adverts for nappies, while a man may be targeted with dating advice because his life pattern reveals that he is single.

These are all examples of a process that Beer (2009) terms ‘power through the algorithm’ (2009: 994). The user is steered along a certain path, without them necessarily being aware of it happening. The things and ideas that they/we show a preference for, coupled with their/our gender, age, sexuality, nationality and/or ethnicity, become algorithmically consolidated. Lash (2007), upon whose work Beer (2009) builds, describes these algorithmic networks as ‘pathways through which capitalist *power* works’ (2007: 71). User information is gathered in order to inform and predict commercial systems, meaning that instead of power acting through largely fixed hierarchies, in a linear structure, power is becoming increasingly networked, fluid and dynamic.

In Lash’s (2007) view, when algorithms begin to affect not just what we do and how we do it, but also how we interact and even think, our beings become more deeply integrated into the capitalist system within which algorithms standardly operate. In a process of subtle programming, our minds begin to reflect the ideology. Lash suggests that this represents a change from ‘constitutive’ and ‘regulative’ rules, towards a society of ‘pervasive media and ubiquitous coding’ (2007:71), where society is increasingly ruled by algorithmic, *generative* rules. Generative rules are written into algorithms and have the ability to impact and shape social interactions, cultural formations, and the lives of individuals (Beer, 2009:994). These are the rules by which the algorithms operate, hidden within the digital framework with which we engage on a daily basis.

The emerging understanding of a society increasingly ruled by algorithmic, *generative* rules, resonates strongly with Hardt and Negri's (2001) influential work on new forms of power. They argue that we are amidst a new world order where the direct power of nation-states has decreased, giving way to a networked power; one where technology, money, people and goods are flowing freely across state lines (2001:9). Production and exchanges are increasingly happening through multiple, flexible channels. They deploy the word 'empire' to reference this new global form. In contrast to imperialism, 'empire' establishes no territorial centre of power and does not rely on fixed boundaries. Instead, it is a '*decentred* and *detrterritorializing*' structure. It incorporates the global world within its frontiers, through the management of 'hybrid identities, flexible hierarchies, and plural exchanges through modulating networks of command' (Hardt and Negri, 2001:xii-xiii).

Importantly, Hardt and Negri's work (Hardt, 1998; Hardt and Negri, 2001) extends the Foucaudian concept of a 'disciplinary society' (1975), towards a 'society of control'.<sup>1</sup> With the concept of a 'disciplinary society', Foucault saw institutions, such as prisons and schools, as avenues through which power was exercised in order to steer thought and practice. For example, schools would use discipline as a way of moulding the student according to the norms of society. In a 'society of control', however, the machines are *directly* organizing thought structures, meaning that there is no teacher acting as a middleman. Instead, the moulding extends outside of social institutions, through flexible and fluctuating networks, such as information networks

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<sup>1</sup> Here Hardt (1998) actually builds on Deleuze's notion of a 'society of control', the articulation of which Hardt considered to be 'very meagre'.

(for example Google) and communication systems (for example Facebook), made increasingly possible by digital technology. In a 'society of control', power is increasingly 'biopolitical'.

Biopower, Hardt and Negri (2001) explain, is a 'form of power that regulates social life from its interior, following it, interpreting it, and rearticulating it... In the passage from disciplinary society to the society of control, a new paradigm of power is realized which is defined by the technologies that recognize society as the realm of biopower' (Hardt and Negri, 2001:23-24). Understood within this framework, society is absorbed within a power that underpins its social structures as well as its processes of development. This is accomplished through the production not only of commodities, but also social relations and needs, mediated through communication networks that use algorithms to structure communication and searches, meaning that 'the imaginary is guided and channelled within the communicative machine' (Hardt and Negri, 2001:3).

An important consequence of the above conceptualization of power and algorithms, is that artistic resistance, particularly in view of the omnipresence of algorithms, can no longer be fought at the ground level, outside of the power structure, since domination has become an active part of what we do (Beer, 2009:992). It raises the need for an artistic practice that functions from within this system of global, networked power, one that manages to create 'a strategic manipulation of the virtual, turning the system against itself' (Causey, 2006:123). The reference to Causey (2006) is significant, since he also claims that 'the more interesting works of contemporary performance



that are concerned with the problems of digital culture are dealing with the material and bio-politics of embeddedness' (Causey, 2006:167). This concept is explored further in Chapter 2.4 ('Agency: uncomfortable interactions, strategic penetration and embeddedness'), but it is useful to note here that Causey uses the concept of 'embeddedness' as a way of referencing a change from the 'age of simulation', where media replaced the real, and where images of the real were hidden and coded but, crucially, still available, to a situation where the data flows inhabit the real itself. This stance echoes Beer's (2009) point that information technology is no longer acting as a mediator, but has instead become an integrated part of our lives. Furthermore, it builds on Lash's (2007) understanding of a post-hegemonic power that works from within, one that cannot be separated from the thing itself. Algorithms, therefore, can be understood as 'technologies of embedding that permit [a] broad control system' (Causey, 2006:152).

What is the significance of the above conceptualization of power and algorithms for theatre practice? The increased knowledge of algorithms, power and artistic resistance gained from the research detailed above, pointed towards the implementation of a networked dramaturgy, one that could embody the multiple, networked, fluid nature of algorithms. This view finds some support in the reflection of Matt Adams, founding member of the interactive performance company Blast Theory. He points out how the four fundamental theatre practices famously identified by director Peter Brook (1968) – namely: the performer, the audience member, this particular place and time - are all 'changed in a time that is networked' (Adams, 2014:ix). In other words, within a networked power structure, there is not always a definable person controlling

another, but instead a feedback loop where interactions through algorithms generate content based on the interactions. It doesn't necessarily move from A to B, but goes from A through B, back to A. Within this process, A has been subtly influenced. As Beer points out, 'the sinking of software into our mundane routines, escalated by mundane technologies such as those found in the popular social networking sites, means that these new vital and intelligent power structures are on the inside of our everyday lives' (2009:995). There is a form of control enacted upon the user, one that 'plays a constitutive role in the mundane activities' (Cheney-Lippold, 2011:168). We are subjected to control as we go about our daily routines.

### *2.2.1 Reflections towards practice: a 'dispersed dramaturgy'*

At this point, I wish to change the register somewhat (away from the analytic, towards the reflective), in order to portray how my engagement with the literature on power and algorithms began to alter my thinking and practice with regards to the research enquiry. Similar changes of register appear throughout the chapter (standardly under the heading of 'reflections towards practice'). This is a structuring device that, it is hoped, is supportive of the broader narrative style.

The playwright Tom Stoppard has described the playwriting process as one where different ideas suddenly merge. '[I]n some strange, quantum mechanical way', he states, 'the two trains arrive on the same line without colliding, and you can begin' (Stoppard in Delaney, 1994:185). The analogy aptly described one of my own moments of conceptual/artistic breakthrough. One day, travelling through London on

the Overground, with the theoretical ideas noted above churning in the cognitive background, I looked out on the financial district of Canary Wharf, reflecting on how algorithms power financial trading and how little I knew about their operation and societal implications. Meanwhile, around me, people were engrossed in their smartphones; typing, reading, listening to music; constantly engaging with ‘algorithmically selected content’ (Eslami *et al.*, 2015). Suddenly, the idea of a networked narrative structure delivered through a smart phone, came to a halt, as in Stoppard’s analogy, next to the idea of the omnipresence of algorithms. The idea that algorithmic power forms a vast network reaching across and between so many different spheres of social life, without resting in disciplinary institutions, seemed to commend the idea of a complex dramaturgy with parallel connectivity. It also suggested the value of creating a narrative able to exist within the *mundane spaces* of the digital landscape. This, it was envisaged, could be realised through the medium of audio, allowing the performance to take place within a smart phone. Making a series of several, disjointed yet connected, shorter audio theatre pieces, would also allow me to explore a wider range of different algorithms. It was at this point in the research process, that I decided to focus on automated trading, health care, search algorithms, fitness tracking and surveillance, leaving others areas, such as flight control and telephone cues, unexplored. This was an artistic choice rather than a scientific selection, as they reflected different areas in society that I felt had a direct effect on my own life and, as such, inspired creativity. Each piece would focus on one manifestation of algorithmic power, without attempting to connect each to the other through character or the smooth continuation of a narrative arc. Instead, there would

be a thematic connection, as they all revolve around algorithms and power. I gave this dramaturgical form the working title of a ‘dispersed dramaturgy’.

Having settled on this broad dramaturgical form, I began to explore ways in which the performance could embody, or ‘mimic’, algorithmic power and, through that process, render the power structures more visible. Rather than telling the listener about the issue of networked power and control, I would attempt to make the dramaturgy ‘perform algorithmically’ and, through that process, make the power structures visible. In search of a way to do so, I turned to research in theatrical practices, looking specifically for research concerned with the relationship between algorithms, power and political agency. The main results of this are outlined below.

### 2.3 Theatre and algorithms

In 2014, as I began this research enquiry, there was little academic writing which explicitly connected algorithms and theatre. While searches for ‘algorithm’ in prominent academic texts, such as *Mapping Intermediality in Performance* (Bay-Cheng *et al.*, 2010:188) and *Digital Performance* (Dixon, 2006:88), produced references to algorithms as technical tools, they did not position algorithms as subjects of theatrical investigations, or as subject matter for dramaturgical form. In 2019, that situation remains largely unchanged with only a handful of theatre researchers specifically grappling with the subject. Some evidence of the relatively sparse research terrain can be found in the results of a systematic review of six major

academic journals: *Performance Research*, *Theatre Research International*, *Journal of Contemporary Drama in English*, *International Journal of Performance Arts & Digital Media*, and *Contemporary Theatre Review*. Table 1, below, shows the results of such a search.<sup>2</sup>

**Table 1. A systematic search for ‘algorithm’**

| Journal name  | Items returned | After screening | Reference  |
|---|----------------|-----------------|--|
| Contemporary Theatre Review                               | 5              | 1               | Frieze, J. (2015) ‘Beyond the Zero-Sum Game: Participation and the Optics of Opting’, <i>Contemporary Theatre Review</i> , 25 (2), pp. 216-229.  |
| Theatre Research International                            | 2              | 1               | Eacho, D. (2018) ‘Serial Nostalgia: Rimini Protokoll’s 100% City and the Numbers We No Longer Are’, <i>Theatre Research International</i> , 43 (2), pp. 185-200.   |
| International Journal of Performance Arts & Digital Media | 65             | 2               | <b>a.</b> Rosamond, E. (2015) Technologies of attribution: characterizing the citizen-consumer in surveillance performance, <i>International Journal of Performance Arts and Digital Media</i> , 11 (2), pp. 148-164.<br><b>b.</b> Selvaggio, L. (2015) ‘URME Surveillance: performing privilege in the face of automation’, <i>International Journal of Performance Arts and Digital Media</i> , 11 (2), pp. 165-184. |
| Theatre Journal   | 17             | 2               | <b>a.</b> Causey, M. (2016) ‘Postdigital Performance’, <i>Theatre Journal</i> , 68 (3), pp. 427-441.<br><b>b.</b> Gillette, K. (2016) ‘Germinal/Yesterday Tomorrow’, <i>Theatre Journal; Baltimore</i> , 68 (3), pp. 443-446.  |
| Performance Research                                      | 60             | 1               | Manuel, P. (2014) ‘Absent Audiences’, <i>Performance Research</i> , 19 (5), pp. 69-76.   |
| Journal of Contemporary Drama in English.                 | 0              | 0               |  |
| <b>TOTAL</b>  | 149            | 7               |  |

<sup>2</sup> Although the initial results, which looked only for a single mention of the term ‘algorithm’ anywhere in the text, suggest far reaching coverage, a process of screening (where articles were retained only if the word algorithm was either a specific subject matter and/or part of the dramatic form, while excluding mentions of algorithms in dance, opera, sound/music and live coding) reduced the final count to seven articles.

Firstly, Causey (2016) distinguishes what he calls ‘postdigital’ performances, as a set of performance aesthetics aimed towards critical engagement with digital technology. The article mentions how computational algorithms turn consumers into targets for consumption, and asks which artistic strategies can be used to counter such power effects. This article heavily informed my artistic development, though largely as a model for the micro-dramaturgy. As such, it is analysed in further detail in Chapter 3.3 (‘Postdigital Performance’).

Secondly, an interesting example of the use of algorithms within the structure of the performance is detailed in Frieze (2015). This discusses the performance *Fight Night* (2013), by the Belgian company Ontroerend Goed. *Fight Night* is a performance about voting, which uses algorithms to process data, live on stage, as the audience votes on the actions of the actors. The data from the votes is then processed by algorithms and fed back to the actors, who act in accordance with the votes. In this way, dramaturgical form and content merge, to make visible the apparatus of voting and how it can act as a constraint by limiting the options available for vote.

A third mention of algorithms appears in Eacho (2018), which details a similar dramaturgical structure deployed in Rimini Protokoll’s *100% City*. The performance travels from city to city (100% Athens, 100% London, 100% Melbourne etc.) staging a statistically representative sample of 100 of the city’s citizens, using categories such as age and gender. The people chosen via this selection process then speak on stage about their lives, views and identities. Statistical results generate both the dramaturgy and the content of the play. However, Eacho (2018) argues, rather critically, that

‘[w]hat ever the problems of statistical representations, at least they can be considered through the medium of theatre, their long-standing kin. The new controls of data and algorithms are opaque, and with their distance from flesh, individuals, and even labour, seem by contrast distant from the stage. Next to them, *100% City* is a comfort’ (p.197). In other words, the complex matrix of ‘big data’ does not boil down to statistical representation and, therefore, in Eacho’s view, *100% City* articulates a nostalgic view of statistics, increasingly inaccurate in a digitalized society.

Two more articles appear in the *International Journal of Performance Arts and Digital Media*. Firstly, Rosamond (2015) offers another example of an artist working towards algorithmic visibility. In her video art piece, *Life in AdWorks* (2012-2013), Erica Scourti documents how she keeps a daily diary, which she emails to her Gmail account. She then reads out the ‘AdWords’ selected by Google’s algorithm to match her consumer profile. Through this process, she reveals how people are made into products through an algorithmic process, where data is sold on to corporate clients of Google. Second, Selvaggio (2015) writes about artistic strategies employed to avoid facial recognition algorithms. His artistic intervention, *URME Surveillance*, is a 3D printed prosthetic mask of the artist’s face. When wearing the mask, the person will be identified as Selvaggio, hence avoiding detection through algorithmic surveillance.

Two final articles (Gillette, 2016; Manuel, 2014) both describe the dramaturgy of Annie Dorsen, perhaps the practitioner who has engaged most explicitly with algorithms. Rather than acting against algorithms, Dorsen uses algorithms as co-creators. Her development of ‘algorithmic theatre’ involves a performance practice in

which text is created through a computer-generated process, as an algorithm makes the structural decisions of the piece. For example, in *A Piece of Work*, Dorsen puts the script of Hamlet through a set of nightly variable algorithms (programmatic commands), which reshuffle the words, lines, stage directions and scenes into a new configuration each night (Berson, 2013). The text is then delivered on stage through projections, as well as a computerised automated voice and an actor speaking lines that are fed, live, from the algorithm, through an earpiece (Grogan, 2013). In an attempt to challenge the traditional notions of embodiment and language as a representation of subjectivity, Dorsen collaborated with algorithms as full creative partners. By limiting the role of humans on stage and, instead, making the algorithm into the performer or protagonist, her aim was to force the audience to make sense of the performance by themselves, unaided by a writer.

Furthermore, turning to Dorsen's (2013) own account of her work, she contrasts the algorithmic dramaturgy that is created live on stage, with the dramaturgy implemented by Brecht. She argues that Brecht looked to illuminate and expose the process of choosing, in order to suggest alternatives and encourage political empowerment. Dorsen, in contrast, suggests that it is no longer the lack of choice holding us back from exercising our decisive powers or seeing our own potential. Instead, we are inundated by constant options and decisions, often presented to us by algorithms that 'filter, consolidate and display certain possibilities while rendering all others invisible' (Dorsen, 2013:42.2) By being presented with and engaged in a constant stream of decision-making, we are easily lulled into a feeling of being in control by making choices, without questioning the powers behind the algorithmically



generated selection. Hence, what Dorsen is seeking to achieve with her practice of algorithmic theatre, is to make the workings of algorithms available for observation and contemplation, ‘so that we may begin to understand not only how they work, but how we work with them’ (Dorsen, 2013:42.2). She advocates a theatre that activates the creativity of the audience, so that, ‘if there is meaning, it’s because the audience makes it’ (Dorsen, 2011).

Incidentally, Bill Blake’s *theatre and the digital* (2014) describes a theatre practice similar to that of Dorsen’s, mentioning the word ‘algorithm’ in relation to the performance company, The Elevator Repair Service, and their use of algorithms to generate performance text (p.17, 39 and 40). The performance *Shuffle* (New York Public Library/Future Perfect, 2010) uses text generated live by software and statistical algorithms searching through a database made up of William Faulkner’s *The Sound and the Fury* (1929), F. Scott Fitzgerald’s *The Great Gatsby* (1925) and Ernest Hemingway’s *The Sun Also Rises* (1926). Extracts of the novels were fed to iPods carried by the actors, who spoke the words as they appeared (Blake, 2014:39). Similarly to Dorsen’s work, the director of the piece, John Collins, (quoted in Samantha Henig, ‘Hemingway, Faulkner, and Fitzgerald: The Remix’, 2011), stated that the focus of *Shuffle* was on discovery and sense making, intended as a ‘kind of experiment, putting process ahead of any definite purpose’ (Blake, 2014:41).

### 2.3.1 Reflections towards practice

Of the above research, Dorsen's 'algorithmic theatre' stands out as the most immediately relevant. However, there are several features of this dramaturgy that seem to push in a direction quite different to the conceptualization of 'algorithmic power' detailed in section 2.2. For example, (or, more specifically) making sense of *Hamlet*, when it is delivered through a set of instructions that scramble the text, indicates a kind of randomness or lack of purpose (other than to scramble the text). This, however, is somewhat contrary to the nature of the algorithms as conceived in this thesis, which sees them as fundamentally designed to produce *specific* results. Whether search algorithms or criminal justice algorithms, they seek to supply fixed, firm answers intended for citizens to understand things in a *specific*, scripted way. This means that Dorsen's 'algorithmic theatre' does not, perhaps, reflect or make sufficiently visible the type of 'embeddedness' and/or interstitial power relations investigated in this thesis.

Furthermore, algorithmic power does not reside solely in its ability to limit and supply different options. For example, when used in automated trading, they can be set against each other in aggressive, automated feed-back loops (investigated in Chapter 5.5 '*Falling*'); and when used to predict crimes (detailed in Chapter 5.7 '*HighRisk*'), they offer set results with inbuilt bias. Again, this suggests that 'algorithmic theatre', with its focus on algorithmically generated selection and audience interpretation, takes inadequate account of the highly dispersed and networked sites of algorithmic power investigated in this thesis.

These insights left me searching further for a clearer idea of a dramaturgy that might meet more fully the conceptualization of algorithmic power. As a first step in that direction, I returned to the notion of algorithmic power to focus on Beer's (2009) thesis that a central danger of algorithmic power is the consequent loss of *human agency* (2009). I did this hoping that it would provide a better link to work in theatre and performance studies, particularly from a political theatre perspective, where discussions of political agency are prominent.

#### 2.4 Agency: uncomfortable interactions, strategic penetration and embeddedness.

As argued above, the review of research and practice on algorithms and theatre did not initially present a clear dramaturgical model sufficiently capable of making algorithmic power structures visible and facilitating political agency. This section ends by noting how I chose to focus on the loss of agency, as this had been identified as a key danger of algorithmic power and suggested potentially useful links to research and practice in political theatre<sup>3</sup>. The following section explains the sense in which the notion of political agency is taken up vis-à-vis algorithmic power. The concept is used to describe a performance that helps enable the audience to act against (e.g. resisting, contesting etc.) the power of algorithms by actively understanding and choosing how and when such engagements occur, rather than having it inflicted on them. The concept of 'agency' is crucial here and needs further analysis.

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<sup>3</sup> By 'political theatre', I refer to works 'that are substantially shaped by the conscious exploration of the needs of particular constituencies, with an articulated desire for social change, whether or not the work is aligned to a specific political manifesto or ideology' (Turner and Behrndt (2008:71). Understood within this broad definition, which encompass a range of different dramaturgies within the umbrella of 'the political', my practice can be conceptualised as political theatre.

In Anthony Giddens (1984) words; ‘Agency refers not to the intentions people have in doing things but their capability of doing those things in the first place (which is why agency implies power: cf. the Oxford English Dictionary definition of an agent, as ‘one who exerts power or produces an effect’). Agency concerns events of which an individual is the perpetrator, in the sense that the individual could, at any phase in a given sequence of conduct, have acted differently (1984:9)’. Furthermore, Kaun *et al.*, (2016) describe political agency in the context of digital media as having *the ability* to act on ‘political, economic and social structures in order to promote social change’ (2016:2). This means being able to intervene or refrain from doing so. Action depends upon ‘the capability of the individual to “make a difference” to a pre-existing state of affairs or course of events. An agent ceases to be such if he or she loses the capability to “make a difference”, that is, to exercise some sort of power’ (Giddens, 1984:14). A prerequisite to such capability, is the ability to recognise the way in which control and power is being exerted. Without this knowledge, one cannot become an active agent able to consciously act one way or another. This means that recognising and understanding algorithmic power can be understood as one step towards increased agency. Furthermore, Lois McNay (2010) makes the point that *political* agency ‘must be created in individuals through, *inter alia*, the formation of critical self-understanding, the mobilisation of political consciousness and the fostering of a willingness to engage in counter-hegemonic action’ (2010: 514). To paraphrase, having political agency is not simply understanding the system of power, but also recognising the role one plays within this system and what/how one may be able to take action against it. In the context of this thesis, it means recognising when

and how one interacts with algorithms, realising the repercussions of such interactions and, through increased knowledge, having the capability to take action against it.

What kind of dramaturgy could be used in order to achieve this? One idea, central to a political dramaturgy that concerns the ‘digital’, is that audience interactivity and participation can lead to increased agency. Indeed, ‘[t]he spectator and his or her agency and participation are often at the centre of performances fostered by digital technologies’ (2016:499), where ‘[i]nteractivity is a key concern of new media dramaturgy’ (Eckersall *et al.*, 2016:375). Here, interactivity does not refer to narratives being determined by the audience pushing buttons, wearing headgear or using interactive software, but, instead, it refers to contemporary performances that use new media ‘as a means of aesthetic innovation’ (Eckersall *et al.*, 2016:375), where not responding to the issues raised by the work ‘becomes increasingly difficult or indeed impossible’ (2016: 377-378). In other words, interaction gives way to an experiential knowledge where the content is directly related to and experienced by the individual, removing some of the distance between the performed and the personal.

One interesting instance of this can be seen in Coney’s performance *Adventure 1*, as detailed in Lewis (2017). Specifically, this work serves as an example of an immersive performance that aims to generate agency (Lewis, 2017: 7). *Adventure 1* is a site-specific promenade performance that investigates algorithms used in financial trading, largely delivered through the audience member’s own smart phone. Instead of selling tickets, Coney invites audience members to send the company an email expressing their interest. This is followed by an email correspondence including

questions and instructions, several text messages and the request to download audio files. These are later used in the actual site-specific performance, which takes place around St Paul's Cathedral, in the financial district of London. Individual listening stations are set up around the site with listening codes that correspond to short downloaded audio pieces. It culminates in bringing together the audience members in a game-like experience, where they have to collectively steal a briefcase and make the decision as to whether or not they should destroy its content, an algorithm that could end the financial market. This is followed by a joint discussion about the issues raised in the performance, facilitated by an actor in a local pub. Lewis (2017) points out that '[t]he performance uses the player's location in the physical environment as a way of critically affecting the perception of the entire financial system. The smartphone becomes a translator and lens, focusing on the player's critical eye and helping to decode the message inscribed in the existing architecture' (2017: 12). The audience moving through the space forms part of the dramaturgy. They become participants, actors and listeners. However, in my own experience of the piece<sup>4</sup>, there are possible limitations to the well-intended ending where the audience assemble in a pub to discuss, among other things, their own role in the financial system. These limitations had to do with the fact that we were largely a homogenous group of people who already, perhaps by choosing to engage in the performance, shared similar political views. The only exception was a lawyer, whose opinions were roundly met with disdain. This meant that the performance, at least for the audience in which I was a participant, struggled to create radically new ideas or agency to act, but rather informed on a subject on which people had already decided what to think.

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<sup>4</sup> Experienced on Sunday, 12th July, 2015.

That said, the central idea that emerged from both Coney's practice (mainly in terms of what I perceived to be its central limitation), and the research on political agency mentioned previously, concerned the dramaturgical importance of conflict and provocation within the moment of participation and/or immersion. As noted below, this also led to the idea of situating part of the performance within a digital device.

The idea that a 'dispersed dramaturgy' could be complemented by moments of conflicted or provocative immersion, found added clarity in Florian Malzacher's (2015) arguments that contemporary political theatre has to reclaim the idea of participation, aiming for a participation that 'thrives – in politics and art – on its radical potential. A participation that doesn't merely replace one mode of tutelage with another. Such an involvement does not necessarily have to happen with the consensus of the people involved. It can also aim at direct confrontation, and can experiment with miscommunication or even abuse' (Malzacher, 2015: 21). Malzacher's claim fits within a tradition of political theatre that utilises audience participation as a way of challenging and confronting its audience. This, he explains, is different to a theatre that simply implements audience participation, since performances that strive for an immersed 'affective' experience, often by embracing digital technology, are at risk of complicity with neoliberalism (Alston, 2016; Malzacher, 2015). Within the 'experience economy' (Pine and Gilmore, 1998), people pay to spend time 'enjoying a series of memorable events that a company stages - as in a theatrical play - to engage him in a personal way' (Pine and Gilmore, 2011: 2). To exemplify, in Punchdrunk's *The Drowned Man* (London, 2013), audience members

wearing masks are more or less free to roam several rooms and floors as a looping performance is unfolding simultaneously throughout the space. This kind of audience participation does not, however, automatically award the participants with agency, as the focus may, instead, be on their *enjoyment* of the experience (O'Hara, 2017). This raises the question of how, if at all, 'theatres of engagement can also be theatres of disengagement, capable of performing separation, disagreement and resistance' (Lavender, 2016: 212). In other words, can theatrical work utilize participation in order to inspire criticality instead of entertainment? Malzacher proposes that a participation that is confrontational has such potential, an argument furthered by Benford et. al. (2012) in their exploration of 'uncomfortable interactions' (2012: 2005).

By 'uncomfortable interactions', Benford *et. al.* (2012) refer to interactions that cause a degree of suffering to the user (e.g. physical stress, tiredness, pain or anxiety). They propose that such interactions can benefit experiences in three ways: through enlightenment, entertainment and sociality. In terms of entertainment, uncomfortable interactions can be part of a thrill sensation (for example the kind caused by being on a rollercoaster). Such sensations, it is claimed, can work to focus the participant's attention inwards onto their own feelings, increasing the subjective memorability and intensity of the experience. In terms of enlightenment, uncomfortable interactions 'may help establish an appropriate tone for engaging with dark themes, demanding a deep personal commitment, reducing the risk of trivialisation and, in turn, promoting empathy and respect' (Benford *et. al.*, 2012: 2006). Additionally, such interactions may prompt subjective interpretation, as the audience member is made to reflect over



and interpret the meaning of and/or repercussions of the uncomfortable interaction. As a third point, Benford *et. al.* (2012) point towards the potential sociality that can be achieved through sharing and confronting discomfort. Such a practice draws on a history of performances that uses an aesthetic of discomfort, such as Marina Abramovic's *Rhythm 0* (1974) where the audience were encouraged to use objects on her body. A more recent example is Blast Theory's *Uncle Roy All Around You* (2003) where the audience wandered through the city and took risks by entering into a strange car. Another recent example is Coney's *Adventure 1* (2015), where the audience was instructed to collectively steal a briefcase from an unknown man in a busy square. What can be seen as *new* here is therefore not the idea of subjecting the audience to discomforting or provoking participation in order to generate an effect, but instead the way in which artists are able to do so through the advancement of digital technology.

'Theatre as hacktivism' (Giannachi, 2007) serves as an example of one such 'new' form. When, Giannachi (2007) notes, 'information equals knowledge and knowledge equals real, concrete power' (2007:17), hacktivism can be one way of reclaiming ownership and control over knowledge. Giannachi presents etoy.CORPORATION and their work '*Digital hijack*' (1996) as an example. Digital hijack involved digitally hijacking people who typed certain words into Yahoo and AltaVista and, literally, contained them in a website named hijack.org, which said: 'You have been digitally hijacked by the organization etoy. Don't fucking move!' Through this practice, Giannachi claims that etoy rendered visible: 'how easy it is to control online information and not only dictate what viewers see but also, quite literally, affect their

ability to move and thereby restrict their freedom and right to information' (Giannachi, 2007:22). That said, since the 'hack' itself is the full extent of the performance, there are limitations as to what such a dramaturgical device might achieve in terms of generating critical awareness. As pointed out by Giannachi herself, 'hacktivism conducts *limited* but effective actions aiming to raise awareness through disruption' (Giannachi, 2007:13) These limitations mean that the disruption does not expand beyond the hijack, nor does it necessarily encourage the audience to make connections between this particular event and others.

Given such limitations, a potentially more useful theatrical work is that which is able to incorporate or, to use Causey's (2006) term, 'embed,' hacks within a larger dramaturgical framework. Specifically, it refers to a theatrical practice that embeds elements of digital power structures within the performance. This also relates to the implementation of 'uncomfortable interactions', which Benford et. al. (2012) stress can perform an important role in a larger cultural experience.

Furthermore, as detailed in Chapter 2.2 (*Conceptualizing algorithmic power*), a shift from a disciplinary society to a society of control, facilitated by digital technology, has meant that power now regulates life from its interior. It is not just producing goods, but also needs, relations and modes of communication. That is partly why Causey (2006) suggests that artistic resistance can be achieved by a strategic manipulation of the same digital tools currently used to uphold a society of control, embedding the work within the network(s) of power.

This idea of 'strategic manipulation' evokes the work by writer Trevor Griffiths and his interventionist practice of 'strategic penetration'. Similarly to Causey's (2006) concept of embeddedness, Griffiths describes 'strategic penetration' as an attempt to challenge ruling accounts of social reality 'by writing within and against the cultural institutions that serve to reproduce these myths' (quoted in Garner, 1999: 2). Griffiths holds the opinion that '[i]f a dramatist is interested in influence and persuasion, he has to understand the structures through which persuasion and influence work' (Garner, 1999:103). Developing the concept in the late 60's and early 70's, he viewed national cultural institutions, such as the National and the RSC, as sites of hegemony, which made them attractive targets for his strategic penetration (Garner, 1999:83). These sites of power became platforms from which 'the socialist playwright engages not only with established or familiar modes of representation (mainly forms of popular realism) but with the dominant cultural institutions themselves as a means of creating meaning for the widest possible audience. Ultimately, this interventionism is concerned not only with the issue of a mass audience but with contesting the cultural hegemony at its strongest point' (Ridgman, 1991:205). At the same time, Griffiths recognised the somewhat limited scope of strategic penetration offered by the theatre as an institution in comparison to television. Indeed, he stated that he 'simply cannot understand socialist playwrights who do not devote most of their time to television' (Griffiths, quoted in Patterson, 2003: 67). Given the increased access to audiences offered by television, Griffiths believed this medium provided a greater chance of accomplishing strategic penetration on a larger scale.

Although the cultural institutions targeted by Griffiths still hold cultural power and could still be seen as valuable battlegrounds for strategic penetration, the shift from a disciplinary society to a society of control has introduced new, perhaps more complex and shifting arenas. As detailed by Hardt and Negri (2001) and further explored in Chapter 2.2 (*Conceptualizing algorithmic power*), the new world order of capitalism establishes no territorial centre of power and does not rely on fixed boundaries. It is networked and fluid, made possible by the advancement of digital technology. Television, for example, is no longer consumed only in set time slots displayed on a stationary black box, but rather it is streamed on demand in multiple locations and on multiple devices, often using the same digital platforms as those used for purchasing online goods, interacting with friends, consuming news, finding dates or conducting work. Therefore, by placing my practice within a smartphone, it becomes more possible to challenge capitalist power at its new epicentre. This is because modern surveillance capitalism, made possible by advanced algorithms, achieves much of its hegemony through the smart phone. This new 'site of power' is increasingly present in the constitution of contemporary society, not just through a passive engagement (happening around people) but through actively constructing how people live their lives.

At the same time, such appropriation may be contradictory, as it could be seen to help maintain the hegemony of such institutions, painting them, in the case of Griffiths's writing for example, as more socialist than they actually are. In this way, a play by Griffiths staged at the National could be the 'token drama' that validates the National's otherwise bourgeoisie repertoire, an issue recognised and problematised by

Griffiths himself in plays such as *Sam, Sam* (Garner, p.90)<sup>5</sup>. Developing *Dysconnect*, I contemplated similar contradictions. Indeed, developing an app could be seen as helping a capitalist market generate further goods, given that people would be expected to own a smart phone in order to access the piece. This issue became even more pressing when, several months after the app had been developed, I received an email from Google Play detailing that updates to apps developed for Android 8 (the format we had used) were being discontinued. In other words, in order for the app to remain updated, we would need to re-upload a new, revised version. This would mean further labour for the programmers. Potential listeners would also need to have newer operating systems in order to play the app, which would require them to pay more money (hence, feeding the capitalist machinery). With this in mind, one may ask whether social critique can be launched from within the systems of capitalist power or, instead, whether one should search for spaces free from such risks of recuperation?

The conclusion reached in this thesis is that contemporary society is increasingly void of any truly 'free' spaces. The everyday usage of smart phones means that capitalism is operating through the everyday experiences of people, whether they are aware of this or not. It is not just through apps of leisure, such as Facebook, Google or Tinder, that one remains connected to a system of control, but increasingly through an expectation of the smart phone to also ring the alarm in the morning, manage one's diary, hold train tickets, offer bank access and service contact with family and friends. Griffiths 'strategic penetration' is still a valid way of conducting artistic resistance

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<sup>5</sup> In *Sam, Sam*, the character Shawcross voices self-contempt 'directed at his own complicity with a bourgeois political order' (Garner, p.86)

against hegemony, but the site of power targeted in his practice has now expanded to include digital platforms as well as theatre and television institutions.

Just as Griffiths embedded his work within powerful cultural institutions in order to launch his critique from within, I am using the smart phone as a site for strategic penetration by placing it at one of the central nodes of algorithmic power. This form also allows for Causey's strategic manipulation of the digital, where the theatrical experience can be programmed to function in ways that seek to expose the power inherent within these very functions (further explored in Chapter 2.6 *Theatre and mobile apps*). One way of doing so can be to program uncomfortable interactions as part of the experience, where audience participation is designed to cause a level of distress/discomfort in order to provoke reflection and generate an experiential knowledge of algorithmic control.

To summarise, two main insights emerged from the research detailed above. One was fastening on the idea of embedding the work within a smartphone, as this presented an opportune site for strategic penetration and manipulation, one where artistic resistance could be launched from within the capitalist system of power. The other draws on the central idea that emerged from both the research on political agency and the analysis of Coney's *Adventure 1* (2015), which detailed the dramaturgical importance of provocation and conflict within the moment of participation and/or immersion. This builds on a tradition of political performance where audience participation takes the form of uncomfortable interactions in an attempt to increase audience agency. Such interactions are perceived to hold the possibility of provoking reflections and relating

the performed to the personal, while digital technology offers potentially new ways of doing so. Indeed, this is the foundation for the development of digital ‘side effects’, further analysed in Chapter 2.6 (*Theatre and Mobile Apps*).

#### 2.4.1 *Reflections towards practice*

Having adopted the notion of a ‘dispersed dramaturgy’, and having explored the ‘algorithmic dramaturgy’ associated with Dorsen and found it somewhat limited, particularly in terms of conveying the ways in which algorithmic power undermines human agency, I turned to theatre practice and research that focused on building political agency. One of the major insights drawn from this phase of enquiry into my own practice was the potentially important role that conflict and provocation, within the process of digital immersion, could play in rendering algorithmic power more visible.

One particularly clear insight was that embedding a ‘digital hack’ within a performance could help to generate agency. This realisation became a guiding principle of my practice. However, I also developed the conviction that, without the dramatic *content* of a play which problematized the issue of online privacy, the digital hack *per se* would not have had the same affect. Therefore, whereas previous scholarship has, at different times, advocated a politics of content *or* a politics of form, this thesis argues that the complexity and political potential of theatre, as concerns the objective of challenging algorithmic power, may actually lie in the combination of digitised interaction (i.e. form) *and* dramatization (i.e. content), where

the digital hack creates a live engagement with that which is simultaneously communicated through the performance. One does not exclude the other, nor are they opposed to one another. Instead, as this thesis demonstrates, digital technology offers new ways of embedding interactivity within scripted content, a combination that can be used towards facilitating political agency. Indeed, this is a new way of practicing theatre through audible devices, where scripted, recorded dramatic content is enhanced by digital effects.

Furthermore, locating a performance within a smart phone (i.e. the code/space) helps inhabit the private milieu of the listener, transforming the device through which algorithms execute digital control, into a space of artistic resistance. At the same time that I began experimenting with embedding direct engagements with algorithms within scripted content, I sought to embrace Kitchen and Dodge's (2014) notion of 'code/space'. This led me away from a performance acted out on stage, to one delivered solely through a smart phone. A dramaturgy of that kind would situate the performance more decisively within the matrix of algorithmic power it was attempting to expose and challenge. It would enter the machinery of a 'society of control' rather than attempt to challenge it from the outside. Indeed, situating the performance within a smart phone app could be seen as confronting the matrix of algorithmic power at one of the central nodes. This conviction was strengthened by Ipsos (2017) research, which indicates that smartphone usage is accelerating ahead of PC/Laptop use in the UK, with smartphone ownership reaching above 90 per cent in the age bands 15-35, across gender and social classification. Whether commuting to work, sitting in a cafe or lying in bed at night, people are engaging, on a daily basis



(Bucher, 2017:32), with sites where algorithms produce and certify knowledge (Gillespie, 2014). These public and private spaces are transformed by the technology; a home can become a shop, a toilet can become a dating site.

As more spaces of the life-world become dependent on technology to function, indeed in order to ‘perform’, this battle is increasingly fought over through code. Algorithms are able to layer and determine a person’s virtual space, granting them access to, for example, information and interactions, while, at the same time, rendering other sites inaccessible. From this point on, my practice would navigate through these avenues of ‘code/space’ by generating a theatrical world through the listener’s own device, merging their everyday environment with that of the play world.

## 2.5 Podplays vs. radio/audio drama – towards a definition

Having explored a ‘dispersed dramaturgical’ form, in which the performance mimicked the diffuse nature of algorithmic power, and having taken up the idea of situating these plays within a digital device, I envisaged the plays, initially at least, as ‘audio plays’. Doing so would allow for experimentation in narrative structures, site-specificity and distribution, free from the constrain of programming and pre-determined audience preferences of radio institutions. Later, however, the plays were re-conceived as ‘podplays’. As such, this section offers a brief overview of audio plays, focusing on the boundaries and aesthetics of radio/audio drama and podcasts, in order to demonstrate how the development of ‘podplays’ offers an alternative to existing audio practices.

To that end, it is helpful to begin by considering current practices and aesthetics that define Radio/Audio Drama and podcasts. In the UK, the field of radio drama is dominated by the BBC Radio Drama platform (Dunn, 2014:142), exerting considerable influence over what constitutes the legitimate form of radio drama. Since it is 'intended for a mass, mainstream audience' (2014:143), with timeslots targeting specific audiences, it comes with artistic constraints, where writers are encouraged to incorporate certain demographic data into their creative process, 'allowing for little scope for experimentation or diversity in the works that they create' (Dunn, 2014:143). Indeed, such a view is largely confirmed by the commissioning editor of the BBC, Jeremy Howe, who states; 'this isn't a fringe theatre where you can put on anything you like. This is a broadcasting network' (cited in Dunn, 2014:143), meaning that demographics and perceived audience reception shape both form and content of what is being produced.

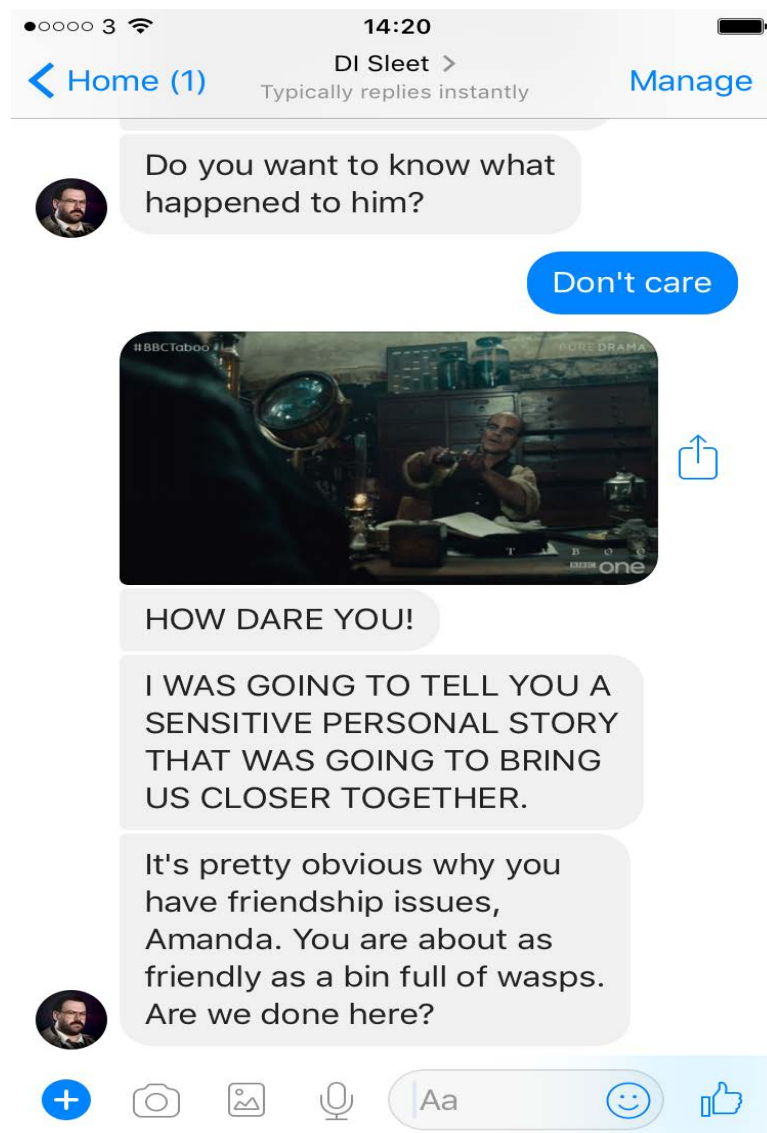
These restrictions are not only to do with themes, content or style, but strict time restrictions are also put in place in order to fill certain time slots within radio programming. For example, the BBC's 'Afternoon Drama' is set to be 45 minutes in length, to fit within the specific time slot between 14.15 and 15.00. This framework of time constraint contrasts quite strongly with the emerging practice of podcasts, which can be of any given length. For example, the American poddrama *Limetown* (Two-Up Productions, 2015), has episodes ranging from 1.27 minutes to 30 minutes; an artistic freedom given to the producers by the fact that they were not bound by the linear format of broadcasting (Chisholm, 2015).

On the other hand, there are multiple examples of initiatives made by institutions, such as the BBC, to diversify and allow for more experimental production. Indeed, as Spinelli and Dann (2019) point out, '[t]he strengths of the BBC, and of BBC radio drama, are that although work must be produced to appeal to a very particular demographic, strands of Reithianism remain part of the Corporation's creative DNA. This means that challenging and experimental works are still being commissioned, funded, and broadcast—not in great volume, but more than would be the case if it were reliant on commercial funding' (2019:133). Examples include BBC Radio 3's *The Wire*, a platform for radio dramas that existed between 2007-2014, designed to showcase works that 'push the boundaries of drama and narrative, created by first-time radio writers and also writers distinguished in other forms' (BBC Radio 3). Worth noting here is that even though the platform was designed to allow for increased experimentation in terms of narrative and content, the dramas still had to fit with strict timeslots. Out of the 74 episodes available online, 90 percent were 1 hour or 45 minute long episodes, with the remaining 10 percent either 30, 50 or 55 minutes long. This suggests, perhaps unsurprisingly, that the episodes still needed to fit within the broadcasting scheduling. However, this is not true of all BBC radio productions. For example, Nick Fisher's *The Wheel of Fortune* (2001) was played out over both the radio and the Internet, enabling the listener to move between different versions of the play, inevitably expanding the duration of the experience. As Edmund (2014) points out, contemporary radio is beginning to experiment with incorporating websites, videos and social media as part of new cross-media practices (p. 2). This is perhaps best exemplified by BBC's online platform, 'Taster', created in order to try

out new ‘experimental’ (BBC Taster, 2017) ideas during a trial period. For example, one can engage in an interactive conversation with the detective *DI Sleet Bot*, through a chat facilitated by Facebook Messenger, as illustrated by the image below.

DI Sleet Bot asks questions and the audience member can choose replies from a list of available answers.

**Figure 4. Screenshot of interaction with DI Sleet Bot.**



Other examples include the ‘interactive object based drama’ *The Mermaid’s Tears* (2017), where the listener can choose which character’s side of the story they want to hear, the interactive graphic historical novel, *Tell me your secrets: Binaural* (2017) and the interactive 360 reality show *The School Run* (2017). Of particular relevance to this thesis are five site-specific ‘Pod Plays’ released on *Taster* on August 3d, 2017. Written by five different writers and described as 4-6 minute long ‘short form audio drama stories’ (BBC Taster, 2017), the podplays focused on using ‘augmented reality sound’, meaning that the sound came from different directions, creating layers and a sense of distance within the audio. The location within the pieces corresponded to a location in which the listener was encouraged to experience the Pod Play, namely: a pub, in bed, in the bathroom, in a park or in the living room. Created for headphone listening and released online, the length and content did not have the restrictions of the radio dramas mentioned above. Instead, they were created as short, on-demand audio plays, designed to be accessed online. In terms of length, they are very closely linked to the podplays developed in this thesis. One crucial difference, however, is that they were developed primarily as a way of experimenting with binaural sounds. For example, in Charlotte Bogard Macleod’s *Pod Play 1: Living Room*, a conversation between two friends, both with romantic feelings for each other, move from taking place in a living room, to the inside of the male character’s brain. The different locations come alive by the augmented sound, which functions to create a change between the real world and that within the brain. The narrative, however, remains linear, depicting a love story, where the characters, after some probing, exclaim their love for one another. Similarly, in *Pod Play 5: Bathroom*, written by

Ben Lewis, a fly addresses the listener as if they are in the same bathroom, buzzing from one side of the bathroom to the other, meanwhile someone is knocking on the other side of the bathroom door. The focus is, again, on the movement and quality of the sound, allowing the narrative to become a vehicle for the sound experiment. The same is true of Timothy X Atack's *Pod Play 3: Pub*, where a man orders drink after drink in a 360° audio pub, and Lee Mattinson's *Pod Play 4: Park*, where the sounds of the park surround the two detectives' search for something in the bushes. As the Head of Audio Drama at the BBC, Alison Hindell, explains, what makes these recordings 'special is the way they are recorded' (BBC website, 2017). The person behind their creation was Catherine Robinson, a sound engineer at BBC Wales, who wanted to enhance the listener's experience by using 360° sound. In line with Robinson's vision, the stories are a vehicle for demonstrating the effects of the sound scape.

Returning to BBC's *Taster*, it is not a platform created specifically for audio dramas. Rather, it is an experimental platform for both audio and visual content where the BBC, by emphasising the temporality of the projects, is able to make pilots that exist outside the constraints of their standard broadcasting. Nonetheless, listeners/viewers are invited to rate the content on *Taster* on a scale from one to five, a rating that will 'help us steer future research and development' (BBC, 2017). This makes clear the strong relationship between the broadcasting company and their audience, where the accumulated popularity of a program will, ultimately, determine its future development. It demonstrates how even though *Taster* allows for experimentation, the institutional constraints, in terms of audience reception and mainstream appeal,

prevail. As stated by Spinelli and Dunn (2019) in relation to the BBC Radio drama production; '[w]hile experimental, innovative, and challenging works were commissioned, such works were broadcast in fringe slots, in isolation, and with minimal recognition' (2019: 103).

With this in mind, it is worth looking at what an institution means when they engage in 'podcasting' versus 'broadcasting,' and whether there are inherent differences to the two formats, in terms of content and/or form. This will hopefully bring us closer to understanding if there are inherent differences between the practice of Radio/Audio Drama and podcasts/podplays.

The word 'podcasting' was first coined by *Guardian* journalist Ben Hammersley, who, in 2004, fused the word 'broadcasting' and 'iPod' into 'podcast'. He did this in order to create a word that referenced the phenomenon of downloadable radio shows, which were becoming increasingly available online (Zaltzman, 2014). Podcasts can be described as a medium that brings together audio, the Internet and portable devices (Berry, 2004). One way of differentiating it from radio, is the fact that it is downloadable and storable, enabling a kind of 'time-shifting' (Fauteux 2015:203), where the audience is able to download and listen to a podcast whenever they like. Lars Nyre states that podcasting has a less well-defined listener position than that of radio. He suggests that the listener's position within radio can be understood as 'for anyone-as-someone' (Nyre, 2015:282). The radio host addresses the individual as a distinct someone, simultaneously making it possible for 1000s of other people to identify as that very same someone (Nyre, 2015:282). In contrast, podcasts are often

more narrow or specific in their content and audience, since they are not necessarily designed to reach the same type of mainstream audience as that of radio. A podcast is also not trying to keep the audience glued to a set time slot, but is instead relying on the fact that the listener has already made an active choice to listen when accessing the podcast. They have demonstrated their willingness to engage with that specific content, rather than accidentally 'tuning in'. Berry suggests this means that the listener of a podcast becomes more actively engaged than the radio listener (2016:12). In addition, research from RAJAR (2015) demonstrates that the majority of podcast listeners engage with the medium through headphones, in contrast to radio, which is often played through speakers. This suggests 'a deeply personal and highly privatized (and intimate) space in which content is consumed, which seems to provide a reasonable hypothesis that podcasting is a more intimate form of audio production' (Berry, 2016:13). Another difference is the way in which it is being produced. Indeed, the podcast producer Alan Hall states that podcasts, in contrast to traditional broadcast radio, allow the producer to have total ownership of the project. 'Podcasts are often made by someone who has a holistic understanding and relationship to the subject' (Manelli and Dunn, 2019:67). Furthermore, Manelli and Dunn (2019) suggest that some established aesthetics of radio drama, such as hearing the world through the character's ears and the thoughts in their head, are not used to the same extent within podcasting. This is because many podcast producers are 'approaching the form unburdened by history or cultural expectations' (2019:106). Rather than having a background in radio production, many producers have roots in film, television or theatre, and have drawn more on techniques from those fields than from traditional radio drama.



However, as podcasts are becoming more commercially viable, and broadcasting companies are beginning to use the format of podcasting alongside their radio broadcast, the lines between podcasting and radio are again becoming difficult to define. As articulated by Nyre (2015), 'the podcasting field has become highly professionalized and increasingly consolidated' (p. 182). For example, the content of the American podcast *This American Life*, is the same as the radio broadcast, with the exception that it sometimes includes extra material that was cut in order to fit the radio timeslot (*This American Life*, 2017). Similarly, for BBC Radio Drama, the lines between audio content, developed specifically as podcasts, and audio content, developed originally for broadcasting, are blurred. A radio play, such as Jeremy Hylton Davies' *On Horizon*, was broadcasted on BBC Radio 4 on October 18<sup>th</sup>, 2017, at 14.15pm. It was then released online, where it can be found under the category 'iPlayer Radio Drama Podcast'. Here it is important to point out that when mainstream radio is available to access 'on-demand', its content is still originally produced for a specific timeslot and a specific, mainstream audience, meaning that the aesthetics restrictions remain, even though the distribution has moved from radio to online audio. Therefore, it seems inadequate to distinguish podcasts from broadcast by their form of distribution, or simply as 'a digital audio file made available on the Internet for downloading to a computer or mobile device' (Oxford Dictionary, 2017).

Instead, I would argue that it is a move away from the underlying aesthetics (in terms of length and specific demographic) that permeate radio dramas produced within/for large institutions, coupled with a shift in the listener's position, that calls for a new

vocabulary to describe different types of audio dramas. Before going further, however, we need to address the problem of categorization that the sentence above contains. If a radio drama is placed online, does it not then, by definition, become an online audio drama? And, if so, does this not indicate that the only difference between radio and audio drama, is the channel through which it is being played? As Berry (2016) puts it: ‘A radio programme can be both a broadcast artefact and a podcast, and while the manner in which a listener might consume them can differ, they are essentially the same text’ (p. 9). Interestingly, in Swedish, the translation for ‘audio drama’, *hörspelet*, from the German *Hörspiel*, is defined as ‘drama for radio’ (Nationalencyklopedin, 2017), or *radioteater* (radio theatre). This points to the close relationship between the audio drama and the institution of radio in Sweden. This relationship is mirrored in the UK, where the dominance of the BBC in the production and broadcast of radio drama for the past 60 years, amounts to ‘a virtual monopoly over the form’s conceptual development’ (Dunn, 2014:142). The word radio, as Berry (2016) suggests, may have become shorthand for ‘audio’ (p. 10). Indeed, Tim Crook’s book *Radio Drama: Theory and Practice* (1999), makes ‘radio drama’ and ‘audio drama’ synonymous with one another, writing ‘Radio/audio drama is theatre’ (p.157) and fluctuating between the two terms ‘audio’ and ‘radio’ when referring to the same concept (p. 96, 159, 160). This is evident, for example, in the titles of the chapters, ‘The new radio drama form’ (p. 103), and ‘The writing agenda for audio drama’ (p. 151), where the terms ‘audio’ and ‘radio’ are used interchangeably. The more recent work by Hand and Traynor, *The Radio Drama Handbook: Audio Drama in Context and Practice* (2011), makes the same interchangeable (non)distinction between ‘audio’ and ‘radio’, present in its title and

throughout the book (p. 103, 108, 111). As Dunn (2014) states, it seems the audio dramas created through the channel of podcasts, has yet to settle on a name, with current uses including terms such as; ‘Pod-Drama’, ‘Podiobooks’, ‘Online Audio Drama’ and ‘Audio Drama’ (p. 142). Hand and Traynor refer to the emerging practice as ‘podcast drama’ (p. 88, 111) and ‘podcast audio drama’ (p. 75, 100, 104). Other independent companies, working with the production of audio drama, such as The Drama Pod, The Wireless Theatre Company and Chatterbox Audio Theatre, describe their work as ‘audio fiction’ or ‘drama pod’ (Drama Pod, 2017), ‘audio drama’, ‘audio plays’ (WTC, 2017), and ‘audio theatre’ (CAT, 2017). Newworld Theatre, a Canadian theatre company, refers to their site-specific audio work as ‘podplays’, while the Guardian, Roundhouse Theatre and the production company Fuel (2011) released *Everyday moments*, a series of site-specific short audio narrations that they referred to as ‘podcasts’. BBC also released a series of ‘Pod Plays’ through their online platform ‘Taster’. These were 4-6 minute long site-specific ‘short form audio drama stories’ (BBC Taster, 2017), which experimented with binaural sounds.

The examples above illustrate that audio drama in the form of podcasts, is a concept still in formation, with Berry (2016) stressing the need for the podcast ‘to further develop its own identity’ (p. 16). Even though we might consider podcasting to be a radio practice, labelling it as radio ‘engenders a perception in the minds of producers and listeners based on their previous experience of radio formats’ (Berry, 2016:9). Furthermore, listeners might choose to engage specifically with podcasts because they are *not* considered radio, which means that making a distinction between the two mediums could help guide listeners (Berry, 2016:9).

### 2.5.1 Reflections towards practice

By choosing to use the word ‘podplay’, I want to cement such a distinction. As demonstrated above, radio drama and audio drama have a history of being interchangeable. When a radio drama becomes an online audio drama by its change of distribution, its content and structure remains the same. Hence, the word podplay offers a category with roots in the traditions of radio/audio drama, which, by Bottomley’s definition, carry the hallmarks of being a scripted, dramatized serial narrative, written, performed and produced to be heard (Bottomley, 183). Yet, the podplay I am proposing does not conform to the restrictions of length put in place by radio programming, nor does it draw on the types of conventional aesthetics detailed by a defining institution such as the BBC, or scholar such as Crook, who states that a radio drama needs to have: ‘a good story’ and ‘create substantial and engaging characters’ (1999:157), indicating a naturalistic approach to writing characters and an emphasis on a ‘narrative arc’.

Instead, I propose podplays that make use of more experimental dramaturgical structures and play lengths in order to serve the specific intention of that piece, rather than appeal to a demographic or reaffirm preconceived ideas of audio. This is contrary to Bill Blake’s (2014) affirmation in *theatre & the digital* that ‘podplays are not really new at all’ (p.48). Specifically, Blake criticises the Wireless Theatre Company’s claim to ‘newness’ with reference to the way in which the company

presents itself online. From this, he concludes that: ‘The digital factor that adds particular excitement to podplays [...] is the ‘pod’ factor: the audio dramas can be listened to on a portable media player, such as an iPod, while the listener wanders around a site’ (Blake:2014:51). In doing so, Blake neglects to account for the dramaturgical forms of podplays, focusing solely on their mode of distribution/consumption.

Furthermore, compared to radio/audio dramas, current practices indicate that podplays have a more clearly defined relationship to the listener since they are designed to be heard through earphones, rather than played out loud. This coupled with the freedom from conventions and institutional restraints, with its scripted, narrative element, is what makes podplays distinctive from the practices of radio/audio drama and podcasts.

## 2.6 Theatre and mobile apps

The decision to embed a series of podplays within a smart phone, coupled with the desire to implement uncomfortable interactions, led to an exploration of the functional and dramaturgical possibilities of creating a performance within an interactive ‘mobile app’. As a first step in this direction, another systemic survey was conducted

of the scholarly literature for research connecting theatre and apps. This produced the results displayed below in Table 2.<sup>6</sup>

**Table 2. A systematic search for research on ‘theatre apps’.**

| Journal name  | Items returned | After screening | Reference  |
|---|----------------|-----------------|--|
| Contemporary Theatre Review                               | 6              | 3               | <p>a. Ekenberg, L., Forsberg, R. &amp; Sauter, W. (2016) ‘Antigone’s Diary – A Model for Democratic Decision Making in Suburban Stockholm’, <i>Contemporary Theatre Review</i>, 26 (2), pp. 227-240.</p> <p>b. Nedelkopoulou, E. (2017) ‘Attention Please! Changing Modes of Engagement in Device-Enabled One-to-One Performance Encounters’, <i>Contemporary Theatre Review</i>, 27 (3), pp. 353-365.</p> <p>c. Chatzichristodoulou, M. (2017) ‘Introduction: Encountering the Digital in Performance: Deployment – Engagement – Trace’, <i>Contemporary Theatre Review</i>, 27 (3), pp. 311-323.</p> |
| Theatre Research International                            | 0              | 0               |  |
| International Journal of Performance Arts & Digital Media | 10             | 2               | <p>a. Demetriou (Yiota) Panayiota A. (2018) ‘Imagineering’ mixed reality (MR) immersive experiences in the postdigital revolution: innovation, collectivity, participation and ethics in staging experiments as performances’, <i>International Journal of Performance Arts and Digital Media</i>, 14 (2), pp. 169-186.</p> <p>b. Ilter, S. (2017) ‘Unsettling the ‘friendly’ gaze of dataveillance: the dissident potential of mediatised aesthetics in Blast Theory’s Karen’, <i>International Journal of Performance Arts and Digital Media</i>, 13 (1), pp. 77-92.</p>                             |
| Theatre Journal   | 16             | 1               | a. Beck, L. (2015) ‘Since I suppose’, <i>Theatre Journal; Baltimore</i> , 67 (2), pp. 228-340.   |
| Performance Research                                      | 19             | 1               | a. Ilter, S. (2018) ‘Blast Theory’s Karen’, <i>Performance Research</i> 23:2, pp. 69-74.   |
| <b>TOTAL</b>  | <b>51</b>      | <b>6</b>        |  |

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<sup>6</sup> Here, I used the same systematic review procedure as the one conducted for algorithms and theatre. Specifically, using the words ‘theatre app’ or ‘app theatre’, I interrogated the contents of five major academic journals (Performance Research, Theatre Research International, International Journal of Performance Arts & Digital Media and Contemporary Theatre Review). The category ‘after screening’ includes instances where the theatre performance, or a substantial part of it, was delivered through an app, excluding instances when the word ‘app’ was simply mentioned, or when apps were used merely as an appendage or in a highly subsidiary way to a performance that, itself, was not app-based. The extent to which this may have been the case was, unavoidably, a subjective judgement.

Although there were relatively few articles that dealt with theatre and mobile apps in the manner delineated above, one interesting theme to emerge was the potentially significant role for site-specific dramaturgies and how this linked with various digital effects. A particularly clear case of this was the use of GPS tracking, which allowed for different parts of a performance play in relation to the person's specific location. For example, Beck (2015) details the performance *Since I Suppose*, by the company 'one step at a time like this'. Delivered through a smart phone, it is a site-specific piece based loosely on Shakespeare's *Measure For Measure*. It takes the audience on a journey through Chicago, demonstrating 'the possibilities of the smartphone as a scenographic mechanism to structure the narrative, sensorial content, and tone of a highly mobile, complex, and site-specific production' (p. 340). Similarly, Love Ekenberg, Rebecca Forsberg and Willmar Sauter (Contemporary Theatre Review, 2016) detail the performance *Antigone's Diary* by Swedish theatre company RATS Theatre, developed in collaboration with the Department of Computer and System Science at Stockholm University. The performance was delivered through an app downloadable to a smartphone, where GPS locations unlocked chapters of Antigone's diary. Each chapter ended with an existential question, such as; 'What makes you angry?' The participants were able to answer the questions via text message and read the answers submitted by other users. Hence, it combined radio drama, site specificity and audience interaction in order to create what the authors describe as an augmented reality performance. While Antigone is portrayed as having personal conflicts, and grapples with decision-making, the digital dramaturgy of the performance attempts to generate an experience of and participation in the process of

decision-making. Similar examples of performances that integrate specific locations and apps include the National Theatre of Scotland's app in conjunction with their production *The Reason I Jump* (2018), which unlocked stories and music through marker points; the Swedish theatre company, Tempus Fugit, which places podcasts in specific locations, unlocked through GPS technology; and the Canadian theatre company, Newworld Theatre, whose site-specific promenade 'podplay' *Look Up* (Wong, 2011) begins in a given specific location and narrates through a smart phone.

Given the prominence attributed to site-specificity in the above instances of app based theatre, serious consideration was given to the ways in which this might contribute to the objective of the research; namely to expose algorithmic power and facilitate political agency. One possibility that was considered involved coding the app with a digital effect so that the listener would need to be in London's financial district, the location of many 'high frequency trading (HFT) algorithms, in order to access the podplay *Falling* (which centre around automated, or HFT trading). This was underpinned by the idea that the site would enhance the content. However, doing so seemed to undermine another feature of the macro dramaturgy, which was to mimic the encroachment of algorithmic power into the mundane 'code/space' of everyday life (this argument is developed more in Part III, Chapter 4.1 *Verbatim and site-specific*).

Ultimately, it was deemed preferable for the app/performance to be situated within the listener's realm of 'everyday' experience. Directing them to specific geographic places, which they may not ordinarily frequent, would change that trajectory. It would



shift the focus towards something outside of the mundane places into which algorithmic power increasingly intrudes. It would also imply that these physical places, like financial districts, are where algorithmic power ‘really’ happens, when it is more accurate to say that the execution of power happens within digital networks. People within the financial district may be pushing physical buttons in physical offices, but the way in which power moves (for example, the sale of shares in a company), extends beyond the concrete space into the digital. That is what the concepts of algorithmic power and a ‘society of control’ attempt to encapsulate. Additionally, even the traders themselves are able to work from other locations, as the technologies used function irrespective of location. For those reasons, a site specific dramaturgical form, at least as it was deployed in the instances above, was set aside. What was retained, however, was the notion of ‘digital effects’, as I could perceive how this might be linked to the idea of ‘hacks’ or ‘digital hijacks’ that Giannachi (2007) describes as leading to new forms of political resistance. Such side-effects could also be understood as ‘uncomfortable interactions’ (Benford *et. al.*, 2012) since they have the potential of causing a thrill sensation or lead to physical stress or anxiety (by the audience member experiencing something uncomfortable), and prompt subjective interpretation (after having gone through such an experience). This could, in turn, lead to an enhanced awareness and understanding of the subject explored. The decision to use digital effects was also informed by my engagement with other prominent instances of app-based performances.

Perhaps the major example in the literature of a theatre performance utilizing a mobile app, is the theatre app *Karen* by Blast Theory (Ilter, 2017, 2018; Demetriou, 2018;

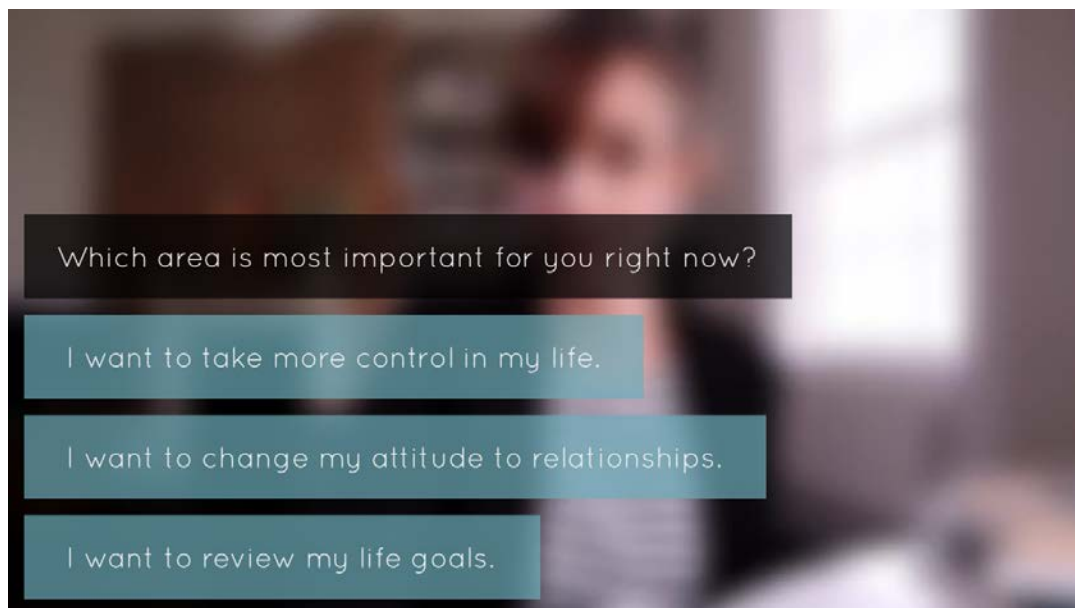
Nedelkopoulou, 2017; and Chatzichristodoulou, 2017). One of the most distinctive dramaturgical features of *Karen* is the way in which the code within the app generates certain effects, giving the performance an interactive and personalised quality. Released in 2015, *Karen* is ‘a hybrid, sitting somewhere between a game, a drama and a self-help quiz’ (Matt Adams, artist and co-founder of Blast Theory, quoted in The Guardian, 2015). The app delivers a series of recorded videos, where the audience is introduced to the character ‘Karen’, a life coach, who invites the audience to participate in life coaching sessions. These sessions are delivered by Karen asking questions, which the audience answers from a set of pre-written responses (See Figure 5). The answers steer which scene(s) will be shown next and the experience stretches over nine days, throughout which the audience is prompted to interact with Karen on a daily basis. Demetriou (2018) describes this as a combination of ‘dramaturgy and game design’, where ‘the work situates the experiencer, or player, both in the physical world (their immediate surroundings) and the virtual environment (the digital)’ (2018: 175).

Alongside this ‘gamified dramaturgy’, *Karen* could be said to deploy a ‘dispersed dramaturgy’, much like Coney’s *Adventure 1*, as its narrative structure mimics the way in which algorithms collect data over time, giving the audience experiential knowledge of the system it attempts to expose.

The questions asked by Karen stem from psychological profiling questionnaires (Blast Theory, 2015). After the experience, the user is able to purchase a personalized report, showing how their decisions affected Karen and how their answers compared

to other users. This kind of interactivity intensifies throughout the experience as Karen becomes increasingly personal, sharing intimate details from her own life. Slowly, the user is made aware of the fact that the app is drawing and collecting personal data, using this in an attempt to create a profile. As Maria Chatzichristodoulou states, '*Karen* is, in short, a trap designed to make you divulge private information' (2017:79). This is done in order to make the process of profiling and data mining transparent, inviting the audience to 'consider other instances when this might apply' and asking themselves 'what is at stake when this occurs 'for real' (Chatzichristodoulou, 2017:79).

**Figure 5. Screenshot from Karen.**



*Source: Screenshot from Karen, 18 September, 2017*

Chatzichristodoulou's conclusion is that *Karen* successfully inspires the thoughts and provocations stated above. In my own experience of the performance, however, I encountered some obstacles to the provocation. In particular, I found an important

limitation in the requirement to answer multiple-choice questions. For example, the image above shows the question: ‘What area is most important to you right now?’ This is followed by the suggested answers; ‘I want to take more control in my life’, ‘I want to change my attitude to relationships’ and ‘I want to review my life goals’. Since none of these answers applied to me, I felt as if Karen forced me into being dishonest. Rather than divulge private information, I found myself choosing answers at random, a process repeated several times throughout the experience. This meant that, rather than feeling exposed or robbed of privacy, I soon began to feel disengaged. Interestingly, Chatzichristodoulou (2017) notes that there is a purpose to this, as it reflects the limitation of profiling used to fit people into often inadequate and faulty categories, which then begin to determine how they interact with or encounter the world. Itler (2018) concurs, stating that: ‘The false impression of agency through participatory aesthetics and multi-authored textual design is inherently political. It is a strategy that Blast Theory uses to question the misconceived correlation between participation and empowerment’ (p. 71). This is particularly poignant after one purchases the information at the end of the experience, since it shows how the answers given were used in order to create a restrictive profile. However, again, in my experience of the app the very same limitation removed some of the intimacy and directness that *Karen* wanted to achieve. Not being able to ‘be me’, and instead being forced to choose states of being or opinions that I didn’t actually feel or believe in, created a distance between the device and myself. In a sense, I was merely ‘playing the game’ for the sake of playing.

The limitations of *Karen*, in the sense that I have just outlined, can be amplified by considering an alternative example of practice that, arguably, is more successful in generating political agency. The interactive app, *Floodwatch* (2014), offers an interesting example of a practice that manipulates the way in which global online companies function so as to make their operation visible. In this way, it can also be seen as responding to Hardt and Negri's call for radical artistic practice that utilize the processes of globalization that they aim to critique (2001:11). Created by the data firm, The Office for Creative Research, together with the Pulitzer Prize winning journalist, Ashkan Soltani, it uses detection algorithms to track the ads encountered online. It then displays the number and types of ads that they are met with through the app. The claim behind *Floodwatch*, is that the current tailored marketing strategies, employed by companies online, were not only invasive, but also reinforced a demographic identity. This identity was manufactured by the information about the user, accessed by the companies, something that could lead to discrimination (Smith, 2014). Hence, the piece made visible how algorithmically determined content was able to create and generate online identities through what might be described as a *dramaturgy of visibility*, where the data flows hidden within the technology were brought into light.

Similarly, although not directly related to algorithms, David Colombini's app *Polluted Selfie* (2017) serves as an interesting example of how an app can be used to generate political awareness. Winner of the 2017 *German AppArtAward*, in the category 'AppARTivism', *Pollute Selfie* is a web-based application connected to a sculptural stand. The stand is designed to hold a person's phone and contains a sensor that

allows the person to take a ‘polluted selfie.’ The selfie has a filter that changes depending on the amount of three main air pollutants (PM, CO<sub>2</sub> and CO), each altering a different parameter of the selfie. The idea is that the app allows people to become ‘environmental activists’ (Appartaward, 2017) by sharing their images on social media. The app also suggests that it is possible to be digitally polluted, drawing connections between the digital and the environment through ‘adopting an aesthetic inspired by Net Art, glitch, and computer viruses’ (Appartaward, 2017). The image of oneself, placed at the centre of the piece, makes the issue of pollution personal.

Finally, Headlong’s interactive app, *Digital Double*, is another relevant example that focuses on exposing the lack of digital privacy in contemporary society. *Digital Double* was created as part of the theatre company Headlong’s stage adaptation of *1984* (Nottingham Playhouse, 2013). Its development was a collaboration between Headlong, the Cultural Institute at King’s College London and the design studio M/A. Drawing on questions about surveillance raised in *1984*, the app sought to create an interactive personal experience, supplying the user with information about how and why their online presence was being tracked, as well as offering advice on how to remove information about themselves from the Internet (Grochala, 2015). Again, this was achieved through a range of digital effects made possible through the app. Initially, the user provided the app with information, such as their name and email address. They also answered questions about their Internet usage, such as ‘do you use a smart phone’, and ‘do you have geolocation on’ (Grochala, 2014). If the answer to the latter question was yes, this led to a page that detailed potential problems with having geolocation turned on. If, however, the user had stated that they don’t have

geolocation turned on, they would have seen a page detailing what they may be losing out on, by not having this setting switched on. According to Grochala (2014), this was an attempt to make the app more 'neutral', providing both sides of the argument. The app also generated information specifically about the user's own social media usage, such as Facebook and Instagram. Additionally, there were settings within the app that related specifically to the live theatre event. If the users were due to attend the performance, they would be asked to supply the app with their ticket number and phone number. If they agreed to terms and conditions, data from their own Facebook activity, Instagram and location tracking were displayed in the theatre foyer ahead of the performance. They also received a text message before the show from Big Brother, telling them that they were being watched. 45 minutes after the performance, they received a phone call that played the song 'Oranges and Lemons', a song played repeatedly throughout the stage performance. In addition, the app encouraged the user to take action against the current use of their private data, by offering them information regarding how they would be able to 'unwrite' some of their data online (Grochala, 2014). This included practical advice as to how to delete your own Facebook account and links to videos detailing further information. In this way, Headlong's, *Digital Double*, is perhaps the clearest example of the use of an app to create digital effects that aim towards facilitating political agency. This is discussed further in the following section, detailing how digital effects became a central feature of my practice.

### *2.6.1 Reflections towards practice*

One important decision in the process of creating the app, which emerged from the practice and research detailed above, was to set aside a site-specific dramaturgy while retaining the notion of ‘digital effects’. In this section I describe how I employed ‘digital effects’ in order to encourage political agency. Again, as previously discussed, a major source of inspiration for this was the way in which companies, such as Headlong, had utilized the functionality of a mobile app (e.g. GPS) to generate specific effects (e.g. location tracking) and, by doing so, make visible certain manifestations of power, with the intention of generating political agency.

Following these practices, my own practice took a significant turn towards what I conceived as ‘digital side effects’, or ‘side effect’ for short. Working in collaboration with a team of programmers from Karlstad University, an app was created to function as a playing device for the podplays. Additionally, each podplay, when played, would automatically trigger a ‘side effect’. Each ‘side effect’ relates to the content explored in the specific podplay and, in this way, combines a ‘dispersed dramaturgy’ with the kind of ‘gamified dramaturgy’ pioneered in *Karen* and rendered more political in Headlong’s *Digital Double*. There is also an important point of connection between the notion of a ‘digital effect’ and ‘hacks’, where the uncomfortable or intrusive quality of a hack becomes a defining feature of the side effects. For example, the podplay *Drowning* sends the listener a message in the notification, changing from one digital platform (the app) to another (the notification). Similarly, the podplay *High Risk* sends a text message to the listener with a personalised risk score<sup>7</sup>. Changing

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<sup>7</sup> The risk score is compiled from a questionnaire he or she has been asked to fill out within the app, following the listening experience.



between different digital platforms in this way, the app looks to insert itself within the private sphere of the listener, penetrating the personal in a way that makes it difficult, perhaps impossible, for the user to create a shield or distance between the content explored in the podplays and their private selves. For example, in the podplay *Trapped*, the theme of algorithmic surveillance, explored within the narrative, is made personal by the app displaying the listener's location live on screen. Such an uncomfortable interaction, as suggested by Benford et. al., demand 'a deep personal commitment' (2012:2006), and serve as a prompt for the audience member to interpret and reflect over the repercussions of the uncomfortable interaction.

'Side effects' can, in other words, be described as a dramaturgical device that engineers moments of 'digital effects', where the listener is subjected to some degree of uncomfortable interaction. The central intention of the side effects is to begin to make visible algorithmic power by mimicking some of the current commercial uses of algorithms. If an audience member is disturbed by the fact that the app has, for example, counted how many steps they have taken since downloading the app (as is the case in the podplay *FitChip*), this, it was envisaged, would help raise a discomfoting awareness of the access apps have to what may be conceived as private information. This awareness could, in turn, lead to increased agency. For example, they could start questioning the use of private data collected through the likes of fitness tracking apps. They may have an increased awareness and ability to recognise when apps collect information and display it/use it in different digital platforms and, as a result, refrain from downloading and using such apps. Ultimately, it may lead to the audience being able to recognise when they are being subjected to algorithmic

power, giving them an increased ability to make informed decisions as to when and how they manage such interactions.

## 2.7 Chapter summary

The objective of this chapter has been to set out the theories that informed the practice of making *Dysconnect*. The process of conceptual development began with an engagement with research, drawing from the social sciences, concerning the relationship between algorithms and power. Algorithms were shown to influence and shape how we experience the world (Beer, 2009), acting through increasingly networked and flexible power structures (Hardt and Negri, 2001). This is a form of power that underpins social structures, relations and needs. Algorithmic generative rules become embedded within the digital systems through which we live our lives (Mager, 2012, Lash, 2007). In such a ‘society of control’, where machines are directly organising thought structures, power becomes increasingly biopolitical.

This raises a need for artistic practices that operate from within these digital systems, since power is decreasingly separated from the devices used to lead contemporary lives. This, together with the omnipresent status of algorithms, gave rise to the idea of ‘dispersed dramaturgies’, existing within the digital landscape and, through its form, able to embody the fluid, networked nature of algorithms. This also gave rise to the idea of creating a series of shorter audio theatre pieces with a thematic connection of algorithms and power, delivered through a smart phone.

A review of scholarly literature on algorithms and theatre demonstrated how algorithms had been used to generate text (e.g. Dorsen) and produce statistics (e.g. Rimini Protokoll's *100% City*). Such practices, however, did not take sufficient account of, nor challenge, the complex ways in which algorithms execute power. Focusing on the loss of political agency, a key danger of algorithmic power, I turned to theatre practice and research dedicated to generating agency. This showed the potential of conflict and contradictions within digital immersion, to render algorithmic power visible. In particular, embedding a digital hack within a performance allowed for an almost involuntary, uncomfortable interaction, which could help to generate agency, as the digital hack creates a live engagement of what is being communicated through the performance.

Research into 'uncomfortable interactions' (Benford et. al. 2012) showed how subjecting the audience to discomfoting participation could lead to increased audience agency. By being forced to partake or interact, it is envisioned that the audience is made to reflect on and relate to the experienced performance. Digital technology offered new ways of creating such interactions. Particularly, theatre as hacktivism (Giannachi, 2004) in combination with Causey's concept of embeddedness (2006), offered examples of how technology could be used to generate knowledge of digital power, through embedding theatrical hacks within scripted content. Drawing on these theories, I explored ways in which the performance would be able to occupy the contested digital space where algorithms execute power, turning it into a platform of artistic resistance. This gave rise to the creation of podplays

delivered through a smart phone. A ‘podplay’ was defined as a scripted piece of audio theatre, free from institutional restrictions of length, form and themes, with a clearly defined relationship to the listener.

Finally, a review of research and practice in theatre apps consolidated the idea that one could utilize digital effects in order to encourage political agency. For example, the app could be used to incorporate or *embed* personal data within the experience, which, it was envisaged, could lead to increased agency. Through this process, digital power becomes *experienced* as well as *described*. This commended the idea of delivering the podplays within an app containing digital side effects. The ‘side effects’ relate specifically to each podplay and seek to generate a direct and somewhat discomfoting experience of the dramatic content. The aim is to bridge the distance between the recordings and the listener, creating a live, individual experience of the plays. Each podplay, in turn, dramatizes how different algorithms execute power over society and citizens. The micro-dramaturgy, which was informed by three political dramaturgies, is now analysed in depth in Chapter 3, ‘Constructing Micro Dramaturgies’.

### 3. Constructing micro dramaturgies

#### 3.1 Introduction

The section above provided a discussion of research and practice that informed the development of the macro-dramaturgy. In this section, I move on to an analysis of the micro-dramaturgy, which concerns the dramaturgical structure of each individual play-text.

At the outset of this practice-as-research, numerous plays investigating digital power through dramatization were being staged around the UK. For example, Jennifer Haley's *The Nether* (The Royal Court/Headlong, 2014) creates a dystopian future, in which people were completely submerged in an online realm, to highlight and question how/if actions committed online influence reality. Stef Smith's play, *Girl in a Machine* (2017), also depicted a dystopian future, where one half of a couple chooses a virtual reality above reality, highlighting the danger of digital dependency. Tim Price's *Teh Internet is Serious Business* (The Royal Court, 2014), detailed the radical 'hactivist' collective, Anonymous,<sup>8</sup> and acted out online text and characters, making it possible to view the online world with more critical eyes. 1924's *Golem* (Young Vic Theatre, 2014), in turn, created a figure of a smartphone, in the shape of 'Golem', which reflected how an excess of digital technology could end up costing us our humanity.

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<sup>8</sup> Anonymous is a group of hackers who have intervened in a range of political activist protests. Their activities began in 2008, when they conducted a series of online pranks and hacks targeting the Church of Scientology. Later targets included Israel, Tunisia, USA and others (Knappenberger, 2012).

Although each of the aforementioned plays clearly engaged critically with digital power, one could dispute the degree to which these plays managed to generate political agency. Certainly, these plays highlighted the issues of digital power and responsibility, which, arguably, could lead to an audience member being able to apply a more conscious use of, say, the Internet, as a result. However, these plays lacked the type of direct or involuntary interactions, exhibited in work such as Headlong's *Digital Double* and Graham's *Privacy*. This means that the content remains *told*, rather than experienced personally. Instead of becoming active themselves within the work, the audience remains outside it. In addition, the plays use a somewhat linear dramaturgy of cause and effect, which, since the nature of algorithmic power is networked and interconnected,<sup>9</sup> seemed inadequate as a dramaturgy for my specific research enquiry. To gain further conceptual material for my own practice, I examined three distinctive political dramaturgies: Sarah Grochala's (2017) *liquid dramaturgies*; Matthew Causey's (2016) *postdigital performance*; and aesthetics of absurdist dystopias used in contemporary British drama as detailed by Merle Tönnies (2016).

### 3.2 Rethinking dramaturgical structures

In *The Contemporary Political Play: Rethinking dramaturgical structure* (2017), Grochala details how playwriting can encourage political awareness and generate change through a *politics of structure*, as opposed to placing the focus on creating an

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<sup>9</sup> An algorithm could, indeed, be seen as a linear calculation, one acting in a casual way. However, the systems of algorithmic power are much more complex and networked, as detailed in Chapter 2.2 (Conceptualizing algorithmic power).

overtly political *content*. Indeed, she argues that the contemporary play ought to break free from Aristotelian linear and causal structure, in order to challenge current political powers and create a greater understanding of its structural operation. A play that simply uses political issues as its content, she suggests, can easily end up reaffirming existing power structures through its form, reproducing normative social structures within its dramaturgical structure. Instead, Grochala (2017) suggests that dramaturgical structures have the potential to create change, reimagining social structures ‘through a shift in cultural representations of those structures’ (p.65). In this sense, Grochala places considerable emphasis on social structures *per se*, as these are seen to be crucial to our understanding of what is the ‘proper’ or expected way to act in a given social situation. This means that ‘any rethinking of these structures through art that better enables us to understand how to have agency is a political act’ (2017:21). When power becomes invisible through digital technology (Lupton, 2015:2), agency and democratic accountability is reduced, since we are unable to hold to account that which we cannot comprehend. Hence, a dramaturgical structure able to make visible the hidden power structures within algorithms, has the potential to create change by making power visible and, therefore, accountable.

Grochala draws on the sociologist Zigmund Bauman to establish a model of dramaturgical practices that engages its audience politically through its form. Bauman states that power is becoming increasingly networked, fluid and dynamic (2012). Similarly to Hardt and Negri, Bauman argues that there is a shift away from linear hierarchical power relations where increased globalization, as a result of post-industrial capitalism, is resulting in a kind of interconnectivity between countries.

This is causing complex networks of power, that transcend nation states, and lead to a dislocation between power and politics, where the people with the power to act, are not necessarily governed by political decisions regarding what should be given priority in society (Bauman 2012: viii). Furthermore, Bauman states that this shift has led to a situation where the old ways of acting have become redundant, while new, better ways are still to be invented (Bauman 2012: vii). He calls this phase of insecurity 'liquid modernity' (Bauman 2012:xii). He contrasts this with the preceding phase, 'solid modernity', which was characterised by 'a common belief in the idea of rational positive progress' (Grouchala, 2017:16). In solid modernity, which is synonymous with industrial capitalism in Britain, change appears to occur in a linear, predictable fashion, where the individual is offered 'clear patterns, codes and rules to which one could conform' (Bauman, 2012:7). In opposition to this, liquid modernity is a phase 'characterised by insecurity, uncertainty and unsafety' (Grochala, 2017:16), where the individual is not given any clear direction of where society is heading. Embracing Bauman's concepts of solid and liquid modernity, Grochala suggests a shift from what she describes (adopting, with some irony, the language of Guardian theatre critic Michael Billington) as 'serious drama', which stems from solid modernity, towards plays that employ liquid dramaturgies.

Jenny Lee's play, *Heartbeats and Algorithms*, (Pleasance Theatre, 2015) serves as an example of the limitations a 'serious drama' faces in terms of investigating and challenging the power of algorithms. The play begins with the character, Banks, introducing the audience to an online forum where she is active. She addresses the audience directly, explaining what an algorithm is and how it is being used in a range



of areas in society. She is currently working for a hedge fund and has developed a new algorithm able to monitor people's choices and, from that, learn how a person will act in any number of different situations. To test the algorithm, Banks has decided to use herself as an experiment, which leads to the algorithm beginning to control her life. When we first encounter Banks, she is sitting in her office in the early hours of the morning, with blood on her face; just as the algorithm predicted.

The play goes back and forth in time between the 'present' moment in Banks office and the days leading up to it. We learn about Banks' everyday routine, which is full of interactions with algorithms through sites such as Facebook and Instagram. We learn her thoughts about algorithms and listen to her interactions with the other characters in the chat room. Little by little, we understand that the algorithm she created has predicted her death. However, in the end, Banks realizes that the 'death' predicted could be interpreted as either a virtual or physical death and manages, with the help of her online friend Dinesh, to delete herself from the Internet. This way, she manages to release herself from the control of the algorithm: 'Because I'm a thousand contradictions, not predictions. I'm not the sum of my clicks. I'm a walking vulnerability. An error message. A glitch. A kink. A quirk. I am who I am, whoever that is. And, for now. I'm free.' (Lee, 2015).

This utopian ending, where Banks is able to disconnect and become free from the algorithm, could, arguably, be cathartic for an audience. The story, which is linear in structure, is also educational, in that it informs an audience of what an algorithm is, relays some of its potential uses, as well as how its ability to predict can be

experienced as intrusive and controlling. That said, the image it creates could be seen as simplifying the full power of algorithms, emphasized by the ending where Banks is able to ‘disconnect’, and be free. This ending implies that we are able to choose our engagement; if we don’t want to be subjected to this type of control, we can stop using the Internet. However, the sense of reality as it is conceptualised in this thesis is somewhat more complex. Algorithmic control is not only executed through direct access via a computer screen or smartphone but present in urban spaces through, for example, CCTV cameras. As Lupton (2015) points out, ‘the digital recording of images and audio by people interacting in private and public spaces, in conjunction with security and commercial surveillance technologies are now part of public spaces and everyday transactions, means that we are increasingly becoming digital data subjects, whether we like to or not, and whether we choose this or not’ (p.3). In consequence of this view, there is little possibility for stepping out of the matrix entirely. This point is reinforced by Cheney-Lippold, who points out that web analytic firms have made it ‘nearly impossible to not be incorporated into surveillance networks’ (2011:177). Hence the idea presented by *Heartbeats and Algorithms* - that we would be able to disconnect - could be seen as creating a false sense of agency. The deterministic structure employed in the piece, where the ‘threat’ is identified as coming from one source, one specific algorithm, and the ‘rescue’ is to eliminate this specific source, could be said to follow the dramaturgical structure of a ‘serious drama’, one that reproduces a structure associated with solid modernity (Grochala, 2017:87). In solid modernity, narrative structure is represented in a linear manner and events are driven by cause and effect. Within a contemporary context, however, ‘these structures can be thought of as reactionary because they are inadequate to capture the

complex and ever shifting social structures of liquid modernity' (Grochala, 2017:87). Algorithmic power is not one-directional and visible, it is multiple, simultaneous, and made more or less invisible. In order to generate visibility and understanding of how these networks are able to control human behaviour, we need to find dramaturgies that are able to rethink 'representations of social structures that better enable the social subject to understand how to have political agency *within* the complex mechanisms of globalized society' (Grochala, 2017:87, emphasis added).

Another concern with the representation of reality in *Heartbeats and Algorithms* is the implication that algorithms, and the digital innovations they facilitate, are inherently bad and should, as such, be disregarded. This suggests a very clear and direct thought process for the audience, one where they are told what to think about the subject presented. This position is problematic since it suggests a closing of the mind, rather than an opening to independent critical thinking. Instead, I would argue for Lehmann and Primavesi's (2015) stance that 'the function of theatre as a public sphere requires a dramaturgical discourse that is more ready to pose questions than to give answers and that is constantly reflecting its relation to political contexts without patronizing the audience or insisting on a particular interpretation' (2015:171). That is also why, as noted in Chapter 2.2 (*Conceptualizing algorithmic power*), Foucault's preference for portraying power as 'dangerous' is seen as an apt guide in connection with algorithmic power.

A more complex account of the way in which algorithms control human behaviour can be found in Stacey Gregg's stage adaptation of Kafka's *The Trial*, titled *Josephine*

*K and the Algorithms* (Abbey Theatre, 2017). Just like Joseph K in *The Trial*, Josephine K, played in the original production by Orla Fitzgerald, finds herself on trial, without knowing what she is being accused of. Through encounters with government officials and a voice who, it turns out, is an algorithm (all played by actor Carl Kennedy), she begins to question whether her recorded online behaviour, which includes watching ISIS beheadings, porn and dead bodies of child refugees, has in fact incriminated her. As the algorithm points out in a profile description, 'She's the person that posts about climate change, yet took 14 flights this year. She's the type of person who clicks articles about murderers. She googles during pub quizzes from a toilet location' (Gregg, 2017). Just as this accumulation of data shows, Josephine K is full of contradictory behaviour and she is guilty of consuming content directly linked to human suffering. By making these connections, the play questions whether the audience members themselves are complicit in crimes through their own online behaviour. Hence, the critical message within the play is two-fold. On the one hand, the algorithms and their continuous accumulation of data, on which they make predictions and judgements, are shown as powerful and intrusive tools in society. On the other hand, the importance and effect of individual responsibility is questioned, by highlighting how online consumption and affirmative behaviour, such as re-tweeting and liking, renders one implicit in the invasive apparatus of Big Data.

In terms of structure, the adaptation follows the original *The Trial*. The narrative unfolds in a labyrinth of bureaucratic twists, turns and dead ends, delivered through monologues, dialogues and sometimes through the commentary of the algorithms spoken into a microphone on stage. No one is able to tell Josephine K what is going

on, while, simultaneously, everyone she encounters, from the government officials, detectives and colleagues, to her old boyfriend, tell her not to worry. After initial resistance, she is eventually persuaded to give in and, in the words of the algorithm, stop ‘fighting’ her trial. The final step in the persuasion is a comical yet powerful ‘physicalization’ of an algorithm’s ability to deliver that which people desire. Pointing out that Josephine K loves cats and birds, the algorithm asks her to open a box, which has been present on stage throughout the performance. As instructed, Josephine K pulls from the box a large, round, brown, furry animal, which, as she holds it up for the audience to see, is clearly a ‘cat-bird’. The emergence of this creature produced laughter from the audience. Yet, it came coupled with the striking recognition of how, when one’s desires are being fulfilled, surrendering to a system of control can be alluring. By making this phenomenon tangible, through the appearance of the cat-bird, the familiar behaviour of instant gratification at the expense of freedom and privacy, was made visible.

There is no resolution in the end, no ‘beating the algorithm’, as in Lee’s *Heartbeats and Algorithms*. Instead, Josephine K’s resignation makes visible one of the ways in which algorithms are able to persuade online users into giving up their data in return for pleasure. This is not a linear hierarchical power relation, but rather one where the algorithms and the human mind, in this case that of Josephine K, has become so intertwined and connected, that the idea of disconnecting becomes inconceivable. Hence, *Josephine K and the Algorithms* can be seen as employing a liquid dramaturgy, offering no clear relationship between power and the individual. The audience is not made aware of who or what is behind the exercise of algorithmic

power. They never find out what the trial was about or on whose authority it was ordered, creating a dislocation or veiled relationship between politics, power and the individual. *Someone* is exercising power over Josephine K, but the reason, the politics behind it, remains hidden. Again, this can be understood as an exemplification of liquid modernity, as it reflects a phase in contemporary society ‘characterised by insecurity, uncertainty and unsafety’ (Grochala, 2017:16). By its non-deterministic narrative, it manages to pose questions and leave room for audience interpretation, creating the kind of open and flexible dramaturgical discourse championed by Lehmann and Primavesi’s (2015:717), one that poses questions rather than provides answers.

Turner and Behrndt (2008) suggest similar dramaturgical aesthetics, proposing a theatre that is finding a new relationship to representation, ‘one in which stories can be told, while the modes of telling, the tellers and even the stories themselves may be suspect, ambiguous and multiple’ (2008:187). Such dramaturgies challenge conventional structures without completely disregarding story, leading to a ‘dramaturgy of process and production, one which does not so much plunge into relativism, dismissing the possibility of making meaning, as involving itself in an exploration of how meaning is (and has been) made’ (2008:189).

Having said that, one could argue that there are also limitations to the capacity *Josephine K and the Algorithms* holds for generating political agency. Specifically, for me as an audience member, the performance didn’t lead to any real life changes. I was shown the allure of surveillance and the absurd matrix of algorithms, but this didn’t

necessarily encourage me to take any specific action. On the other hand, someone less informed than myself about algorithmic control might be able to recognise, for the first time, when they are tempted by algorithms to comply. They may also reconsider and change some of their more exploitative online behaviour, by, for example, refraining from consuming content directly linked to human suffering.

With this in mind, Grochala's concept of 'liquid dramaturgy' is not so much directly a call for political action where the audience will take to the streets, as it is about creating critical awareness (which, in turn, can lead to political agency). Specifically, it offers a set of aesthetics aimed at creating dramaturgies that engage with political issues through their structure, accounting for the networked and flexible power structures that underpin contemporary society. This is achieved, in part, through allowing temporal dramaturgies to 'shift from a successive towards a more simultaneous understanding of time', where spatial dramaturgies become 'less concrete and more virtual; plot structures question linear mechanical and socio-psychological models of causation; the focalization of the social subject move from an objective to subjective viewpoint' (2017:17). Together, these dramaturgical strategies offer a model of political theatre that operates 'predominantly through a politics of form as opposed to a politics of content' (2017:17).

These aesthetics are explored in my work. Delivering the podplays through an app allows the spatial dramaturgy to move from the concrete to the virtual space. Time becomes fluid, as the 'beginning' and 'end' of the experience is directed by a networked dramaturgy, where the podplays generate 'side effects' that occur at

dispersed time intervals. The podplays are connected not through linear plot structures or socio-psychological models of causation, but rather through the shared theme of algorithms and power. This, it is claimed, amounts to a liquid dramaturgy, in the sense that the political potential lies not just in the content but also in the way in which the app mimics and makes visible algorithmic systems of control through its structure. To further exemplify, in *FitChip* the app demands the listener to move and records their step count, giving the listener a live experience of how algorithms can insert themselves into our private sphere. Hence, the algorithmically generated ‘side effects’ enact some of the issues raised in the podplays, making the experience expand across different digital platforms and time. In addition, the podplays *Falling*, *Safe*, *Let’s Google it!* and *Drowning* (see Chapter 4.5, 4.6, 4.9) incorporate algorithmic operation within their micro dramaturgies. In *Falling*, for example, the dialogue builds towards a crash in a feedback loop, mimicking the type of algorithmic glitches found in automated trading and Amazon’s pricing algorithms (further analysed in the Chapter 4.5 ‘*Falling*’). Again, the political potential lies within the dramatic structure, since this generates an experience of algorithmic operation.

Ultimately, this is done in order to generate an increased critical digital practice, so that people will manoeuvre through the digital realm equipped with knowledge as to *how* and *when* they are being subjected to the controlling force of algorithmic power. By asking the listener to activate certain functions on their phone, such as GPS tracking, it will draw attention to the existence of these functions, how easily they can be used and abused and how the listener can choose to activate/de-active these functions.



### 3.3 Postdigital performance

The dramaturgies of the podplays also draw on Causey's development of a 'postdigital performance practice' (2016). In line with Hardt and Negri, Causey argues that we are currently experiencing a new kind of biopolitics, one in which 'the life of the individual is at stake' (Causey, 2006:154). As mentioned in Chapter 2.2 ('*Conceptualizing algorithmic power*'), biopolitics reflect a situation where power has become part, not only of reproduction technologies, such as television, but also of communication and information devices.

To counter such systems of control, Causey suggests a 'postdigital performance practice' that considers the affects of the digital by *incorporating* the structures and strategies, discourse and ideologies of the digital, in order to 'resist, or at least understand, the systems of electronic and computational control' (Causey, 2016). To this end, Causey (2016) establishes a series of artistic concepts and/or strategies as significant components of digital and networked thinking, which together form a 'postdigital aesthetic' (2016:434). These include 'asynchronous time registers' and 'multidimensional spatial configurations', where time and space become fluid and flexible within a digital context.

It could be argued that this is precisely the type of dramaturgy created by Blast Theory in *Karen*, where the digital device allows the experience to spread across time

and space. However, the fact that I was presented with episodes of *Karen* delivered in intervals, did not necessarily further my knowledge of computational control. Hence, this dramaturgy does not, in and of itself, render digital power visible. Rather, it is an artistic strategy that offers possibilities in which asynchronous time registers and multidimensional spatial configurations can be manipulated and implemented towards such an end. In contrast, in my own practice, *Dysconnect* allows the side effects to be inflicted on the listener through shifting digital spaces, incorporating email, text message, notifications and Facebook. Computational control becomes visible because of the fact that the app changes avenues of engagement, demonstrating the ease with which such digital devices can claim virtual spaces and user attention. Time-delays could also be used to make computational control visible through, for example, programming certain ‘side effects’ to occur months, perhaps even years, after the listener has activated the app. This fluid use of time would make visible the longevity of digital traces and how algorithmic power reaches beyond moments of active engagement.

Causey (2016) also incorporates ‘the reality of the virtual’ within postdigital practices, which mirror a reality where the virtual and the real are made increasingly indistinguishable. Similarly to the examples of space and time above, I found that creating such virtual ‘mirrors’ did not automatically render digital power visible. For example, in one early draft of a podplay based on Facebook’s EdgeRank algorithm, I sought to create a script that followed the rules of the algorithm, allowing its principles to be mirrored in the dialogue. Certain characters were excluded/included due to overlaps of interest, likes, shares, mutual friends and clicks. However, rather

than making visible the deterministic and exclusive nature of EdgeRank, this dramaturgy generated a somewhat mundane conversation. By following the rules of the algorithm, there was no trace of what was being included/excluded or what principle was governing this inclusion. The act of mimicking EdgeRank, it could be said, simply reproduced its power structure. However, in the podplay *Connected*, (discussed in further detail in Chapter 5.3; script available in Appendix I), I created a networked dramaturgy through a chorus of overlapping lines that arise out of four monologues, spoken simultaneously. This gave an experience of algorithmic connectivity and pattern recognition, mirroring how conversations and information are connected through algorithmic operation, making these functions visible and accountable.

The micro-dramaturgy of the podplay *Falling*, further analysed in Chapter 4.5 (*Falling*), also incorporates ‘the reality of the virtual’ by mirroring the way in which algorithmic trading can cause escalations and crashes. This makes use of another of the postdigital aesthetics detailed by Causey (2016), namely that of ‘bugs’ and ‘glitches’. Bugs are seen as technical failings, while glitches are described as temporary errors, both re-occurring events within the digital world. When the system malfunctions, through a bug or a glitch, weaknesses inherent in the systems are made visible and their operation can be questioned.

Causey (2016) also establishes ‘networked interconnectivity and the transmedial’ as important components of postdigital performance. Interconnectivity between different agents, such as online news sites, political or advertising campaigns and

communication forums, make up the substructure of postdigital cultures and networks. Causey (2016) subsequently states that creating a dramaturgy that draws on this interconnectivity has the potential to make such complex power structures visible. Implementing these within the practice, I again found instances when it worked and others when it did not. For example, an early podplay titled *Ulysses 2.0* (See Appendix H) explored a stream of consciousness steered by algorithms, which kept supplying the character with the content she sought from different digital platforms. Similarly to the podplay about EdgeRank, this failed to make the power behind the algorithmic selection visible. It presented a limited view of the world, but it did not make visible how this view had been limited. In developing the ‘side effects’ for the app, however, I found the idea of incorporating networked interconnectivity particularly useful in terms of exposing algorithmic power. Specifically, allowing the ‘side effects’ to spread across different digital platforms helped make visible how an app can connect to these different mediums and begin to use them to its advantage. Control is executed over the users by way of intrusion, forcing interaction and engagement through the user reading emails generated by the app.

As demonstrated above, the postdigital performance aesthetics set out by Causey are not to be taken as a manual. There is no sense in which, if followed to the letter, it will automatically expose digital power abuses. What the postdigital performance aesthetics do offer, however, are strategies that can be manipulated towards such an end, explored in further detail in Part III (*Practices towards a digital political dramaturgy*).

### 3.4 Absurdist dystopias

The third influence towards the micro dramaturgies of the ‘podplays’ came from plays using dystopian dramaturgies as a way of raising current issues for debate, especially those that centre on or utilize technology. Kelleher (2009) defines the task of theatre that wishes to engage politically as one that opposes the current ‘state of consensus by provoking disagreements of various sorts’ (p. 72), through the construction of other, paradoxical worlds that ‘however brief, however virtual, and however fictional [...] takes its place in the world’ (p. 72).

Indeed, we are in a moment in time when digital technology is becoming part of the mainstream cultural narrative. Novels, theatre performances, movies and television series, such as David Eggers’ *The Circle* (2014), Jennifer Haley’s *The Nether* (2014), Alex Garland’s *Ex Machina* (2014) and Charlie Brooker’s *Black Mirror* (2011-present), all depict situations where human lives are in some way ruled by or lived through digital technology, set in a near dystopian future.

Trish Reid (Glasgow University, 2018) points out the significant number of British playwrights are describing a dystopian near future, exemplified by plays such as Rory Mullarkey’s *The Wolf From the Door* (2014), Alistair McDowall’s *Pomona* (2014), Zinnie Harris’s, *How to Hold Your Breath* (2015), Lucy Kirkwood’s *The Children* (2016), EV Crowe’s *The Sewing Group* (2016) and Stef Smith’s *Girl in the Machine* (2017). According to Reid, these dramas ‘do not re-inscribe socio-political problems, or the status quo, by pretending to be objective records of the real world.

Instead they create alternative fictional near-future-worlds, exploratory dystopias that deliberately perform anxiety-inducing and estranging critical interrogations of current cultural and political concerns' (Reid, 2018). Describing alternative 'near-future-worlds' is inherent to the literary genre of 'dystopia', where social, political and economic problems are furthered to present a nightmare vision of what is to come (Booker, 2010). At the heart of dystopian writing lies a social critique (Thiehen, 2016:59), often with scientific and/or technological advances as subject matter (Thiehen, 2016:59). Essential to dystopian drama is the relationship between 'society in the present and its trajectory towards and within an unknown future' (Kaplan, 2015:69). Issues 'concerning the collective destiny of humanity, are discussed' (Klaic, 1992:6), offering the audience an 'embodied social critique' (Thiehen, 2016:60). Dystopian dramas could, therefore, be seen as inherently political, in the sense that they seek to generate agency within its audience, by revealing possible future repercussions of current behaviours. The idea is, as Thiehen (2016) points out, that dystopian plays seek to lead their audiences to relate to the characters of the play and adopt their journey as their own. In other words, the audience is encouraged to reconsider 'what we hope our future looks like or never becomes' (p. 61). Through this identification, the audience might be moved to continue the struggle of the characters in their own lives, making real life changes in order to avoid the depicted future. In Stein's words, dystopian fiction 'appeals to emotions to motivate people to change' (Stein: 2016:57), meaning that the reader of dystopian fiction, traditionally needs 'to be "moved" by the plot to grasp the message and then hopefully put it into practice... When the fictional rebellion finally fails because the system proves too

strong, the readership should feel pushed to continue the (by then usually dead or subdued) protagonist's project in their own lives' (Tönnies, 2017:159).

An example of a drama using such a dystopian dramaturgy is Mike Bartlett's *Game* (The Almeida, 2015). *Game* depicts a speculative future where the audience witnesses a couple whose domestic life is filmed and broadcast as part of a Big Brother-style reality TV-show. In addition, voyeuristic viewers pay to come into the audience and shoot at the couple with tranquilliser darts. The dystopia served to raise the issues of voyeurism, gaming, reality TV and how we are all more or less complicit in its machinery of exploitation. For me, as an audience member, however, the fact that the characters shooting at the couple were depicted as starkly unsympathetic (an alcoholic, bickering, upper class couple; and a group of loud, aggressive, drunk young women on a hen party) created a strong distinction between 'victims/heroes' (the couple) and 'villains' (viewers/shooters). This did not generate agency, as I remained a spectator of other people's abusive behaviour and, therefore, I did not find myself 'moved' to change.

This illustrates one potential limitation, in terms of generating agency, inherent within dystopian dramas that express an explicit political message. Instead, Tönnies suggests a move from *dystopia* to *absurdist dystopia*. As detailed in Section 2.2, contemporary society has made it increasingly difficult to break free from current power structures. Tönnies suggests that absurdist dystopias manage to capture this state of being, this feeling of being stuck and unable to break free, which in turn can lead to critical reflection. For example, the absurdist language used by Carol Churchill in her

dystopian play *Far Away* (Royal Court Theatre, 2001) creates an experience where the audience is moved to critical thought by the absurdist elements within the dystopia. If we look at the third act, animals, wind, and air are used interchangeably as enemies: ‘Mallards are not a good waterbird. They commit rape, and they’re on the side of the elephants and the Koreans. But crocodiles are always in the wrong’ (Churchill, 2003:39). By making the conversation increasingly absurd in its description of ‘the enemy’, characters ‘adhere to familiar thought structures (us versus them), [...] which in turn satirize our own destructive categories’ (Diamond, 2009:140). Through making the familiar absurd, we are able to look anew at destructive behaviours that may have become normalised and, through this, recognise potential faults and flaws in our own behaviour.

Tönnies (2017) sees this mix of absurdist and dystopian aesthetics as part of a trend in contemporary British political theatre. She highlights a move from plays created as direct political interventions, exemplified by In-Yer-Face Theatre or Verbatim/documentary plays, towards plays that address power relations in more abstract terms. Some of the defining features of dystopia, such as relatable characters and set plot structures, evident in Haleys’ *The Nether* and Bartlett’s *Game*, become less distinctive in the fusion with the absurd and its denial of rationality. Coherence or comprehensible patterns, give way to conspicuous repetitions, circularity and immobilization. ‘As a result,’ Tönnies suggests, ‘what dominates is a powerful impression of both characters and spectators being “stuck” – conversations simply cannot move forward in any meaningful way in the world of the play’ (p. 164).



Headlong's production of George Orwell's classic dystopian novel *1984* (Headlong/Nottingham Playhouse, 2013) demonstrates such tendencies. In Duncan Macmillan and Robert Icke's adaptation, the protagonist, Winston, has numerous conversations in the canteen with his colleague O'Brien, which are repeated continuously until they become absurd. The repetition and circularity make visible an engineered thought process, resulting from an overpowering state control. Rather than giving the audience a clear political message, the absurdist element made for an active viewer experience, where one had to make connections between how the absurd reality of the play mirrored that of contemporary society.

In addition to the stage performance of *1984*, political agency was encouraged through the app *Digital Double*. As detailed in Chapter 2.6 ('*Theatre and mobile apps*'), the app provided a summary of the user's online identity, a 'digital double', generated by commercial companies, based on the user's tracked and monitored online activities (Headlong, 2015). This related to the central question of the play, namely: 'Is Big Brother watching you?' It gave a tangible, real-to-life experience of how we as citizens are being surveyed, bridging the fictional landscape of the play and the reality of the audience member. It also supplied the user with practical information as to how they may be able to limit the way in which their personal information was being used.

The micro dramaturgy of absurdist dystopia, within the narrative of the performance, is coupled with the immediate, personal and interactive digital dramaturgy of *Digital Double*. The play looks to inspire independent, critical thoughts while the app

encourages real, immediate action. This thesis strives to achieve a similar affect: where, on the one hand, the micro dramaturgy of each podplay aims towards generating independent critical thoughts relating to algorithms and power. Meanwhile, in tandem, the ‘side effects’ generated through the app strives towards giving the audience a direct experience of algorithmic control. Algorithmic power is, in this way, both depicted and experienced through the performance, leading to the type of dramaturgy suggested by Turner and Behrndt (2008:189); one that challenges conventional structures without completely disregarding story.

### 3.5 Chapter summary

This section detailed three political dramaturgies used in the creation of the micro dramaturgies. Firstly, Sarah Grochala’s *liquid dramaturgy* refers to a political theatre that operates through its dramatic form, rather than through the content being overtly political. This is principally because a play with a linear, deterministic structure can create a false impression of power being executed in a lineage. Instead, as detailed in Chapter 2.2 (*‘Conceptualizing algorithmic power’*), when algorithmic power is operating through fluctuating, digital networks, such dramaturgical structures reflect an inaccurate view of that power. Similarly, plays with a clearly articulated, simple message risk potentially narrowing the scope for critical consciousness, rather than one that gives the audience the agency to think for themselves. Grochala, therefore, suggests a liquid dramaturgy that offers a veiled relationship between power and the individual, one that poses questions rather than supplying fixed answers. She proposes a set of aesthetics where time moves from being linear to being simultaneous, where

space becomes less concrete and more virtual, and where the focus is no longer on socio-psychological models of causation. This inspired the development of the podplays, as the performance moved from the concrete to the virtual space. Through making a series of separate podplays with ‘side effects’ happening at different time intervals, time became networked rather than linear. This offers a new model of practicing theatre through digital devices. Additionally, the macro dramaturgies of the podplays *Falling*, *Safe*, *Let’s Google it!* and *Drowning* are constructed in such a way that they mimic the algorithmic structures explored within the narrative. This constitutes a *politics of structure*, where the political potential lies within the podplays offering a listening experience of algorithmic operation.

The second political dramaturgy discussed in this section was Matthew Causey’s (2016) ‘postdigital performance practice’. In order to resist and understand a power that exists within communication and information devices, Causey (2016) suggests a practice that incorporates the structures, strategies, discourse and ideology of the digital. This includes ‘asynchronous time registers’ and ‘multidimensional spatial configurations’, where space and time become fluid; ‘the reality of the virtual’ where the virtual and the real are made increasingly indistinguishable; ‘networked interconnectivity and the transmedial, reflecting an increased digital connectivity; and bugs and glitches, which reflect the key strokes of the digital and can make its operation visible. These aesthetics offer strategies towards the exposure of digital power, which are implemented within the micro-dramaturgies of the podplays.

Thirdly, this section has detailed absurdist dystopias as set out by Tönnies (2017). The term, ‘absurdist dystopias’, describes a drama that captures a state of being stuck within current power structures. Coherence and/or comprehensible patterns, give way to conspicuous repetitions, circularity and immobilization. While dystopia as a genre offers visions of the future, the absurd element seeks to highlight potential flaws and faults of current, normalised behaviours.

Having identified the main elements that comprise the micro dramaturgical form, Part III details how these were used to reveal the ‘power of algorithms’ and facilitate political agency in practice. However, before we go into this analysis, I would like to change the focus somewhat and account, in further detail, for the practical process that led to the development of *Dysconnect*.

## PART III: The ‘Practice as Research’ Process

### 4. From stage to app.

To give a more detailed account of the practical process that shaped this ‘practice as research (PaR) project, I shall now take a leap back to its very beginning and account for how initial ideas were dismissed and/or developed. I will also account for how the collaborative process shaped *Dysconnect* and how financial constraints limited and influenced the development.

#### 4.1 Verbatim and site-specific

When I began this PaR in 2014, I first envisioned that the practice would become an on-stage, part verbatim play developed together with BeFrank Theatre Company. Having worked previously as a dramaturg with BeFrank, which specialised in verbatim and documentary theatre, I pursued the idea of finding personal accounts of malfunctioning algorithms, with a view to using these as the dramatic basis for a play with the working title ‘The Glitch’. The image on the next page shows an early outline of the project. The idea was to locate intriguing real life stories of when an algorithm had malfunctioned and affected a person negatively, using these instances as the basis for dramatic stories. However, research into the nature of algorithms threw doubts on this approach. As I was learning about the networked nature of algorithmic power, the idea of building a linear ‘true to life’ story in order to expose

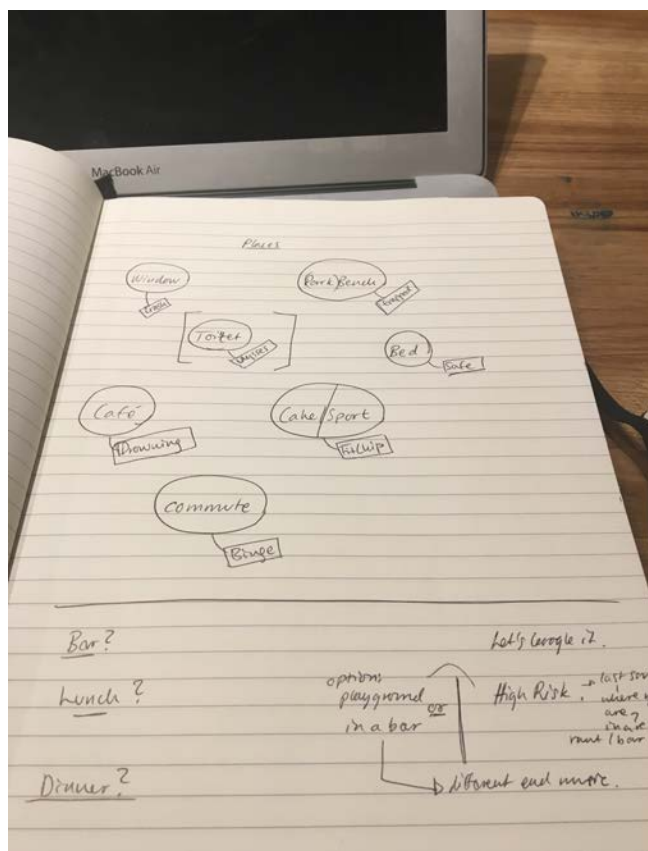
Figure 6. Screenshot of an early development stage.



such a power seemed forced and inadequate. If algorithmic power was networked, it could not be exposed by shining a small light on one of its many connections, expecting it to illuminate the whole. Focusing on the experience of one person also threw up difficulties, as this narrowed the story to one person's account of an event, rather than exploring the algorithm itself in-depth. For example, a person who told a story about having been mis-sold merchandise because of a rogue algorithm driving up the price, offered little insight into the power structures behind the algorithm or the function of the glitchy algorithm itself. By focusing only on the most dramatic instances of algorithms malfunctioning, I also evaded its often mundane usage and everyday dangers. These realisations meant that I decided to leave the idea of verbatim behind and instead embark on the research and practice detailed above in Part II, Chapter 2. This meant leaving the envisioned collaboration with BeFrank Theatre Company and to instead, begin to search for new collaborative partners.

The second idea that I explored was to make the practice site-specific. This drew on my own experience of how immersing an audience within an environment could create powerful connections between that which was acted and what is simultaneously experienced, through being within that space.

**Figure 7. Extract from diary - exploring site-specific.**



As demonstrated by the image in Figure 7, I envisioned making a series of podplays that would relate to a specific place. For example, when accessing the podplay *Drowning*, the audience member would be encouraged to go and listen in a cafe, placing themselves within the environment of the podplay. However, one possible difficulty with this, was that the audience

could easily disregard the instruction and, instead, chose to listen to it in a location of their own choosing. Another potential problem might be that the place, say a cafe, would be full of sounds that would instead hinder the listening experience. These considerations led to the exploration of creating listening stations.

## 4.2 Listening Stations

At this point in the development, I began collaborating with director Eleanor Taylor and creative producer Carla Almeida, to explore the idea of making an immersive headphone experience. This was carried out in two separate R&D's, one at Ugly Duck Tannerstreet (London) and one at Curve Theatre (Leicester).

The podplays themselves were developed with support from Curve Theatre, Leicester, and the Arts and Humanities Research Council, England, in two separate periods of rehearsal and recording (one in February, 2017 and the other in March, 2018). The second development was informed by the lessons learned from the different modes of presentation, detailed below.

### *4.2.1 The FitChip Room*

The first idea that we explored, was to develop an immersive listening room where the listener would engage with the material in a setting designed specifically to enhance or immerse the listener within the podplay. As part of the festival Real/Virtual (London, 2017), organised by UglyDuck@Tannerstreet, we created an exercise/eating room where the podplay FitChip was playing on repeat. The idea was to test whether engaging the listener in the act of eating/exercising while listening to the podplay, would enhance the listening experience. Senses, such as taste and physical exertion, would, it was hoped, make the story within the podplay feel almost



*Figure 8. Listening station: The FitChip Room.*



experienced. The image above (Figure 8) shows one audience member inside the room, eating candy while listening.

However, when talking to audience members following the experience, it soon transpired that although people liked being in the room (eating/exercising), the activities were drawing focus away from the audio content, rather than amplifying it. While exploring/interacting, people forgot to listen. When asked what the room was actually about, no-one had sensed the significance of algorithms.

#### *4.2.2 The Audio Trail*

With this in mind, we decided to try a different approach. Rather than making immersive rooms, we designed an audio trail around Curve Theatre during their festival Inside/Out. In the FitChip-room, the audio had been playing through speakers, something that, we imagined, contributed to the sound fading into the background. Instead, we designed listening stations where the audio would be played through headphones, as demonstrated by the images below. Each headphone was attached to a wooden box with a red button. When one pressed the button, the audio played from

*Figure 9. Man listening to Ulysses 2.0 (left) and listening station for Drowning (right)*



the start. The boxes themselves were placed in a setting staged to relate to the location of the podplay; one was in the theatre's cafe, another in an armchair/living room, another next to a toilet. After the festival had ended, it was clear from observing the audience that this mode of presentation had several flaws. Firstly, very few people engaged with the listening stations. When asked why that was, people replied that they were unsure of what to do with them, how to engage with them, or simply didn't notice that they were there. Secondly, few people actually listened to the end of the

podplays. It seemed as if the environment distracted the the audience rather than engaged them.

Further research, conducted into the nature of algorithmic power, pointed towards other problems with the idea of making the work site-specific. Hardt and Negri (2001), for example, wrote about how algorithms disregarded physical boundaries and acted through interconnected networks. With this point in mind, it seemed as if grounding the theatrical pieces within physical places, over-simplified algorithmic operation and disregarded its omnipresence. In other words, the power of algorithms is not linked to a cafe or confined to a person's bedroom. The devices that algorithms operate through are instead carried around by people through multiple places. This was one of the realisations that led to the macro dramaturgy of placing the work within the smartphone, rather than within a distinct location.

**Figure 10. Diary extract - exploring ideas of interactivity.**

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palaeontologist must reconstruct a past event – the crime – on the basis of its remnants. Bennett argues that the museum as it was invented in the nineteenth century is another backteller, a narrativemachinery.  
At least, it seems so. For as Tony Bennett has shown in his illuminating (91)

Could think of a space that creates certain a certain type of behavior – and link this behavior to the content – thinking about the everyday as actions that can inform – rather than mirror

Use 'Reality and Fiction' and the idea of 'in-betweenness' as WAY OF ANALYSING THE MIRROR-podcast

Page 93  
At any tram station in the centre of Munich youwill always find people carrying luggage; in any town men wearing blue shirts are on their way – against whom the voice warned in Frankfurt; and in all public buildings thewatching eye of a camera is installed – to which the voice constantly referred in order to supply evidence of the chase. Therefore it was hard, if not impossible, for the spectator/visitor to get a clear indication of whether actors were playing the parts of the pursuers all over the city or whether he or she was just imagining that the people to whom the voice referred were hunters. To

Idea of referring to objects/people that will, in all likelihood, be present in that space.

Since such dichotomous pairs like the 'real' and the 'fictional' serve not only as tools to describe the world, but also as regulators for our behaviour and actions, their destabilization, their collapse, results, on the one hand, in a destabilization of our perception of the world, ourselves and others, and, on the other, in a shattering of the norms and rules that guide our behaviour. From

**Ideas for interactivity (to ask a coder)**

**Is it possible for an Iphone to record live the environment the listener is in and play it back 'live'?**

**Could a text message be sent in real time to the user, as they are listening to one podcast?**

**Also think about limitaitons/possibilities that these give**

**Everyday as a contested space? Rather than create 'performance spaces' in the everyday (like in everyday moments) can there be performance alongside or within the everyday – manipulate what is, rather than generating/recreating...?**

As demonstrated in the circled diary extract above (see Figure 10), the bottom paragraph asks whether, instead of creating performance spaces in the everyday, the performance might be able to happen *alongside* or within the everyday and, through that structure, mirror algorithmic operation, making it comprehensible and visible for critique. This shift in format, from a physical to a virtual space, meant that once again I parted ways with my collaborators and began looking for new collaborative partners.

### 4.3 App development

#### *4.3.1 Funding constraints*

Before going further, I would like to mention briefly the difficulty in securing sufficient funding for a PaR project. This is of relevance because such difficulties restrict and influence the artistic choices, shaping the development of the final outcome.

PaR sits, in my experience, somewhat awkwardly between academia and the arts, in the sense that many of the regular streams of funding for arts projects (such as, for example, Arts Council England) specifically exclude projects existing within a formal educational programme. At the same time, universities, such as my home university, University of Birmingham, have no available funding to be put towards the development of PaR projects. Being the recipient of an AHRC-scholarship, I was able to apply for a ‘Student Development Fund’ (SDF). However, the SDF states specifically that funds cannot be given towards paying salaries. Having personally

consulted the Senior Management Committee of the AHRC, I was informed that the organisation had no other additional funding streams available. This is problematic when one is looking to develop something that requires obtaining different skills to those held by the principal investigator. For example, I consulted fellow academics and artists who have developed apps as part of their practice, to find out roughly how much such collaborations had cost them. Dr Sophie Hadfield-Hill, at the School of Geography Earth and Environmental Sciences at University of Birmingham, and Katie Day, Artistic Director of the immersive theatre company The Other Way Works, informed me that the regular fee for collaborating with an app developer was around £500 per day (amounting to, in the case of Dr Hadfield-Hill, £20,000 for the complete development of her app). Perhaps needless to say, my stipend of £1100 pounds per month, could not cover such expenses.

Instead, I was advised to search for collaborative partners within the University (i.e. to find a fellow student that would be prepared to do the programming required, for free). I proceeded to contact the computer science departments of University of Leicester, University of Nottingham (including the Mixed Reality Lab) and University of Birmingham. After receiving no expressions of interest, I began searching for computer scientists who might share my interest in algorithms and privacy, and I widened my search to include my home country, Sweden. This is how I came across Dr Lothar Fritsch, a German computer scientist working at Karlstad University in Sweden. He found the project interesting and suggested that the app development would be offered within the framework of Karlstad University's Master's degree in Computer Science. As such, it would be part of the learning, rather

than an extra project undertaken for free. At first, we agreed to make my project available as an elective Masters dissertation, the project description seen in Figure 11 below.

*Figure 11. The Master advertisement sent to students.*

November 10th, 2017. 30hp Computer Science / Engineering Degree Project Period Spring 2018

**Master thesis (E-level): Algorithmic Side Effects – An Interactive App for Audio Theatre**

**Supervisor:** Dr. Lothar Fritsch, Computer Science Department, Karlstad University, Sweden, mail: [REDACTED]

**Co-Supervisor:** Amanda Fromell, dept. of Drama and Theatre Arts, University of Birmingham, UK, mail: [REDACTED]

**Project area:** Smartphone app, interactive audio drama, gamification, mobile tracking, privacy invasions

**Supervision languages:** Both supervisors speak English and Swedish.

Project outline

I'm looking for one or more students who are interested in working on an artist project using a smartphone app to create **gamified**, interactive audio drama pieces. The app will appear to the user as an audio player, enabling them to access a series of short audio drama recordings ('PlayPods'), each dealing with some aspect of algorithmic control (e.g. online surveillance). Behind the appearance of an audio player, the app will generate various "side effects" related to the PlayPods and the listener's own location and/or online profile. For example, after listening to a PlayPod about location tracking, the user may be sent a text message suggesting what they should wear, depending on the weather specific to their location. The app will involve a kind of artistic hacking that mirrors and makes use of commercial practices, but with the aim of generating critical awareness, giving the audience a direct experience of the power of algorithms in everyday life.

Technological framework

Students will discuss the particular side effects with the participating artist, investigate their technological feasibility and produce, together with the supervisors, a plan for their implementation.

The project will require the following activities from the students:

- Capture, investigation and specification of "side effects" and research how they will get technically implemented;
- Production of an app that can play audio, extract information from phones, and communicate with a "game controller" (either by sending messages to a human or by connecting to a server, depending on the output of the specification step above)
- Research, planning, implementing and testing selected "side effect" interventions with the artist, running a prototype of the app;
- Writing of a master thesis report summarizing development and prototype deployment.



However, my project would be competing with commercial companies, which also offered the students project briefs within the context of a Masters dissertation. This meant that the chances of students forfeiting what was, essentially, an internship with a future employer, to develop a theatre app with a PhD-student, were slim. Unsurprisingly, none of the students chose my project.

This halt in the development led me to submit a small application for £900 to the SDF for the development of a simple prototype of the app. To circumvent the issue of applying for a 'salary' in the application, I stressed how the development would be collaborative and how my own learning would be essential to the process. The application was successful and Alex Peckham, former Technical Lead on Blast Theory's theatre app *Karen*, was brought in as a collaborator to create a prototype of the app. The funding restrictions, however, meant that we only had time to create a simple interface, where two podplays played alongside imagery. Creating digital side effects were immediately deemed too time-consuming, as Alex estimated that the preliminary research alone would take up to a week per side effect.

At this point, Lothar, with whom I had kept in contact, suggested offering the development of *Dysconnect* as the elective course, 'Computer engineering project' (15 ECTS credits), which forms part of the final year Masters in Computer Science, at Karlstad University and runs during the Autumn term. This was different to the Masters dissertation, in that it was offered as a group project and, crucially, it was not competing with other employers. The project was taken up by Martin Wahlberg, Daniel Larsson, Daniel Steinvall and Armin Mangafic, supervised by Dr Fritsch and myself.

Before I move on to further discuss the collaboration that followed, I would like to mention some other implications, in terms of funding, inherent with this method of working. Since the students are engaged to work on the project for the duration of the specific course only, there can be no additional programming done after the course

has finished. This limits the afterlife of the project. For similar reasons, no data was sent to any external server, since there would be no-one to oversee such facilities following the completion date. Any programming of demands would have to remain local, on the listener's smart phone. This also meant that we were unable to collect data which could have documented the listeners experience (for example, it could have informed on how many people listened through the whole piece, when/if they paused etc). We were also unable to conduct large audience testing, since we did not have the time to conduct re-developments of the final prototype. Lastly, there were programming choices that had to be made because of time restrictions relating to the completion of the course, which shaped the final outcome of the app. These will be discussed in further detail below.

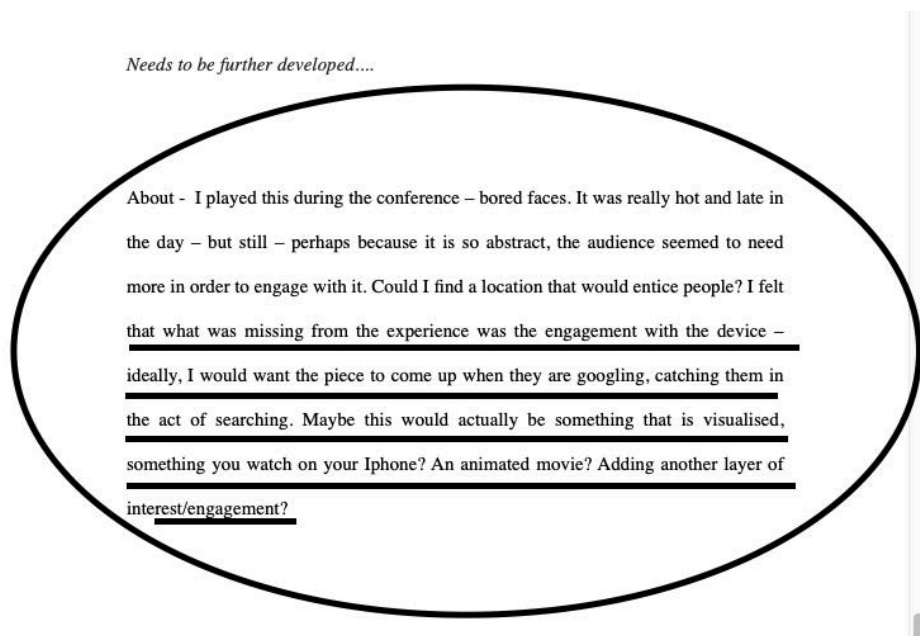
#### *4.3.2 Early prototyping*

As mentioned above, a small SDF from the AHRC allowed me to collaborate with Alex Peckham on the creation of a small prototype of the app. From this phase, three realisations emerged. One was the importance of visual content in order for the audio to become engaging. This was also based on an early audience demonstration of the podplay 'Let's Google it', played to an audience during a conference for Midlands3Cities scholarship holders in 2017. As demonstrated in the diary extract below (see Figure 12), the audience seemed to disengage after having listened for a while. This sparked the idea of adding visualisation in order to further engage the audience and ground the experience within the smartphone. This development subsequently allowed content complementary to the podplays to be added, enriching



the individual pieces. The second artistic decision was to create speech bubbles with which the app communicated with the listener, seen in the image below (Figure 13).

*Figure 12. Diary extract - reflections regarding engagement.*



*Figure 13. Prototype front image of the podplay Connected.*



This aimed to create the impression of a private conversation aimed specifically at the listener, allowing him/her to engage in a ‘conversation’ of sorts with the technology. The third realisation, also mentioned in Chapter 4.5.1 (*Funding constraints*), was how time consuming and, therefore, expensive the development was going to be. Many of the side effects had to be thoroughly researched, coded and implemented, written ‘from scratch’ rather than copied and pasted from pre-existing code.

#### *4.3.3 Dysconnect as ‘Computer engineering project’*

The development of *Dysconnect* and the connections between dramatic content in the podplays, side effects and visuals, will be analysed in detail in Part IV. Before moving on, however, I would like to address specifically how financial, ethical and legal constraints came to influence the development, as well as shining light on how the cross-disciplinary collaboration allowed the project to grow in new directions.

The collaboration with Karlstad University began in September 2018 and ran until January 2019. It did not build directly on the prototype developed with Alex Peckham, but it did incorporate the three elements, mentioned in the text above, in the aesthetic choices.

The collaboration constituted the module ‘Computer engineering project’ (15 ECTS credits), which formed part of the final year Master of Computer Science, at Karlstad University. The group consisted of Martin Wahlberg, Daniel Larsson, Daniel Steinvall and Armin Mangafic, supervised by Dr Fritsch and myself.

As seen in the figure below (Figure 14), the work started with defining a plan for development and researching its requirements. The students and I had weekly meetings where we discussed technological restrictions and opportunities that emerged from their research.

**Figure 14. Timeline for collaboration with Karlstad University**



The period of research was followed by development, where I tested and gave feedback on the app as the work progressed. Through this process, algorithms were implemented not only in the micro dramaturgies and content of the podplays, but in the actual construction of the app. For example, an algorithm counts the steps of the user from the point at which they download the app, which then determines what type of response the user receives in the form of an email. Algorithms change images at specific times during *Drowning* and *High Risk*, trigger vibrations in *Falling* and *FitChip*, and collect the user’s location throughout the experience.

The process was both collaborative and creative. I brought initial ideas to the students but they were not set in stone. Instead, I encouraged the students to come up with their own creative ideas and solutions. For example, as seen in the project specification below (see Figure 15), I had initially suggested collecting the listener's step count and sending this in an email, as a side effect for the podplay *FitChip*. I also suggested showing these results in comparison to other listeners' step counts.

*Figure 15. Extract from the collaborative process (email) 1.*

### **FitChip**

#### *Synopsis*

Sarah is being pressured by her mother, Kim, and Kim's colleague, Sharon, into implementing a 'FitChip'. A FitChip is a fictionalised version of the wearable and mobile activity tracker 'Fitbit', which 'constantly measures the acceleration of your body and algorithms convert this raw data into useful information about your daily life, such as calories burned, steps, distance and sleep quality' (Fitbit Inc., 2014). Rather than a wearable fitness tracker, the technology has, in a dystopian twist, morphed into an implant, a **fitchip**, which is placed directly into the body.

#### *Side effect (to be discussed/developed)*

Idea: The side effect is an account, sent via text message, taken from the time when the listener downloads the app, counting how many steps the listener takes per day, generating an average step count. Also think it would be fun if we could make a competition between the different listeners so that it says something like - compared to our other listeners, this puts you in 'the bottom 10 per cent'...

#### *Visual*

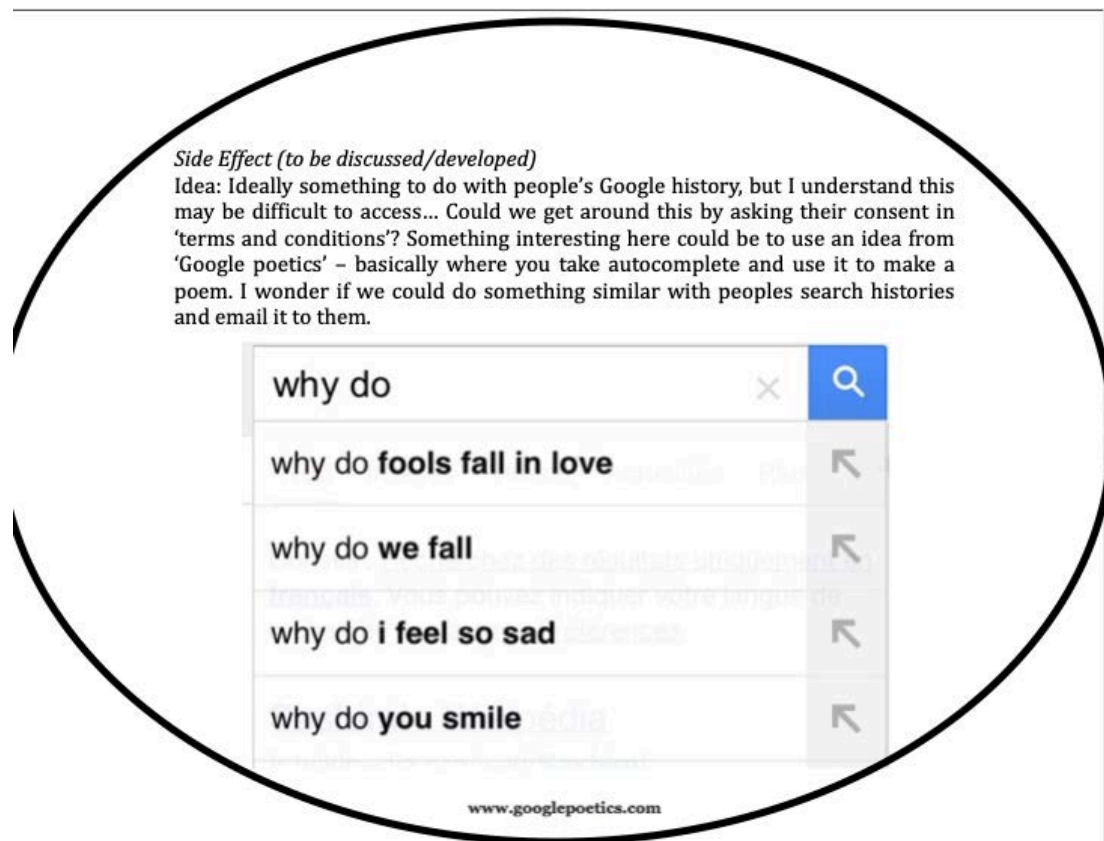
However, the latter suggestion was not possible without sending data to an external server, which, as described in Chapter 4.5.1 *Funding constraints*, we were unable to do. Instead, the team suggested creating a side effect that meant that the podplay would only play if/when the user was moving. When he/she stops, it would begin to

vibrate and a speech bubble would appear telling them to keep walking. This could be accomplished by creating a pedometer that shows current steps while listening (running non-stop in the background) and a motion detector to check whether the user is moving or not. Interesting to note here is that I would not have made such a suggestion, since I assumed that this type of application would be too complicated. Hence the collaboration pushed the project beyond my own artistic vision and grew with the imagination and skills of the Masters level computer science students. Similarly, I had not developed an idea for a side effect relating to *Falling*, only ‘something along the lines of speed’, as stated in the project specification. The students came up with the suggestion that they could make the phone vibrate alongside the sound of the beating heart heard in the audio. This vibration created a haptic sensation of the speeding feedback loop explored in the podplay.

These examples are testament to the importance of this kind of cross-disciplinary collaboration in creating innovative new work at the intersections of theatre and technology.

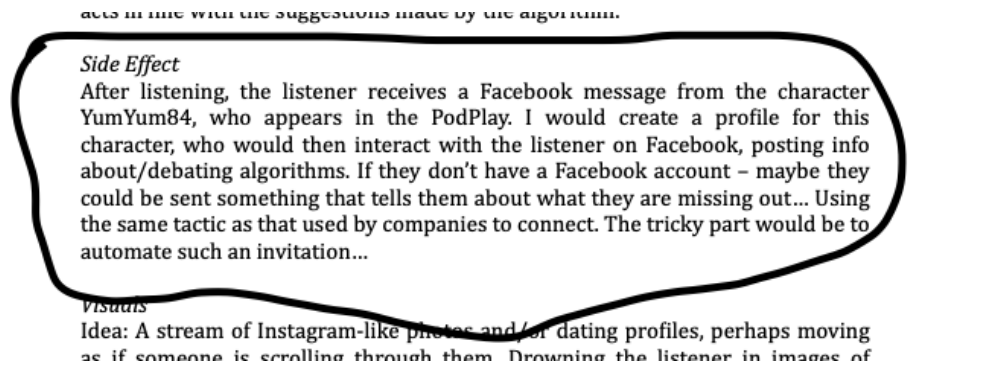
Moving on, other side effects were dismissed due to privacy issues. As one of the students commented, ‘everything is possible, but not everything is legal’. As shown in the circled extract below (Figure 16) from the original project specification, I had envisioned a side effect for the podplay *Let’s Google it!* that would access and display people’s Google history. However, this was not deemed legally feasible.

*Figure 16. Extract from the collaborative process (email) 2.*



Time restrictions also influenced the development of side effects. As seen in the image below (Figure 17), I had originally envisioned that the listener would, after having listened to *Drowning*, receive a Facebook request on Facebook from the character YumYum84, found within the podplay. Creating a bot that would execute this automatically was possible, but deemed too time consuming. As an alternative, we decided to create an automatic email directed to me with the listener's profile details. If they used Facebook to log in, I would be able to see this and then proceed to engage with them manually by acting as YumYum84. However, this approach proved ineffective, as few users logged in via Facebook and, subsequently, we disregarded the idea.

*Figure 17. Extract from the collaborative process (email correspondence) 3.*



Another issue that affected the development of the practice relates to ethical considerations, which also links to funding restrictions. As mentioned previously, we were unable to send data to external servers since there would be no one to service these after the project ended. This meant that all side effects in the form of emails and text messages were erased when the phone ran out of battery or was turned off, as the commands remained local on the phone. This presented limitations to my original idea of programming side effects that would occur months after the event, since it relied on the phone to never be switched off. At the same time, there was also a question mark regarding the ethical implications of actually mining peoples' data in order to expose algorithmic power. Could we guarantee that the data we collected remained safe? Could we guarantee that our practice was in-keeping with European data protection law? How did the law differ (if at all) between Sweden and the UK, and, if so, what country should set the precedent? These are questions that, with sufficient funding, could have been answered with the involvement of a lawyer, who

would be able to instruct us and draft legally viable and binding terms and conditions, ensuring the legal legitimacy of the project. Without this type of funding, we remained cautious when it came to extracting data from the users. For example, the podplay High Risk explores criminal justice algorithms and whether or not a person's life pattern can determine if they are running the risk of becoming a criminal. In the initial project specification, circled in the image below (see Figure 18), I suggested extracting information from the listener and using this to generate a risk score. In the end, we deemed this to be too difficult in terms of obtaining the right consent from the listener to gain access to such information. Instead, we asked the listener to fill out a

*Figure 18. Extract from the collaborative process (email) 4.*

This idea was inspired by work carried out by Richard Berk, Professor of Criminology and Statistics at University of Pennsylvania. Berk is developing an algorithm that he claims would be able to predict, from birth, the likelihood of a person committing a crime by the time he or she turns 18 (Baustein, 2016).

*Suggested Side Effect (to be discussed/developed)*

Idea: After listening to High Risk, the listener receives a text message, detailing a risk score using a classification algorithm. This is a highly subjective risk score compiled of statistics collected from their phone (such as age, gender, location, occupation) steering towards the absurd. Imagine that it says something like: you have been categorised as xxx... We strongly suggest that you change xxx. The idea would be to present something almost comical/absurd – reflecting the precarious nature of prediction algorithms, how they force people into inadequate categories. Of course, we would need to consider what type of information we are able to access legally etc... Something to brainstorm ©

*Visuals*

The background sounds in the PodPlay follows an app played by Emma, which contains sounds that are designed to make babies sleep. Visuals follow the background sounds – an image of a washing machine, an image of a busy road, rain, heartbeat, etc. perhaps there is an interface in-between, when Emma changes that sound.

questionnaire which formed the basis of a risk score. With sufficient funding, however, extracting information directly, without the knowledge of the listener, would



arguably have had a stronger effect in terms of demonstrating how vulnerable we are to algorithms mining our data.

Another idea that was disregarded for similar reasons, was to incorporate images from the photo album on the person's phone, running these images as visuals during High Risk. We also discussed the possibility of recording sounds from the listener and then playing this back at the end of *Safe* (which investigates the intrusive aspect of the Internet of Things). Although both these ideas were deemed possible to implement technically, they were discarded because we felt that the privacy breach was too great without sufficient legal backing.

#### 4.4 Chapter summary

In this Chapter, I have accounted for the artistic process that led to and shaped the development of *Dysconnect*. The initial theatrical form of 'verbatim' was adjudged to be unsuitable in terms of challenging algorithmic power because it limited the story to a linear form and personal accounts, when algorithmic power, instead, proved to be networked and multiple. Experiments in making the performance site-specific were carried out, specifically through an interactive room and physical, fixed location listening stations. Both these approaches proved inadequate; the activities within the interactive room diverted attention away from the audio story, while the listening stations were difficult for the audience to engage with. Following further research into the nature of algorithmic power, I decided instead to create a performance that would attempt to mirror algorithmic operation through its delivery form, making it

comprehensible both through its macro and micro dramaturgy (as detailed in 4.5 *App Development*). This introduced a shift from a physical space to a virtual space, which, in turn, came with financial constraints and difficulties, described in 4.5.1 *Funding constraints*. Following a brief development phase funded by the AHRC (detailed in 4.5.2 *Early prototype*), I pursued a collaboration with Masters students at Karlstad University Sweden. Chapter 4.5.3 *Dysconnect as 'Computer engineering project'* provided an account of the collaborative process, focussing on how ideas were forged and then either incorporated or discarded, and more broadly how the working process influenced the work.

The section below changes focus, from the subsequent development of the app, to the analysis of each specific podplay, visual and digital side effect, and how these elements form part of the research enquiry.

## **PART IV: Practices Towards a Digital Political Dramaturgy**

### **5. Critical reflections on practice**

#### 5.1 Introduction

As noted in Chapter 1.2, a distinguishing feature of PaR research is that it involves a ‘research project in which practice is a key method of inquiry and where, in respect of the arts, a practice...is submitted as substantial evidence of a research inquiry’ (Nelson, 2014:8-9). Importantly, the practice is not an appendage to the thesis, but rather an integral component. Although the artistic practice which has been undertaken in this research enquiry (the *Dysconnect* app) can stand alone, in the sense of engaging an audience that has no prior involvement in the research context (indeed, it is available to download by the general public through Google Play), as a contribution towards research in the field of theatre and performance studies, the practice needs to be spoken for. Of particular importance is stating the underlying intention, relation to the research context, and what substantial new insights are afforded through the practice. As such, the objective of Chapter 4 is to provide a report on the practice that addresses the first two of those issues (underlying intentions and relations to the research context). Chapter 5 then takes up the issue of what new insights are afforded by the practice.

As discussed in detail in Chapter 2.7 and 3.5, the *Dysconnect* app contains seven podplays, each with micro dramaturgies that draw on a combination of liquid

dramaturgies, postdigital performance aesthetics and absurdist dystopias. Each podplay is also connected to one or more visual, haptic or interactive ‘side effects’ that aim to mimic algorithmic power. In the account of practice that follows, the focus is twofold. For each of the seven podplays, commentary is provided on underlying intentions and relations to the research context, both in respect of the text (or recorded audio) and the visual and/or specific side effects that support the text/audio. For coherency, the analysis of the seven podplays is presented in the order in which they appear in the *Dysconnect* app.

## 5.2 Drowning

### 5.2.1 Text/audio

The objective of *Drowning* is to illuminate how power becomes inscribed in search algorithms. It depicts the main character, Ali, searching online for information regarding how one might be able to trick Google’s search algorithms, through a process of ‘drowning out’ negative information with new positive information. A second character, Izzy, provides answers to Ali’s questions, while simultaneously attempting to sell him a lifestyle that will make him happier. As implied by the title, Ali’s original question is eventually ‘drowned out’ by Izzy’s barrage of predictions as to what Ali likes. Izzy does so through a process of collecting data that maps Ali’s Google browsing patterns and then using these to sell services/products back to him. In the end, Ali’s original question, and its subversive intention, is expunged as he acts in line with the suggestions made by Izzy, who, as the listener may begin to perceive, is an algorithm.

The micro dramaturgy of *Drowning* mimics the operation of search algorithms. In her critical discussion of such algorithms, Mager (2012, 2014) argues that capitalist ideology becomes inscribed in search algorithms through increasingly routine social practices. Focusing on Google's search algorithm, she describes how users are 'profiled' by an algorithm that collects and maps their user patterns. This allows Google's algorithms to target adverts to those users, supplying them with individually tailored results. Mager (2014) explains that, 'algorithmic logics, code, external content, link structures, user data, clicking behaviour, user-targeted advertising, financial transactions all act together and take effect in a single Google search' (p.32). This means that when algorithms track and map online behaviour, in order to target individuals with tailored advertisements, users' attention is redirected, as they are encouraged to consume not just information but also goods and services. This, in turn, is reflective of the ideology of the company who writes the search algorithms. These algorithms are then able to 'nudge the behaviour of data subjects and human decision-makers by filtering information' (Mittelstadt *et al.*, 2016:9), providing the users with different prices, content and information, all in accordance with their specific profile.

*Drowning* attempts to make the power inscribed in, and interests served by, search algorithms more perceptible. For example, early in the podplay, algorithms are presented within the dramatic content when Ali and Izzy discuss the meaning of the word. Though somewhat counter-intuitive to my dramaturgical practice, explicitly mentioning the word 'algorithm', and detailing some of its operation, was a calculated decision grounded in the argument that many of the algorithms investigated within the

practice do not appear to be part of public knowledge. As stated in Chapter 1.1, algorithms are not only generally unperceived by the public, but also largely unintelligible (Mackenzie and Vurdubakis, 2011). For that reason, it was deemed crucial to detail some of their operation, so that the audience could better understand the issue explored.

This kind of explicit mention, bordering on the didactic, contrasts somewhat with plays, such as Carol Churchill's *Love and Information* (2012), which in Sarah Bay-Cheng's analysis, 'reflect digital technology and rely on an audience capable of recognizing references to other media in the ostensibly solitary medium of the theatre' (2016). In *Love and Information* there is no explicit explanation of the media explored, as it is assumed that the audience will, by living in a world submerged in the digital, be able to understand the parallels. However, given the invisible nature of algorithms, it seemed negligent to rely on such assumptions. One may know about the practice of, for example, a fitness bracelet, but not how algorithms were used to produce its calculations. Making the presence of algorithms explicit through the content of the podplay was, therefore, deemed a crucial preliminary step towards exposing their power effects and increasing awareness of their operation.

In terms of structure, *Drowning* appears to deploy a linear dramaturgy, with a beginning, in which Ali searches for an answer, and an end, in which his intention has been altered. However, the structure of the dialogue is actually based on the way in which algorithms target the user with adverts. For example, in one line, Izzy is commenting on Ali's hair, while in the next, she asks him whether he is interested in

meat, as seen in the exact from the script below.

### **Excerpt 1. Depicting ‘algorithmic targeting’ 1.**

```
                Izzy
    You could be anyone. Except for the hair.

                Ali
    Right.

                Izzy
    Could I interest you in meat?

                Ali
    Meat?

                Izzy
    Pulled pork. Double glazed ribs.

                Ali
    No, thanks I'm/more

                Izzy
    /More of a beef man?
```

In another example, Ali is talking about how he suspects that an online company has managed to trick the algorithms by flooding the internet with (mis)information. Rather than answering his question, Izzy starts talking about Ali’s failing love life, shown in the abstract below.

### **Excerpt 2. Depicting ‘algorithmic targeting’ 2.**

```
                ALI
    I'm thinking they must have tricked the algorithms some how? Could they do that?
    Could they flood the Internet with new positive information in order to drown out the
    bad stuff?

                IZZY
    This is exactly the sort of thing that will devalue your profile. It's cute to have a
    passion, like playing the guitar. There's even a niche market for extremists and
    pessimists, but if you want my advice, I'd stick with the nerd card and subtly mention
    the house in France. You have potential. Don't waste it.
```

This ‘randomness’ mimics the character of online searches, where a person is targeted with tailored advertisements while s/he is engaged in the act of searching. The content presented by the algorithm may not seem random to the user, since it relates to

interests previously demonstrated by him/her. However, the sudden shift in attention is caused by algorithms influencing, or even restructuring, the user's train of thought. By mimicking this structure, *Drowning* attempts to portray the way in which capitalist ideology can affect people through search algorithms. Instead of providing answers to questions, it produces needs and products targeted to satisfy those needs.

In this sense, the podplay can be seen as instantiating Causey's (2016) 'postdigital performance practices', since it allows the structure and strategies of the digital to be reflected within the dramaturgy. Simultaneously, because the political potential lies within the podplay's ability to generate an experience of algorithmic operation through its dramaturgical structure, not just its content, it can be connected to Grochala's (2017) notion of a *politics of structure*. The structure of the dialogue is reflective of the way in which search algorithms execute power. This becomes particularly clear towards the end of the podplay, when the ideals generated by the algorithms build towards a crescendo of ideals and desires.

### **Excerpt 3. Depicting 'algorithmic power through persuasion'.**

Izzy  
Do you not wanna grow as a person?

Ali  
I/

Izzy  
Get a tattoo?

Ali  
I/

Izzy  
Learn another language?

Ali  
I/

Izzy  
Self publish?

Ali  
I/



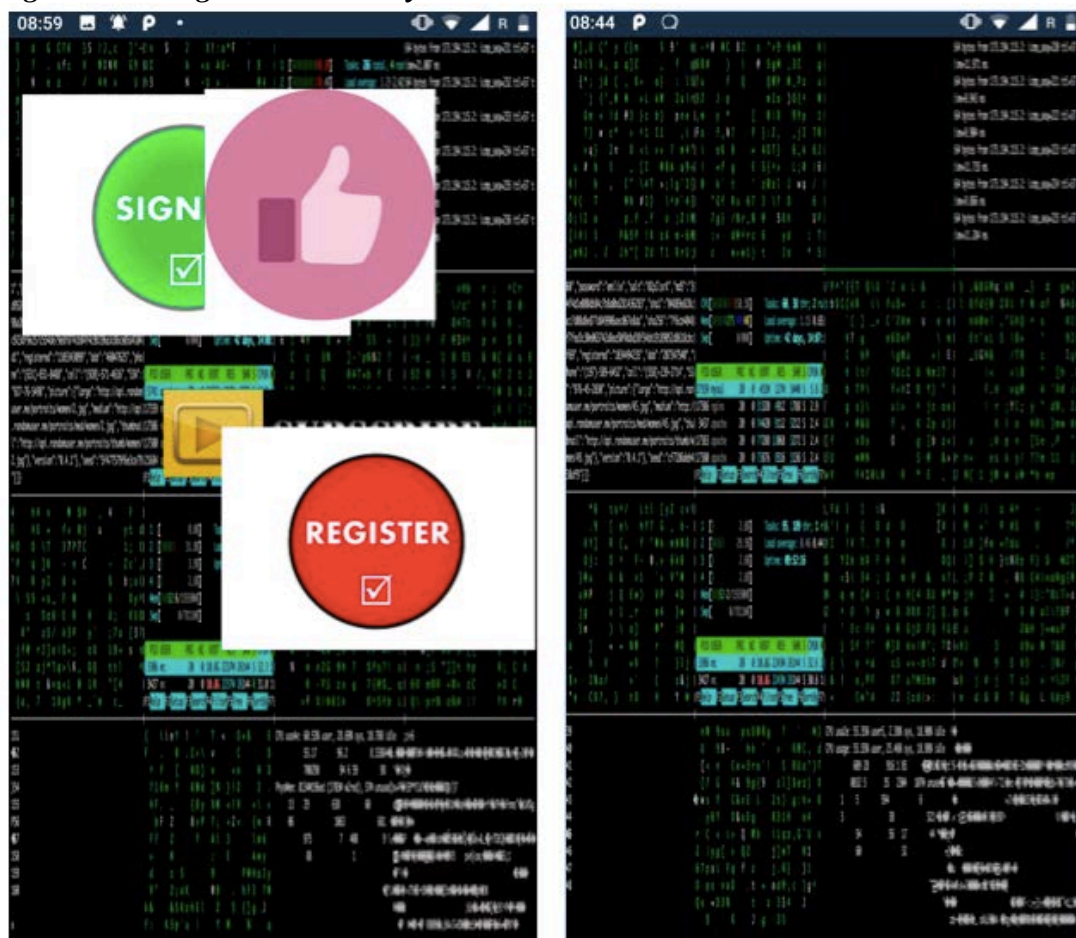
Izzy  
Do you not wanna reconnect with your true self?  
  
Ali  
I/  
  
Izzy  
Get two for the price of one?

This demonstrates how algorithms are used, not only to match users with goods, but also to create the desire to be a certain way, ultimately nudging the user towards those ideals. This ending is similar to that of Gregg's *Josephine K and the Algorithms* (2017), where the appearance of the 'cat-bird' demonstrated people's readiness to give up privacy for pleasure (see Chapter 3.2 for a more detailed description of that work). Again, by mimicking this structure, algorithms can be more vividly portrayed as powerful tools, aimed not only at boosting corporate sales, but also, as a way of influencing people's thoughts and conduct. Employing this dramaturgy helps the play expose how this is achieved, and aims to offer the audience a means of challenging online control, through recognising when and how this power is being executed.

### 5.2.2 Visual and side effects

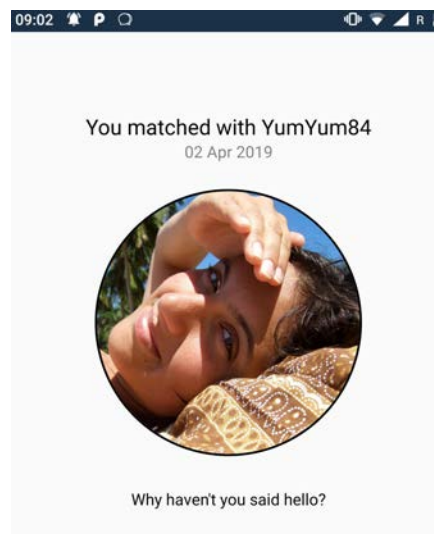
Parallel to the audio, *Drowning* displays an image of sixteen moving pictures of computer code (see Figure 19). This is done in an attempt to draw attention to the computerized aspect of the dialogue, as if one was watching Izzy in action. Towards the end of the dialogue, following the intensification of Izzy 'drowning out' Ali's opening question, images appear relating to the words Izzy is speaking. They become a visual extension and representation of Izzy's relentless persuasion.

Figure 19: Images linked to Izzy's words.



In terms of ‘side effect’, a pop-up was developed, showing a notification stating that the user has a match. This notification appears when YumYum84 is first mentioned in the podplay. When the listener clicks on the notification, they are shown the image (see Figure 20). Paralleling Izzy’s diversionary tactics in the audio content, this was an attempt to divert the listener’s thought, from engaging in listening to thinking about dating, subjecting them to the kind of algorithmic power that is explored within the podplay itself.

*Figure 20: A diversionary notification*



In summary, *Drowning* aims to reveal how power becomes inscribed within algorithmic searches by using search algorithms as content (conceptualized as a *dramaturgy of visibility*), and dramaturgical form. This is presented as a 'postdigital performance practice' (Causey, 2016), where the structure and strategies of the digital are incorporated within the dramaturgy, to render the execution of algorithmic power both more perceptible and comprehensible. Rather than relying purely on an overtly political message, the political potential lies largely within the structure. The listener is not told what to think about search algorithms, but instead is shown an example of their power effects. The side effect, in turn, is designed to allow the listener to experience directly an element of the algorithmic power explored within the podplay. It is this integration of a dramaturgy of visibility, political dramaturgy and side effect, delivered through an app, which warrants the distinction as a digital political dramaturgy. The content presents the subject of search algorithms, the political dramaturgy reflects the way in which search algorithms operate and execute power, while the digital side effect offers a personal experience of how the algorithms are

able to redirect thoughts. In this way, algorithmic power can become both depicted and experienced, in the hope that it will provide the audience with an experiential knowledge of its operation.

### 5.3 FitChip

#### 5.3.1 Commentary and analysis of text/audio

*FitChip* places algorithms at the heart of a dystopian future, where Sharon and Kim are pressurizing Kim's daughter, Sarah, into implanting a 'FitChip'. The FitChip is a dystopian version of 'Fitbit', a popular activity tracker. Fitbit, for which there are numerous competitor products, is a bracelet that 'constantly measures the acceleration of your body and algorithms convert this raw data into useful information about your daily life, such as calories burned, steps, distance and sleep quality' (Fitbit Inc., 2014). Rather than an externally wearable fitness tracker, the technology in *FitChip* has morphed into an internally carried chip, a 'fitchip', which is implanted directly into the body.

At the core of *FitChip*, is a critique of health tracking algorithms. Specifically, it challenges the way they are used to mediate and govern how people engage with their bodies and health and, through this process, alter how people undertake physical activity and consume food. Health tracking algorithms have been shown to create a complex relationship between the user and the device, where variables built into the algorithm's calculations can begin to steer the user's conduct according to the interests of commercial providers, as well as government agencies acting on public

health agendas (Williamson, 2015). Gillespie (2014) points out, for example, that users of such technologies are beginning to reshape their practices to suit the algorithms they are dependent on.

When this happens, users can be said to reconstruct their actions, not only according to an algorithmic logic, but one which carries societal norms and judgements as to what is healthy or not. For example, it may enforce a hierarchical classificatory view of humans, where those who have the time and money to exercise and eat healthily are seen as 'better' and more successful than those who fail to comply with the instructions of the devices (Fourcade and Healy, 2013). Such a classification typically ignores the myriad of socio-economic factors that may contribute to differences in health. In this way, responsibility for 'health', is shifted away from society towards the individual consumer. Such a shift in focus, from governmental responsibility to the responsibility of the individual, is one of the defining features of the type of liquid modernity described by Bauman (2012), on which Grochala (2017) bases her definition of 'liquid dramaturgy'. Indeed, Bauman (2012) states that when people: 'fall ill, it is assumed that this has happened because they were not resolute and industrious enough in following their health regime' (2012: 34). Through health tracking algorithms, the responsibility of health is laid solely on the individual. As such, she will have to take full responsibility for any health-related difficulties she may encounter, a process that makes individuals self-regulatory. In this context, Baker (2017:176) has argued that there is a need for artistic practice that aims to make the power relationship between such devices and its subjects more visible.

One way *FitChip* seeks to do so, is by questioning the relationship between fitness tracking and the invasion of privacy achieved through gamification strategies. In particular, it aims to problematize, and render visible, the phenomenon of ‘pleasurable surveillance’. Pleasurable surveillance refers to ways in which self-regulation and monitoring are executed not only voluntarily but for fun (Whitson, 2013). It is accomplished through a system of rewards and competitions, presented as expressions of free choice and empowerment, as reflected in the dialogue below between Kim and Shannon (see Excerpt 4).

***Excerpt 4. Depicting ‘pleasurable surveillance’.***

KIM  
Powerful Sarah. And you can collect points!

SHARON  
We should have started with that.

KIM  
You can sign up and compete with all your friends.

SHARON  
And there are rewards.

KIM  
Trophies. We’re launching a national award as we speak.

SHARON  
It’s a trial before we go global. Kimmy is destined to win.

KIM  
I do take my health very seriously.

However, as mentioned above, the algorithms behind these devices are not politically neutral. Instead, they contain ‘value judgments that reward some activities and not others’ (Williamson, 2015). Therefore, the sense of empowerment can be seen as false, since the user is acting according to data with inbuilt agendas that remains largely unknown to them.

In terms of relation to the research context, the dramatic content of *FitChip* seeks to illustrate the type of liquid modernity laid out by Bauman (2012), where there is a shift from governmental to individual responsibility. Similarly to *Drowning*, specific algorithms are detailed within the podplay, employing a dramaturgy of visibility where the algorithm is rendered visible. Sharon explains to Sarah that the FitChip ‘measures the acceleration of your body, allowing the algorithms to convert the raw data into useful information about your daily life, such as calories burned, steps, distance and sleep quality’. Though somewhat didactic, this passage clarifies how the algorithms are the driving force behind the generated predictions of the fitness tracker.

In contrast to this explicit mention of an algorithm, *FitChip* ends with Sarah having the FitChip implanted into her body, but how this will affect her is left unsaid and her response to what is happening is deliberately missing from the text. This is an unresolved ending that presents a veiled relationship between the subject (Sarah) and the biopolitical force implementing the control (the algorithm). The listener is encouraged to ‘fill in the gap’ and actively reflect over how having such an implant could affect a person. This instantiates the type of ‘liquid dramaturgy’ detailed by Grochala (2017); namely one that poses questions rather than supplying answers.

*FitChip* also draws on Tönnies’ (2017) concept of absurdist dystopias by using repetition as an absurdist tool. For example, Kim’s line, ‘With the device, you can keep track without having to think about it’, is repeated six times throughout the podplay, aiming to generate a chorus of re-enforcement. Eventually, the repetition becomes disturbing, jarring with the naturalism of the rest of the dialogue. This

absurdist break draws on the ‘state of immobility’ described by Tönnies (2017), where the character herself becomes ‘stuck’ within the system of control that she is trying to uphold. To highlight this further, the line is emphasised with a sound of an advertisement jingle that appears every time Kim repeats the line.

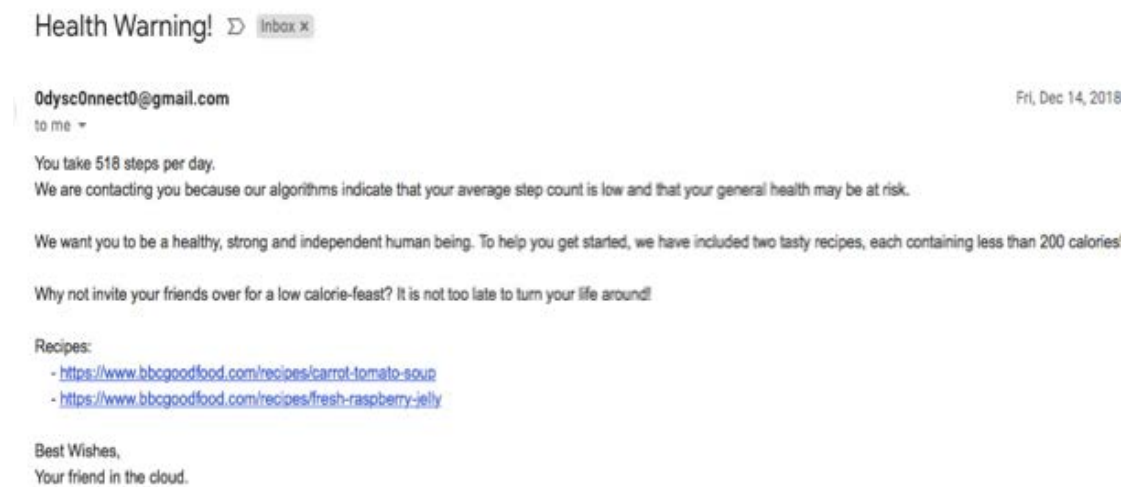
By using the aesthetics of advertisements within the dialogue, a layer of absurdity is added and this introduces another break from naturalism. These sounds jar with the content because the clash with the other sounds becomes ‘unnatural’. In the actual practice of ‘nudge marketing’, such sounds are often used to subtly nudge consumers into buying and complying (Hynes and Manson, 2016). Making use of these commercial strategies of seduction and attention-grabbing is an attempt at highlighting the character of their power. In addition, it makes the persistent positivity expressed by Sharon and Kim appear increasingly absurd, allowing the listener to recognise such practices. In turn, this may enable a more critical approach to be taken towards these types of devices.

### *5.3.2 Visual and side effects*

The side effects triggered by listening to *FitChip* are aimed at making pleasurable surveillance more perceptible. Firstly, it records the amounts of steps taken by the listener since downloading the app. It then sends an email, seen in the picture below



**Figure 21. Providing an experience of pleasurable surveillance.**



(Figure 21), either reprimanding or praising the listener, depending on whether his or her step count puts them into category A or B. The aim of this was to make pleasurable surveillance visible through engaging the user to invite friends into the act of changing behaviour ('Why not invite your friends over for a low calorie-feast?'), mimicking the way that fitness trackers encourage 'fun' activities while executing control. The email also incorporates Sharon's line, 'We want you to be a healthy, strong and independent human being', to echo the text of the podplay within the private digital space of the listener. The aim is to bring the issue of pleasurable surveillance closer to the listener, by closing the gap between fiction and reality through what can be understood as a potentially uncomfortable interaction (uncomfortable in the sense of being uninvited and intrusive).

Secondly, a 'side effect' forces the listener to move by only playing the podplay if/when the listener is moving. As seen in the image below (Figure 22), the text encourages movement and the phone also vibrates if/when the smart phone is still. This helps the content explored in the podplay, namely that of enforced algorithmic

fitness tracking, apply to the user directly as they are listening. It also seeks to subject the listener to a certain degree of discomfort, as they are forced to move vigorously in order to make the podplay play.

**Figure 22. ‘You need to walk to listen’**



To summarize, *FitChip* creates a dystopian future where health-tracking algorithms are used to enact control over citizens. Just as *Drowning* implemented a dramaturgy of visibility through mentioning search algorithms, the fitness-tracking algorithm in *FitChip* is stated explicitly to make it more comprehensible. The ending, whereby the chip is implanted while Sarah remains silent, presents a veiled relationship between

the biopolitical force implementing the control and the subject, leading to a liquid dramaturgy that poses questions rather than supplying answers. Repetition is used as an absurdist device to generate a sense of the characters becoming stuck within the system of control. Pleasurable surveillance becomes visible through implementing gamification strategies within the script and by suggesting ‘fun’ activities through a personalised email. Additionally, it forces the listener to participate by only playing while s/he is moving and ‘rewarding’ their movements by playing the podplay. It commits him or her to partake in the type of process generated by health tracking algorithms, in order to facilitate an experiential knowledge of how these systems can execute control. These can be understood as uncomfortable interactions, where the app imposes commands and interactions on the listener.

This exemplifies another instance of a digital political dramaturgy, where the dramaturgy of visibility, political dramaturgy and side effects combine to create a situation where it is hoped that the listener will be afforded increased agency in terms of how they interact with these types of devices. Specifically, the audience may be able to recognise strategies of pleasurable and lateral surveillance as ‘sales tactics’, rather than ‘fun games’. They may question and enquire into the mechanisms behind the predictions given by a Fitbit bracelet, and/or refrain from endorsing such practices by not judging others on their ‘lack’ of engagement.

## 5.4 Trapped

### *5.4.1 Commentary and analysis of text/audio*

What happens when peoples' smart phones become part of who they are, defining their interactions, thoughts and ways of living? These are the questions explored in *Trapped*. In contrast to *Drowning* and *FitChip*, *Trapped* does not focus on one particular algorithm. Instead, it relates to some of the larger questions generated by this thesis' exploration of algorithms and power. It depicts a dystopian future where a conversation between the two colleagues, Simon and Anna, turns into an interrogation. In the first half of the podplay, both characters speak about each other as if they have followed one another closely online, narrating updates and images, verbalising the other's digital presence.

#### **Excerpt 5. Depicting 'verbalisation of digital presence'.**

ANNA

You enjoy reading.

SIMON

You prefer browsing.

ANNA

You love walking your dog.

SIMON

You insist on drinking decaf.

ANNA

You loiter in public spaces.

SIMON

You comment on the use of contraception.

ANNA

You argue for stricter border control.

SIMON

So do you, Anna.

ANNA

Don't we all?

This changes in the second half, when Anna begins to subtly accuse Simon of hiding something, since he entered into a 'black zone' and therein lost reception. Being disconnected is, within the play world, something suspicious and potentially

dangerous. Surveillance systems have become such a normalized and integrated part of people's lives that the absence of surveillance is an abnormality that begins to penalize a person.

Surveillance is extended to include situations where the person willingly supplies the data through status updates and social interactions, or simply by using their phone and relaying their location through GPS. When this becomes the norm, and people are 'cultured in a dependent position where they find that they now need exactly the sort of surveillance that the system supplies' (Stoddart, 2011:97), the entrapment becomes voluntary. For example, it can penalize a person to not have a profile on the likes of Facebook, since they may lose out on a job that is solely advertised there. Likewise, a person might miss a social event where the invitation is only issued on Facebook. In other words, *Trapped* attempts to shine a light on people's dependency on algorithmically driven technology, questioning what it means to be connected versus disconnected. This is exemplified in Anna's monologue, where she is talking about Simon being trapped in Alaska without reception (See Excerpt 6).

### ***Excerpt 6. Absurdist monologue***

ANNA

Right. Horrible experience for you though, to be trapped in a black zone like that. I imagine your mind must have become completely blank after a while, wiped clean of content, deprived of answers and information. It must have been torture, being so utterly disconnected. It must have driven you mad, your sense of self shrinking, hearing nothing but the humming and the shrieking and the freezing and the dripping, your veins clogged with silence, your heart deflated from lack of stimulation. I cannot imagine the strain.

This monologue introduces an absurdist element to the piece. Anna's description of being disconnected as 'torture', of veins becoming 'clogged' by silence, veers away

from naturalism towards a heightened, absurd reality, inspired by the type of language used by Carol Churchill in *Far Away* (2001). In that play, Churchill makes the familiar increasingly absurd by using abstract concepts to name ‘the enemy’, such as ‘wind’ and ‘birds’. In Anna’s monologue, the language aims to reflect how an increased reliance on digital devices can begin to affect and control us in subtle yet essential ways, for example, through the idea that a *feeling* of madness will follow from a lack of digital connectivity.

Another absurdist device is Anna’s ‘friendly’ attempts to comfort Simon in the end. Rather than threatening him, Anna is ‘trying to help him’. Surveillance and pleasure become intertwined, to the point where one can no longer distinguish between them.

### **Excerpt 7. Depicting ‘surveillance and pleasure intertwined’.**

ANNA  
Look. If it’s danger you want, or risk, or surprise, you know we can make it part of your profile. It is easily arranged.

SIMON  
That’s not what I want.

ANNA  
What do you want?

SIMON  
I... I don’t know.

ANNA  
Don’t worry, Simon. We’ll figure it out. For a start, I think you would be more comfortable in the park. (SFX: Knocks on the glass.) Harry?

SFX: Sounds from the park return.

ANNA  
There. Isn’t that better? *Beat.* You can almost smell the grass.

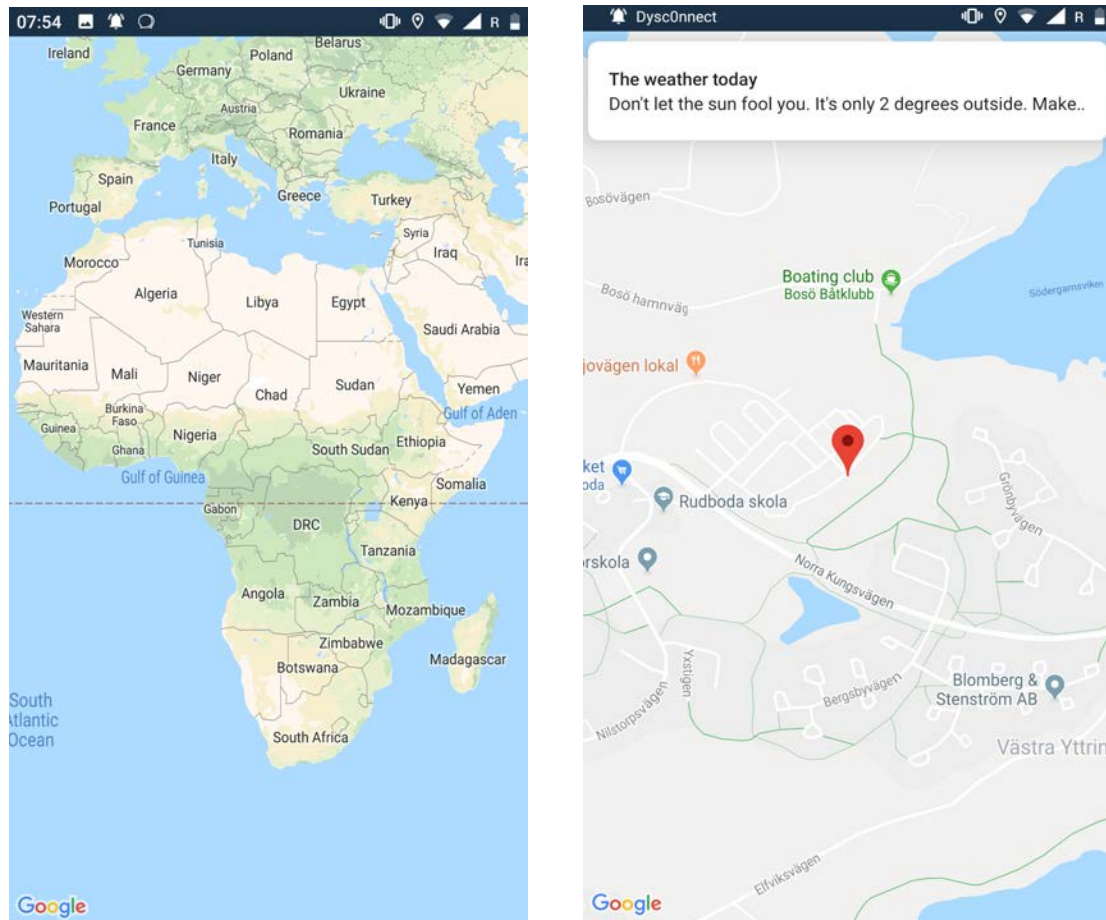
This ending draws on similar ideas to those expressed in Gregg’s *Josephine K and the Algorithms* (2017) (see Chapter 3.2). Josephine K’s final resignation, where she accepts her trial and is given her ‘cat-bird’ as a reward, illuminated one of the ways in

which algorithms are able to persuade online users into giving up their data; namely, in return for pleasure. *Trapped* highlights the same broad idea when Anna reassures Simon that they, the algorithms, will make him happy, as soon as they have figured out what he wants. Happiness becomes a product, made concrete through predictions, which in turn validates algorithmic surveillance. As with *FitChip*, *Trapped* presents an unresolved ending. We don't know what will happen to Simon, we can only guess as to whether or not he will be made 'happy'.

#### 5.4.2 *Visual and side effects*

The app's user interface in *Trapped*, displays a map of the world, which zooms in on the person's live location when the podplay begins to play, marking it with a red dot (see Figure 23). Here, the artistic intention is to make visible the simplicity of tracking, and how easily we give up our privacy. It looks to draw a direct link between the content of the podplay and the listener, by allowing the tracking to happen to them, live, as they are listening. This has the potential of creating an uncomfortable interaction, in the sense that the listener may find the apps tracking possibilities intrusive and uncomfortable.

**Figure 23: Screenshots of Trapped - Opening page (left) & Location/weather (right)**



Initially, the possibility of collecting statistics about the listener's use of specific applications was considered. Here, the idea was that the listener would be asked questions about their usage, followed by reprimand/praise for dishonesty/honesty, resembling an interrogation that would mimic the one taking place within the podplay. However, it proved difficult to find enough useful data about the listener in the time available within the context of this thesis. This could, therefore, be an area for future development, as such an interrogation could help to relate the issues explored in the podplay to the individual.



As an alternative, the concept of location tracking was expanded to include an alarm manager that collected the user's locations throughout the experience, later presenting these coordinates in an email. In order to make the email personal, it was scripted as if it was sent from a person, rather than an app. However, if the phone remained stationary throughout the experience and/or the app failed to retrieve such coordinates, it was programmed to not send the email (rather than sending one that was blank). Additionally, the app sends an alert commenting on the weather in the listener's area, as seen above in Figure 23 (screenshot to right).

To summarize, *Trapped* investigates the increasingly normalized and totalizing reach of computerized algorithms, facilitated by faster and more extensively networked connectivity. The text of the podplay depicts an absurdist dystopia with an unresolved ending, where the lack of connectivity is equivalent to torture. The 'side effect' displays the listener's own location and a local weather prediction, making location tracking more personal, immediate and potentially uncomfortable, further emphasised through a personalised email. In this way, *Trapped* could be presented as another example of a 'digital political dramaturgy' (Causey, 2016), where the dramatic content of location tracking is experienced directly through the side effect, encouraging the listener to reflect on how the act of giving away permission to their location could be used as a way of involuntarily controlling and/or extracting information.

## 5.5 Falling

### 5.5.1 Commentary and analysis of text/audio

The central algorithmic concept that *Falling* deals with is the instability, and risk of eventual crash, that arises from different algorithms reacting off each other in unintended and undesired ways, an occurrence known as algorithmically enabled run-away systems. This concept was originally approached through a script titled *The Making of a Fly* (see Appendix C). The title was taken from the title of a book on [amazon.co.uk](https://www.amazon.co.uk) where the purchase price had unintentionally escalated to \$23.7 million (plus \$3.99 shipping!). The *The Making of a Fly* script featured Alex and Jo, two colleagues that had previously had a short romance. Through their dialogue, which referred to a market spinning out of control but without any context to or explanation for it, the script attempted to mimic an algorithmic feedback loop that eventually crashes. In that way, the *The Making of a Fly* was an early attempt to challenge algorithmic power through a correspondence between a particular characteristic of algorithmic power and the structure of the script. However, feedback on an early draft suggested that the relationship between the two characters drew the focus away from the concept of algorithmically enabled run-away systems, and that that concept remained too abstract. In short, the algorithmic notion at the core of the script wasn't sufficiently in the foreground of the content for its presence in the structure to be perceived.

That feedback was the impetus for the podplay *Falling*. One key difference between the two scripts is the extent to which the concept of algorithmically enabled run-away systems is surfaced in the content (i.e. through the text). For

example, *Falling*, feature two characters, Alec and Joe (now cousins), who are in a pub having a conversation about the risks of financial trading. Before long, the dialogue begins to loop towards a crash, mimicking the structure of algorithmic instability that led to the ‘Flash Crash’. However, as explained below, *Falling* is less about the ‘Flash Crash’ as a particular historical event, and more a depiction of the nature of risks associated with the kinds of algorithmic architecture that caused the Flash Crash.

The Flash Crash refers to an event that took place on May 6<sup>th</sup>, 2010, when the US Dow Jones faced the fastest and second-largest percentage-point price decrease in its history (Millo and Beunza, 2015). Its losses were close to \$862 billion before, suddenly, it automatically began to recover, rebounding within the space of 20 minutes (SEC and CFTC, 2010). This steep plunge, and sharp recovery, is shown in the image below (Figure 24). It was an event the likes of which had not been seen before. One trader described the experience as being like ‘watching someone get run over by a car’, then only two minutes later see the very same person get up and walk away, unharmed (Meerman, 2011).

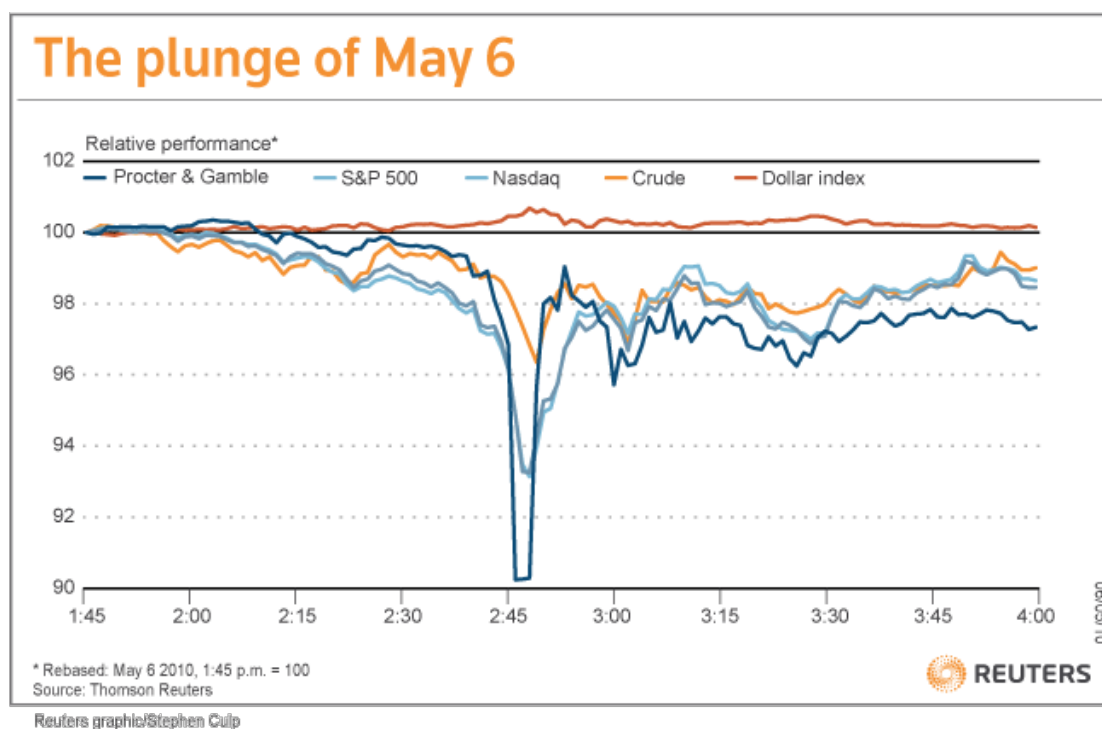
Initially, financial analysts and scholars were at a loss to explain the exact causes of the Flash Crash. Over time, however, most analysts have attributed a major role to

algorithmic trading or ‘high frequency trading’ (Steiner, 2012)<sup>10</sup>. In Paul A. David’s analysis of the ‘Flash Crash’ (2010), the crash was the result of a fractured market, where trading algorithms and the interactions among various ‘online’ computer-mediated stock-trading *sub-systems* played a part; presenting a societal problem that ‘resides in the organizational fragmentation of the former stock market that has resulted in a largely unrecognized transformation of the financial landscape’ (David, 2010:12). Many thousands of different actors were connected in a non-linear dynamical system during the Flash Crash. As interaction between algorithms becomes more aggressive and direct, human involvement and oversight is pushed further to the margin, and the risks of dynamic run-away systems increases. David’s (2010) theory, however, goes beyond the financial market, as he points out that the same catastrophe could appear wherever hyper-connectivity allows the formation of a ‘system’ to be technically enabled (2010:16-18), producing ‘run-away’ dynamical systems. It is those risks that are at the heart of *Falling*, rather than the emergence of automated trading or the Flash Crash *per se*.

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<sup>10</sup> High frequency traders (HFT) use complex algorithms to *predict* and act on orders that are *about* to be executed. To explain how this process works, imagine the following example. A large pension fund wants to invest in a million Apple shares. If a high frequency trader is able to see that this large order is on its way, s/he can buy the shares just ahead of the pension fund, the millisecond before the sale is about to go through. By doing so, they are able to resell the Apple stock to the pension fund at a slightly higher price, making a profit before the pension fund has time to retract the order (Steiner, 2012:50). However, as this practice became apparent, pension funds and other institutional traders began hiring hackers to develop algorithms that could mimic randomness, in order to hide their intentions of buying or selling. They would do this by chopping up the order into smaller units, so that it would appear as if it there was not a big order about to be placed, but many small unrelated ones. In response to this, the high frequency traders hired programmers to develop complex algorithms that could ‘sniff’ the market for large trades that had been disguised. As one commentator explains, ‘the algos probed them for signs that they were about to buy or sell, and then used superior speed to get them to sell lower or bid higher’ (Smith, 2014).

**Figure 24. Image of the Flash Crash**



The pricing algorithms used by Amazon to automatically update prices offer a particularly vivid example of an algorithmically enabled run-away system. On April 18<sup>th</sup> 2011, the science book, *The Making of a Fly*, was on sale at Amazon for \$23.7 million (plus \$3.99 shipping). The high price was caused by an ‘upward pricing spiral’ (Sutter, 2011) where algorithms reacted and responded to each other in a run-away dynamical system. This happened because the pricing algorithms, used by different providers and sellers of books, were programmed to automatically respond to each other by increasing their prices as soon as their competitor’s prices went up. The problem arose because these algorithms were not programmed to have a ceiling or cap, which allowed the increase to escalate indefinitely. Sutter (2011) compares this to the workings of the stock exchange, where prices are fluctuating in a similar manner. That is why the system on Amazon is at risk of uncontrollable escalations, in

a way that resembles the Flash Crash.

**Figure 25. Looping dialogue.**

When an algorithmic system malfunctions, weaknesses inherent within the system can

...we're doomed.  
SFX: Someone laughing.  
ALEC  
We are if you don't stop this.  
JOE  
I'm just/making conversation.  
ALEC  
Without control/ this loop will keep  
JOE  
Just stop thinking/about the world  
ALEC  
But it's all/ connected!  
(5th loop)  
SFX: Sound of glasses clinking.  
JOE  
The nightmares/ are back.  
ALEC  
No, /I'm fine  
JOE  
Because Sue /mentioned  
ALEC  
Because Daddy/ used to promise  
JOE  
Shut up/or I swear to God  
SFX: Sound of a siren speeding past.  
ALEC  
Are you /threatening me?  
JOE  
Muscle weakness, /paralyzes.  
SFX: Ping of a text message.  
ALEC  
14

---

We had the same/ drink.  
JOE  
Then we're both doomed.  
SFX: Someone laughing.  
ALEC  
We are if you don't / stop this  
(6th loop)  
SFX: Sound of glasses clinking.  
JOE  
The nightmares/are back  
ALEC  
No, because Daddy/ used to  
JOE  
Shut up/or I swear  
SFX: Sound of a siren speeding past.  
ALEC  
Are you /threatening me  
JOE  
Muscle weakness  
SFX: Ping of a text message.  
ALEC  
The same/drink  
JOE  
We're doomed.  
SFX: Someone laughing.  
ALEC  
Paralyzes, and then/  
JOE  
Cardiac arrest!  
SFX: Sound of glass against glass shattering and a heart monitor flat lining.

be rendered highly visible, allowing for their operation to be questioned.

Malfunctions and glitches, therefore, make it more possible to raise awareness of these risks. Indeed,

research by Bucher (2017) suggests that people become aware of everyday

algorithms, such as Facebook's algorithm EdgeRank, in moments of

perceived breakdown (Bucher, 2017).

This is what happened both in the case of the Flash Crash and *The Making of a Fly*,

where the glitch in the system revealed the presence and risk of

current automation. This provides support for Causey's (2016) advocacy,

in connection with post digital performance, for an 'aesthetic of

failure, disruption, noise, and interference that promotes spontaneity

and randomness' (Causey, 2016: 434).

*Falling* attempts to develop an ‘aesthetic of failure’ (Causey, 2016), by building on the idea of algorithms becoming visible through malfunctioning. Specifically, it implements postdigital performance aesthetics by taking on the form of malfunctioning algorithms and incorporating these into the dramaturgical structure. In this way, *Falling* highlights the danger of algorithmic runaway systems, through both a ‘dramaturgy of visibility’ and its dramaturgical form. This is achieved through the creation of a dramatic situation rooted in naturalism, which eventually spins out of control. Similar to *Drowning* and *FitChip*, actual information about the event of the Flash Crash was included within the dialogue, so that the audience would be able to make connections between the real life event and those within the play-world. The structure mirrors this content and follows some of the repeating patterns of run-away systems, where a simple process is repeated over and over again in an on-going feedback loop. For example, this can be seen when the two cousins exchange insults in a conversation that begins to loop, each time becoming increasingly compressed and dangerous, until it is life-threatening (see Figure 25).

To enhance the experience of compression and inversion, the background sounds correspond to the looping text. Specifically, four distinctive sounds that are typically heard in a bar/pub setting were added to that effect: the sound of a siren speeding past, the sound of a glass smashing against the floor, the buzz of a phone receiving a message and the sound of a woman laughing. In the first loop of the conversation, the sounds are spaced out with equal time between them. This means that they appear as

part of the environment, adding a naturalistic imagery to the sound scape. However, as the loops are repeated, so too are the sounds. The distance between them is made shorter, as they follow the shortening of the looped conversation. This is seen in the image on the left, where the distance between the circled sound effect of someone laughing and the repeating dialogue becomes shorter. This means that the sounds become increasingly strange, creating a rhythm of increased stress in sync with the escalation of the conversation, an audible imagery of a build-up towards a crash. In this way, the sounds help generate another impression of a loop, one made increasingly intense by the compression.

Rather than ending the play with the crash, the dialogue ‘rebounds’ and continues, ‘unlooping’ by reusing parts of the previous dialogue. This time, however, the loops are longer rather than shorter and, crucially, Alec is now expressing the viewpoints of Joe, and Joe those of Alec. This switch of positions aims to create an indistinct sense of something having changed and being ‘wrong’. This reflects the fact that we don’t know what type of changes these glitches within the financial system may bring (Millo and Beunza, 2015). Perhaps, within the crashes, there are casualties, changes, that do in fact alter part of what existed before. It also highlights how there is little concern for individual humans within this system; they are there only to facilitate the on-going machinery, like human grist to an algorithmic mill. Rather than ‘spelling this out’ within the text, the change of character position aims at generating a subtle sense of danger. This helps generate a liquid dramaturgy where, as expressed by Bauman (2012), uncertainty becomes ‘*the only* certainty’ (p. viii) within contemporary society. The listener is encouraged to engage in a process of sense-making, reflecting over, on



the one hand, what has happened; and on the other, where to position themselves on the scale between complacency and action.

Although *Falling* does not offer a way of directly changing the financial market, it attempts to alert listeners to the destabilizing tendency of high frequency trading. It raises questions about the issue, which, it is hoped, could prompt people to put pressure on legislators, pension funds and banks. It also tries to signal the inherent dangers of dynamic run-away systems more generally. With these warnings and provocations, one may be able to recognise when such systems appear in other areas of society, such as rough online algorithmic pricing (as implemented by Amazon) or algorithms constructing absurd content on sites such as YouTube.

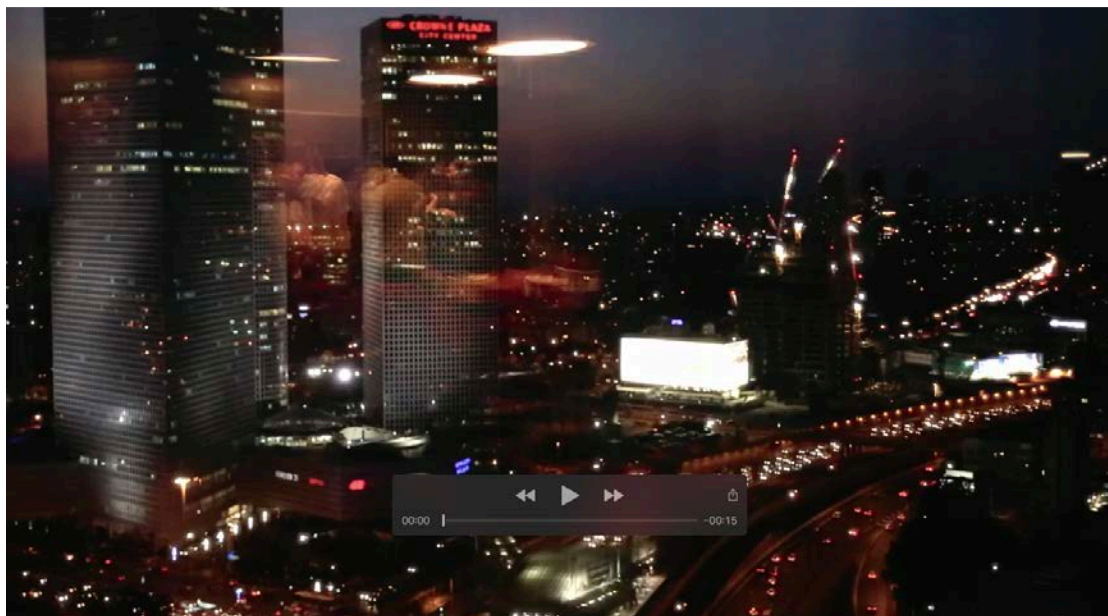
### *5.5.2 Visual and side effects*

The moment of ‘crash’ in the dialogue is preceded by the sound of a beating heart that flat-lines when the dialogue crashes. This is paired with a haptic side effect, as the phone begins to vibrate in sync with the sound. If the user is holding the phone, this creates a haptic experience of the audio, as if the content is spreading through the imaginary space of the audio to the actual physical space of the user’s phone. It was envisioned that this side effect could cause a degree of discomfort, as one is experiencing the stress of the increasing loop. Taking this side effect a step further, the phone would not only vibrate, it would physically heat up at the moment of ‘crashing’. The intention of this overheating was to provide a haptic sense of speed and crash, reflective of the content in the podplay. The latter effect, however, only

worked on certain types of smartphones, as it transpired that many newer smartphones have inbuilt protection against overheating that could not be overwritten.

In terms of visual experience, *Falling* contains a video on a loop, representing the view which the characters in the podplay would be looking at, as seen in the image below (Figure 26). The video also loops in shorter intervals, following the increased heartbeat, creating a jarring visual, with the intention of providing a visual representation of a system failing.

**Figure 26: Screenshot of the video shown during *Falling*.**



Additionally, the listener is sent an email containing links to two documentary films: ‘The Flash Crash, Money & Speed: Inside the Black Box’ (2011) and ‘The Wall Street Code’ (2013). This offers the audience a pathway to increased knowledge about the particular historical event and the role of algorithms therein.

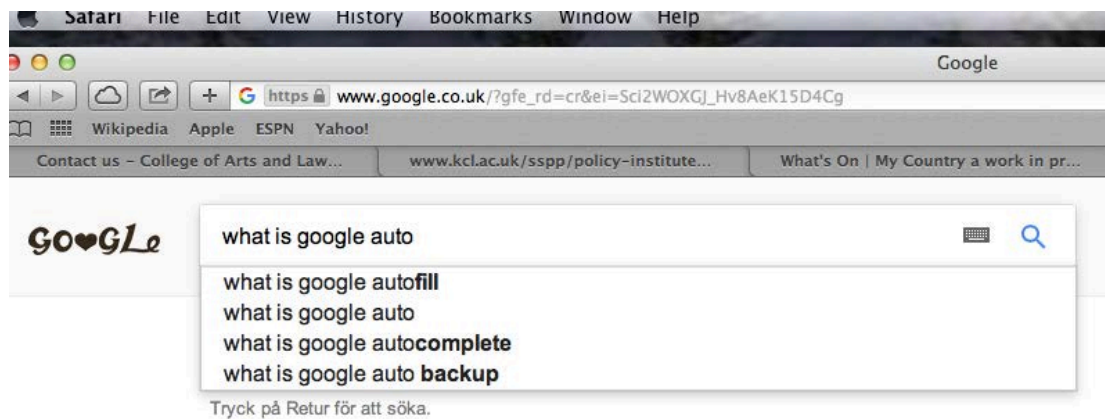
To conclude, *Falling* features dynamic run-away systems in both content and dramaturgical form. It deploys postdigital performance practices by incorporating into its structure the aesthetics of algorithms malfunctioning. It does so in order to draw attention to how such systems can fail, leaving it to the audience to reflect over its potential repercussions. Vibration is used to generate a haptic, potentially uncomfortable experience of the podplay while, in addition, an email seeks to provide access to knowledge of the highly complex subject of automated trading. The ending, where the characters switch position, and uncertainty becomes the only certainty, instantiates a liquid dramaturgy (Grochala, 2017). It highlights potential dangers of dynamic run-away systems and how these can spin out of control. Ultimately, it seeks to encourage the audience to become active in questioning and thinking about our reliance on such systems.

## 5.6 Let's Google it!

### 5.6.1 *Commentary and analysis of text/audio*

Similar to *Falling* and *Drowning*, the micro dramaturgy of *Let's Google it!* follows an algorithmic operation. In this case, the focus of the podplay is on highlighting the often absurd, biased or even racist answers produced by Google's autocomplete algorithm. Set at a fancy dress party, the podplay relates a conversation between three characters, Kay, Helen and Stanley. The conversation becomes increasingly absurd the more they rely on Google to answer their questions and fill their uncomfortable silences with content.

*Figure 27. Google autocomplete.*



In addition to being *about* Google’s autocomplete algorithm, the actual text was partly created by using the algorithm. In the writing process, partial questions were entered and Google’s autocompletions and answers were then incorporated within the dialogue, as seen in the image above.

Although there are similarities to Dorsen’s use of algorithms in *A Piece of Work* (see Section 2.3), the creative process for *Let’s Google it!* was more directly inspired by a 2013 UN Women campaign. Created in 2013, the campaign displayed a series of adverts in order to demonstrate the digitised discriminations that arise out of the search engine. Using Google autocomplete searches in order to ‘reveal the widespread prevalence of sexism and discrimination against women’ (UN Women 2013), search terms such as ‘women need’ and ‘women should’, were entered into the search engine and the generated results were then displayed in a series of photos (see Figure 28 below). The purpose of the UN Women campaign was to highlight how digitised discrimination is being voiced and reproduced by Google’s autocomplete algorithm displaying the most-searched-for terms by other users. This means that the

autocomplete algorithms are not simply ‘acting to draw on search data; they are also actors in the construction and reproduction of social attitudes’ (Lupton, 2015:140). If a user types ‘women should’ into Google, the fact that it ‘completes’ this by displaying discriminating content can work to reinforce particular views of women, since they may interpret this as a standard or legitimate world view.

**Figure 28. UN Woman campaign**



The fact that it appears as a legitimate answer, and that the view is not challenged by Google, also works to reinforce its legitimacy (Lupton, 2015). On the other hand, if the search engine began to ‘clean’ their searches, this could also raise ethical issues,

since it would then be made obvious that a group within the company was tasked with deciding what should be deemed politically and socially necessary information as opposed to that which is eliminable.

These are some of the tensions that *Let's Google it!* attempts to make visible. It aims to challenge people's faith in, and reliance on, the information provided by Google, provoking consideration of how these can have potentially dangerous and/or unwanted outcomes. Rather than stating explicitly such potential dangers, *Let's Google it!* offers a model of political theatre that operates 'predominantly through a politics of form as opposed to a politics of content' (Grochala, 2017:17). Specifically, the form is generated through a process of collaboration with Google autocomplete, where the reliance on the algorithm for information is made increasingly absurd through the dramaturgy of the podplay.

One interesting development that highlights this issue arose as I was writing this analysis. In order to document my process, I wanted to include a screenshot showing the Google search results of the typed in question 'what do you call'. My original search had generated the answers: 'symbol', 'jokes', and 'a sheep with two legs'. I had used these results to generate the following dialogue:

**Excerpt 8. First version 'what do you call'.**

KAY  
What do you call this?

HELEN  
I'm not sure.

KAY  
I'll Google it! What do you call - symbol. What do you call jokes. What do you call a sheep with two legs?

HELEN  
I don't know.

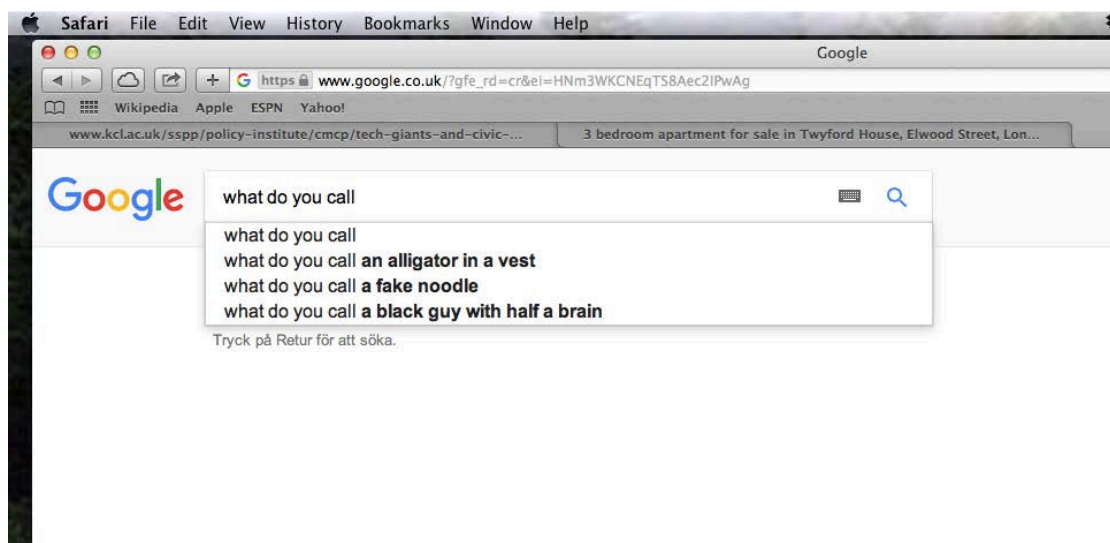
KAY  
A cloud. (*laughs*) So... How do you know Tom?

HELEN  
I don't.

KAY  
That's right. You said.

The new search, however, being conducted several months later, produced the results 'an alligator in a vest', 'a fake noodle' and 'a black guy with half a brain' (shown in the image below).

**Figure 29. Screenshot of a Google search conducted on March 2d, 2016**



While the first search had given me the joke: 'what do you call a sheep without legs? A cloud.' I was now presented with; 'What do you call a black guy with half a brain?' This was subsequently followed by other suggestions of racist jokes.

I can only speculate as to what prompted the change in my search results. Perhaps it was because, as part of researching a piece about Eco Chambers for this PaR PhD, I had visited more right wing news sources (such as Breitbart and Fox News). If so, it reveals a pattern between the readers of these sources and racist Google hits. That said, this is purely speculation on my part and might be nothing but an assumption based on my own prejudice. Another reason could, alternatively, be that these types of jokes are becoming more popular and, because they are ‘trending’, they are beginning to appear more frequently. In order to test this, I decided to put the same question into the Google search bar of my husband’s computer. As it turned out, this produced different results (‘an alligator in a vest’, ‘a bear with no teeth’, ‘a deer with no eyes’). Hence, it seemed as if the results produced were specific to my own computer, suggesting that the answers were, indeed, based on my previous searches. Intrigued by this new search, where the material was clearer in demonstrating some of the bias or racist content that can be generated by Google, I chose to include it in *Let’s Google it!* This changed the dialogue to read:

**Excerpt 9. Second version ‘what do you call?’.**

KAY  
What do you call this?

HELEN  
I’m not sure.

KAY  
I’ll Google it! What do you call... an alligator in a vest. What do you call a fake noodle. What do you call a black guy with half a brain?

*Beat.*

Ehm. So... How do you know Tom?

Instead of the character Kay making an awkward but innocent joke about a sheep, in the second version, she is making a racist joke, prompted by Google. This changed the dynamic of the dialogue, since Helen is now hearing Kay relay a racist joke



which, she might assume, is a reflection of Kay's own opinions. This adds an increased tension between the characters, as well as demonstrates early on in the podplay how the Google algorithm is not neutral, regardless of who is influencing its predictions.

An early draft (See Appendix F), titled *'Infinity. Google it!'*, had two characters waiting in a room for a job interview. The idea was that they were being monitored and, as a challenge, had to Google every time they hesitated and then continue the conversation based on the result given by Google autocomplete. However, this failed to reflect the mundane, everyday use of Google, and how its results can be false and/or racist. Therefore, I changed the setting to a party and allowed the Googling to enter into the conversation more 'naturally', first appearing when the characters wanted an answer to a question.

Using Google autocomplete as a co-writer also makes use of postdigital performance aesthetics, in particular, through a practice of copying and pasting. This process, of allowing the algorithms to generate an answer, which is then copied and pasted, replicates the pattern that, according to Causey 'constitute the signature aesthetic and cerebral organization of the postdigital' (2016:439). Indeed, the process of copying and pasting offers potent means of challenging algorithmic power, since the absurd, racist, and contradictory answers are foregrounded and made visible. For example, a prediction generated by Google, for a sentence beginning 'McDonalds is...', includes 'bad', 'good for you', 'healthy', and 'getting healthier'. The first one directly contradicts the second one, which means that the user is able to choose the answer he

or she is most inclined towards or interested in. This is not necessarily ‘good’ or ‘bad’, as much as it indicates the precarious nature of Google’s predictions. Caught up in a search, one may not take time to reflect on such contradictions. However, when put in a dialogue, the artistic intention is to make the unreliability (unreliable in terms of producing an accurate answer to a question) more apparent.

### 5.6.2 *Visual and side effects*

During *Let’s Google it!*, a spinning globe is displayed with a search bar at the top of the screen stating ‘Search here’. The globe is intended to portray the global reliance on Google for information, while the search bar encourages the listener to engage in the act of Googling. When/if the listener tries to use the search bar, it produces a text bubble below the globe saying ‘*Don’t Google!*’ (shown in Figure 30). There were two intentions to this practice. Firstly, to provoke the user to search for something. Secondly, to reprimand them for doing so. Through this action, the user is encouraged to draw active parallels between the content in the podplay and their own behaviour, reflecting the almost involuntary habit of Googling.

In an attempt to draw attention to and even ‘lure’ the listener into clicking, the letters ‘search here’ were made to blink. This mirrors both the dubious practice of ‘Clickbait’ and the more legitimate commercial practices, where popups of advertising draw attention through blinking and/or moving.

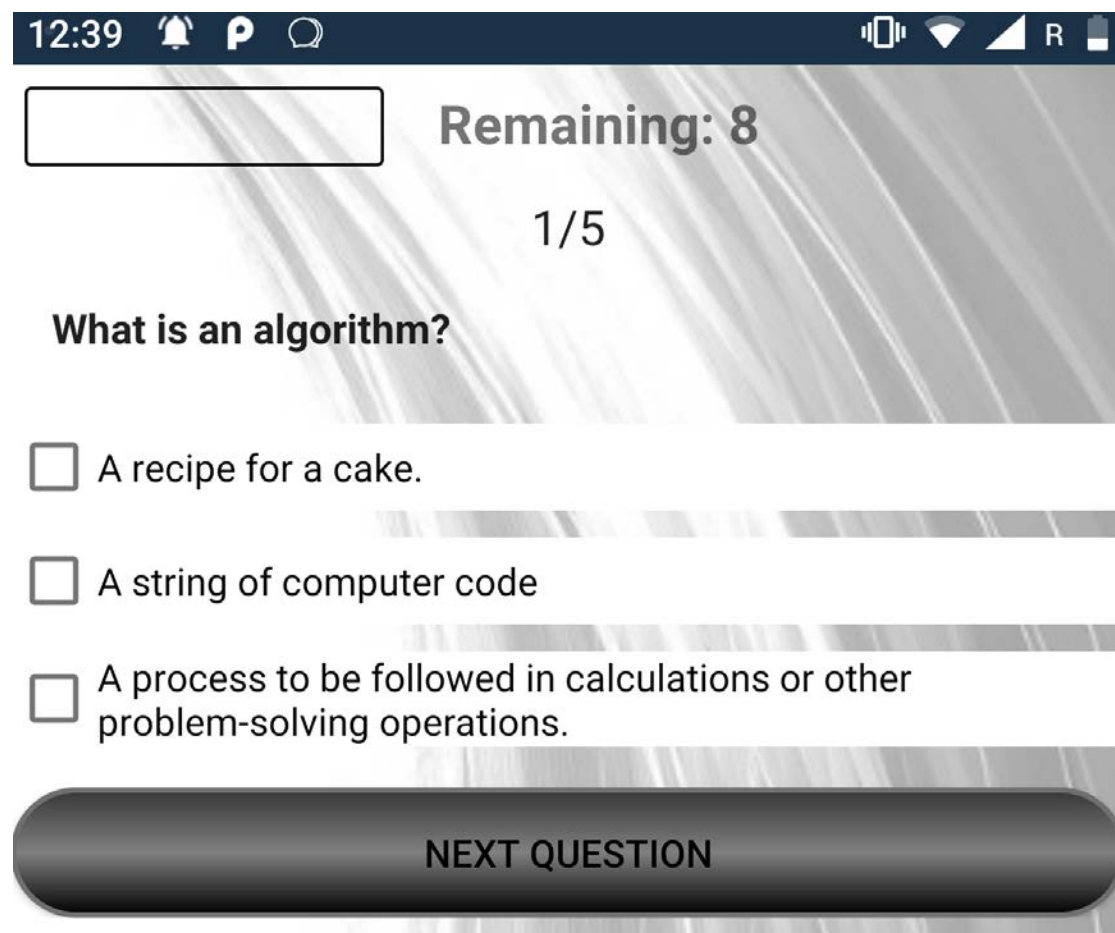
**Figure 30. Don't Google!**



The ‘side effect’ at work in *Let’s Google it!* is delivered in the form of an interactive quiz (see Figure 31). As the podplay plays, a new page displays one question at a time, with a timer counting down from 30 seconds, before moving on to the next question. The same search bar as the one in the podplay is displayed above the question, only this time it takes the user to a Google-page where they are allowed to search for the answer. The artistic intention was, again, to draw attention to people’s reliance on Google for information. The five questions relate to the content of the previous podplays, such as; ‘What is an algorithm?’ (from *Drowning*) and ‘A dark pool refers to’ (from *Falling*). Others, such as; ‘How many calories are there in a Big

Mac?’ (from *Let’s Google it!*), and ‘What is the recommended age for babies to transition from milk to solid food?’ (from *High Risk*), also have traces of themes mentioned in the podplays. The last question, ‘Who wrote the song ‘I will Always Love You’, is simply there as a stereotypical quiz question one might want to Google. If the person chooses to Google, they immediately have points taken away from them, which is displayed after the quiz.

*Figure 31. Interactive quiz*



In summary, *Let’s Google it!* uses the predictions generated by the Google autocomplete algorithm as a dramaturgical device to create a script that seeks to manifest the near habitual reliance on Google as an information provider. It then

questions the objectivity and accuracy of the answers given by voicing the biased, racist and contradictory answers it produces. Additionally, the search bar and quiz engage the listener in the actual act of Googling, creating a moment of potential contradiction and reflection. In this way, and consistent with Grochala's (2017) notion of 'liquid dramaturgy', dramatic content and digital form merge in order to create an experiential knowledge of the potential limitations (in terms of knowledge) that come with a reliance on Google as a habitual source of information.

## 5.7 High Risk

### *5.7.1 Commentary and analysis of text/audio*

Emma is in hospital following the birth of her daughter. Still in the maternity ward, she receives a visit from Officers 1 and 2. Their initial concern for her wellbeing soon turns to insinuation and denigration. What is her financial status? Is her living situation appropriate? And where is the father? It becomes increasingly apparent that a criminal justice algorithm has alerted the Officers to the fact that Emma's baby is running a statistically high risk of becoming a criminal. Pre-emptive action is duly taken.

This plot was inspired by work carried out by Richard Berk, Professor of Criminology and Statistics at University of Pennsylvania. At the time of writing this thesis, Berk was developing an algorithm that he claimed would be able to predict, from birth, the likelihood of a person committing a crime by the time he or she turned 18 (Brustein, 2016). Extreme as this prediction may sound, it epitomises the rise in the kind of

‘criminal justice algorithms’ that are currently used throughout the USA to predict whether a felon is likely to reoffend (Epic.org, 2016). Taking account of variables such as unemployment, marital status, age, education, finances, neighbourhood and family background (Starr, 2014), these algorithms produce a result with a specific percentage showing the likelihood of future criminality (Epic.org, 2016). However, such practices are subject to mounting criticism (Naughton, 2016; Barry-Jester, *et al.*, 2015) as they have been shown to produce biased results. For example, criminal justice algorithms have predicted that black felons are more likely to reoffend than white felons; a prediction that is not corroborated by present fact (Angwin *et al.*, 2016). Similarly, despite a lack of corroborating evidence, they have deemed a person convicted of child molestation to be at low risk of reoffending because he/she had a job, while judging a person convicted of drunken disorder as high risk, on the basis of them being homeless (Angwin *et al.*, 2016). Additionally, since criminal justice algorithms belong to for-profit companies that are under no obligation to display the inner workings of their algorithms, they have been challenged on the grounds of a lack of transparency (Starr, 2014).

*High Risk*, therefore, seeks to encourage a critical awareness regarding the use of criminal justice algorithms and, going further, to encourage a critical approach towards the implementation of and values attributed to such predictions. This is achieved dramaturgically through the creation of an absurd dystopia (Tönnies, 2017), set in a future where the type of criminal justice algorithms envisioned by Berk are used to locate and obtain babies that are deemed high risk.

In terms of dramatic content, the words ‘criminal justice algorithms’ were added within the text in an attempt to signal the relationship between the actions depicted in the podplay and the power of algorithmic predictions. This was because it was judged that, without prior knowledge of the existence of criminal justice algorithms, a listener would find it difficult to identify the algorithm from the dramatization of their power effects.

### **Excerpt 10. Cementing ‘criminal justice algorithm’.**

OFFICER 1  
We are here because Anna got a high 70 per cent on her risk assessment.

OFFICER 2  
The criminal justice algorithms flag everyone above 60.

OFFICER 1  
As I am sure you are aware, this is an evidenced-based method taking into account variables such as marital status, age, education, finances, neighbourhood and family background.

To further strengthen the link between the dramatic content of the play and the notion of algorithms, sounds were used as an absurdist device to reflect the algorithms at work. For example, Emma is heard playing different tracks through an app designed to help babies sleep. A sense of estrangement is created by the sound of, for example, waves crashing onto a beach, being juxtaposed to the setting and situation of a hospital. In other words, the sound is misleading as an indicator of location. Instead, the choice of soundscape is intended to reflect the emotional intensity of the Officers. For example, the sound of the beach grows to a storm as the dialogue becomes increasingly heated. It becomes an automated reinforcement, as if the Officers are part of, and even control, the machine through which the sounds are being played. This seeks to create a situation that is increasingly unstable and unpredictable, through a break between the naturalism of the dialogue and the behaviour of the sounds.

Another example of this is when Officer 1 states, towards the end of the podplay, that Anna has used the word ‘I’ 42 times in the past 10 minutes. This is followed by the audio playing back eight examples of Anna saying ‘I’, parsed together from the previous dialogue. Here, the artistic intention of giving Officer 1 and 2 the ability to manipulate the sound in the audio, is to create a tangible reflection of digital power, where the borders between people and machines are increasingly blurred.

Additionally, drawing on the idea that ‘aesthetic of failure’ is central to postdigital aesthetics (Causey, 2016), *High Risk* deploys a dialogue of repetitions and stutters. The dialogue below (Excerpt 11) demonstrates an example, where the word ‘wait’ is bounced between the characters. This repetition mimics the sound of a machine malfunctioning and also accentuates a sense of estrangement.

***Excerpt 11. A dialogue of repetitions and stutters***

OFFICER 2  
When the time is right.

OFFICER 1  
Did you?

EMMA  
Did I..?

OFFICER 2  
Wait.

OFFICER 1  
Wait.

OFFICER 2  
Wait.

EMMA  
Wait?

OFFICER 2  
Wait.

OFFICER 1  
Did you?

OFFICER 2  
Until the time was right.

In addition, *High Risk* implements the type of unresolved ending that Gregg (2017) used in *Josephine K and The Algorithms*, where the audience is left to reflect over



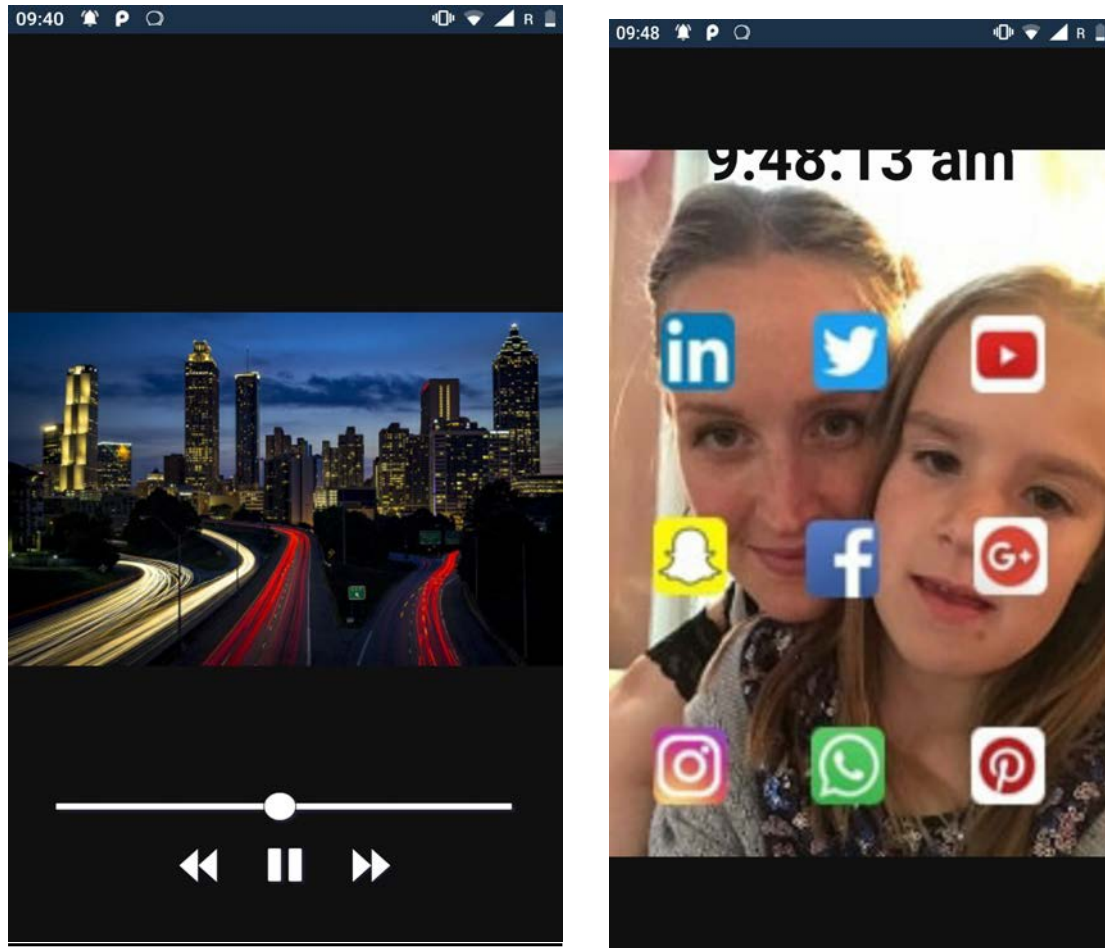
what will happen to the protagonist. After a short pause (silence) in the audio, there is a leap in time. When the sound resumes, the listener is transported to a future in which Emma is celebrating her daughter's 5<sup>th</sup> birthday together with Officers 1 and 2. After singing 'Happy Birthday', the sounds of children playing morph into a brewing storm. In this ending, the relationship between the subject and the biopolitical force implementing control remains obscured, although the instrument of power, the algorithm, has been rendered more perceptible by explaining some of its operation and demonstrating its possible future usage of control. The listener is not told if Emma and her daughter are happy, nor what has happened to them. Nor do they know who is enforcing the algorithmic predictions. This reflects the kind of 'liquid modernity' described by Grochala (2017), where contemporary society is characterised by uncertainty and unsafety. Rather than providing the listener with certain answers, this type of ending seeks to encourage the listener to become increasingly active in interpreting what happens 'after'. Through this process, it is envisaged that listeners will become actively engaged in interpreting possible implications of criminal justice algorithms.

#### *4.7.2 Visual and Side effects*

As detailed above, the main character of the podplay, Emma, uses an app on her phone to play sounds designed to make a baby sleep. As a visual device, *Dysconnect* displays the imagery of Emma's app as if the audience member was looking at her phone through Emma's eyes. Figure 32 demonstrates one of these slides, named 'traffic', which displays the image of traffic on roads with forward/rewind, pause and slide buttons, indicating that the image belongs to the app playing the sound in the

audio. Through this imagery, the object in the audio becomes tied to the object in the listener's hand.

*Figure 32. 'Traffic' (left); and 'Selfie of Emma and Anna' (right).*



Additionally, an image (see Figure 32, right) appears in the end and displays the 'background' or 'wallpaper' image of Emma's phone, a selfie depicting herself and her daughter behind app icons. The time is displayed as it would be on a smartphone. However, it corresponds to the time of the listener. '9.48' is both the time when the image was taken, as seen in the top left corner, and the time on Emma's phone. The intention of this detail is to blur the distance between the world explored in the podplay and the listener's own reality. As the clock is ticking, the fictional time

becomes real time, adding an element of ‘liveness’ to the pre-recorded, hinting to the listener how elements of their reality can be incorporated by an app, without their explicit consent.

Different options for digital side effects were explored and discarded. One suggestion was that the listener would receive a text message detailing a risk score, using a classification algorithm compiled of statistics collected from their phone (such as age, gender, location, occupation). The idea was to both reflect how prediction algorithms force people into inadequate categories, and to demonstrate how this is often performed without the person realising that this is happening. This drew on the ‘dispersed dramaturgy’ used by Blast Theory in *Karen*, where the app collected data (in the form of answers) from the audience, which was then used to supply them with a restrictive profile. However, as pointed out in Chapter 2.6, this dramaturgy was found to be somewhat limited in terms in generating political agency. The restrictive answers created a distance between the device and myself. To overcome this, it was originally planned to collect information using the service Google+. However, in October 2018, half way through our development process, Google disabled this specific service. This meant that, within the diminishing time at our disposal, it was not possible to find a (legal) way of obtaining enough information for the application to be valid. That is not to say that it is impossible. Indeed, it is one area of artistic research that could be explored further in the future. It alludes to possibilities of the type of involuntary interaction that could lead the audience to experience, reflect and question how algorithms can be used to extract information from their smart phones.

Lacking the resources to follow this route, an alternative possibility, of making a questionnaire based on questions extracted from COMPAS, was investigated<sup>11</sup>. COMPAS is a prominent risk assessment tool offered by a for-profit company that uses criminal justice algorithms to predict the risk of criminals reoffending (Stevenson, 2018:326). This questionnaire was used as inspiration for *High Risk*, where questions of neighbourhood and socio-economic background, taken from the questionnaire, appear within the script. An example of COMPAS can be seen in Figure 33 below.

Figure 33. Sample questionnaire from COMPAS risk assessment, 2016

**Risk Assessment**

| PERSON  |                 |         |  |
|---------|-----------------|---------|--|
| Name:   | Offender #:     | DOB:    |  |
|         |                 |         |  |
| Gender: | Marital Status: | Agency: |  |
| Male    | Single          | DAI     |  |

| ASSESSMENT INFORMATION |                                     |           |                 |
|------------------------|-------------------------------------|-----------|-----------------|
| Case Identifier:       | Scale Set:                          | Screener: | Screening Date: |
|                        | Wisconsin Core - Community Language |           |                 |

**Current Charges**

|   |  |   |   |
|---|--|---|---|
| <input type="checkbox"/> Homicide               | <input checked="" type="checkbox"/> Weapons    | <input checked="" type="checkbox"/> Assault | <input type="checkbox"/> Arson            |
| <input type="checkbox"/> Robbery                | <input type="checkbox"/> Burglary              | <input type="checkbox"/> Property/Larceny   | <input type="checkbox"/> Fraud            |
| <input type="checkbox"/> Drug Trafficking/Sales | <input type="checkbox"/> Drug Possession/Use   | <input type="checkbox"/> DUI/OUIL           | <input checked="" type="checkbox"/> Other |
| <input type="checkbox"/> Sex Offense with Force | <input type="checkbox"/> Sex Offense w/o Force |   |   |

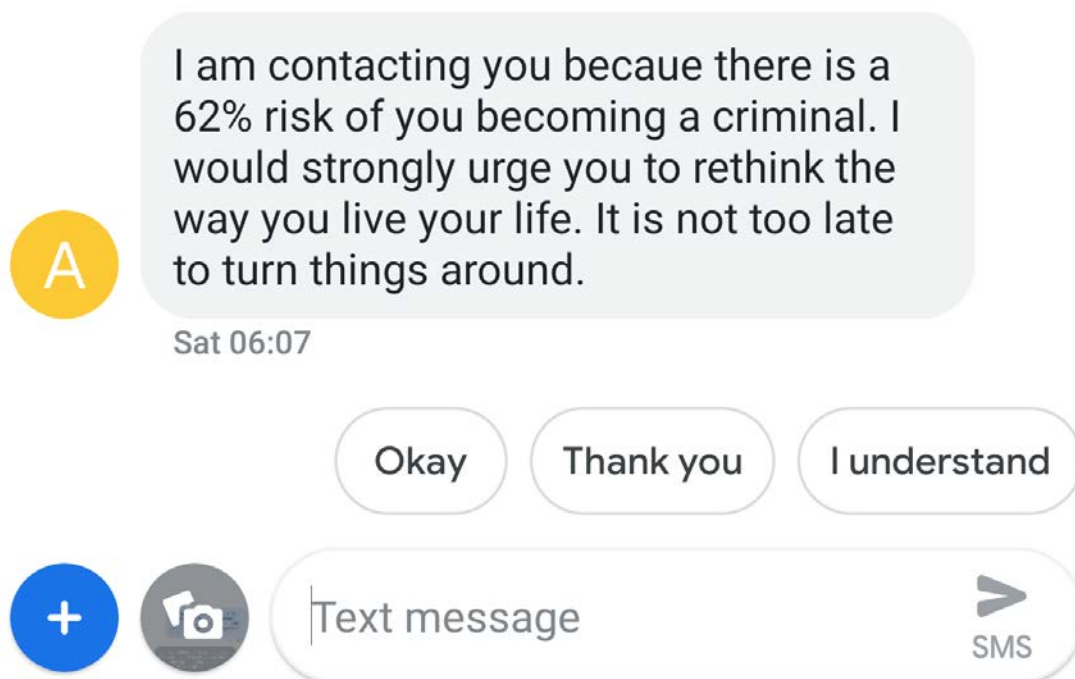
- Do any current offenses involve family violence?  
 No  Yes
- Which offense category represents the most serious current offense?  
 Misdemeanor  Non-violent Felony  Violent Felony
- Was this person on probation or parole at the time of the current offense?  
 Probation  Parole  Both  Neither
- Based on the screener's observations, is this person a suspected or admitted gang member?  
 No  Yes

The questionnaire is divided into different categories (such as 'Current Charges'). From these categories, several were chosen for incorporation in the podplay (e.g.

<sup>11</sup> The version below is, according to Julia Angwin, obtained from Wisconsin, USA, a state that uses COMPAS at every stage of the criminal justice system after conviction (2016).

'Resistance/Stability', 'Education', 'Vocation', 'Leisure', 'Social isolation', 'Criminal personality' and 'Criminal attitudes'). The selection was purely an artistic one, favouring questions that seemed more 'mainstream' and less obviously 'criminal'. For example, a question such as; 'Have you been a member of a gang?' was discarded in favour of; 'Do you have a regular living situation'. Additionally, the user was asked for their age and gender. The answers to these questions were then assigned a number, from high risk to low risk, where the result is presented to the listener as a percentage of risk, i.e. a 'risk score'. Mimicking the calculus of the criminal justice algorithms, a prejudice was built in to the calculation of risk. For example, being young and male, gives a higher risk score, reflective of how bias becomes inscribed within algorithms. This risk score was then sent to the user as a text message, as demonstrated by Figure 34 below.

*Figure 34. Screen shot of message sent to Amanda Fromell's phone*



The risk score was similar to the profile found in Blast Theory's *Karen*, where restrictive questions give a limited result. However, instead of offering the audience the opportunity to buy the result, it was imposed on them as a text message. The artistic intention here was to move from the digital realm of the app to the listener's inbox, shifting digital platforms and entering into a personal space. By doing so, it was hoped to create a direct and somewhat uncomfortable experience of algorithmic power, showing not only how it works to generate profiles, but also how it can insert itself into different digital spaces without the listener necessarily intending for this to happen.

To summarize, *High Risk* takes current practices of criminal justice algorithms as the basis for a dystopia, where these systems are used to predict and decrease future crime. It deploys the postdigital aesthetic of glitches and repetitions, to create an experience of how digital control can influence human behaviour. It also implements a 'liquid dramaturgy' of unresolved endings, where the relationship between the subject and the biopolitical force implementing control remains obscured, although the tool of power, the algorithm, is made visible.

As articulated by Angelaki (2017:3), agency comes from the listener being encouraged to think, to draw connections, to become active in making sense of the play. With this in mind, it is hoped that by providing an audience with an increased measure of awareness of criminal justice algorithms, and the precarious nature of algorithmic predictions, they are given the opportunity of a more critical digital

practice. For example, the listener may start to recognise, and question, algorithmically produced recommendations, statistics and predictions, as they appear in everyday life. This could include adverts detailing ‘risks’ of conditions/behaviour aimed at selling policies, or politicians presenting algorithmically produced crime statistics in order to gain support.

Algorithmic control is also made tangible and personal through the risk score presented to the listener. This is an area that could be developed further, by finding ways of extracting information about the listener without their knowledge. It would also be interesting to include imagery from the listener, perhaps by accessing photos from their photo album on their phone and using these as background to the questionnaire.

## 5.8 Safe

### *5.8.1 Commentary and analysis of text/audio*

Set in a dystopian near future, where the Internet of Things penetrates every aspect of people’s lives, from movement, to healthcare, to thoughts, *Safe* follows the journey of a woman, addressed as ‘you’, on her way to work. The narration moves forward by relaying information supplied by algorithms communicating through different devices. At the core of the piece is a concern about algorithmic surveillance and the Internet of Things. In an early draft of *Safe* (see Appendix I), the spying ability of household objects (the Internet of Things) was not included. Instead, the character was being observed through CCTV and a fitness bracelet. As I learned more about

how algorithms operate through the Internet of things, I changed the script to include and reflect the way in which such algorithms are able to subtract information.

The term 'algorithmic surveillance' refers to surveillance that makes use of automatic step-by-step instructions (Introna and Wood, 2004:181). It can be understood as a hidden or 'silent' technology (Beer, 2009), since it involves a passive, embedded operation, where the subject is largely unaware of when and how s/he is being observed. For example, facial recognition algorithms employed through CCTV cameras are silent, in the sense that the process requires no input from the person being targeted and happens without their knowledge (Introna and Wood, 2004:183). This is made possible by the algorithms accessing images live through CCTV camera footage, automatically comparing them to a database of collected images taken from official documents, such as driver licences and passports.

Lupton (2015) describes this as a shift from 'panoptic surveillance' to 'dataveillance', 'ban-optic' and 'algorithmic veillance' (p. 35). The notion of panoptic surveillance is associated with Foucault's (1975) work on power, where an invisible disciplinary power alters the thought and behaviour of people. Although Foucault discusses the uses of panopticon architecture, such as Bentham's prison designs, it is clear that modern CCTV networks can have the same effect. When people know that they are being watched through a network of CCTV, they are more likely to self-regulate their conduct according to the societal norms enforced by the technology. However, Lupton (2015) argues that we are now in a post-panoptic world, 'where the panoptic model of



surveillance has been completed or superseded by new forms of power relations cohering around observation and monitoring' (p. 142).

The idea of the panoptic implies a certain degree of awareness, where the individual is aware of the fact that they may be watched and so, in consequence, conform and alter their behaviour. 'Algorithmic-veillance', in contrast, makes decisions and predictions about people based on their previous activities, gender and/or ethnicity (Lupton, 2015:36), in order to present them with choices and information, which, arguably, will influence the decisions and choices these people go on to make. This is 'surveillance as a mode of authoritarian power to which those who are monitored do not always give their explicit agreement (or, indeed, are asked to do so), and those who monitor others do not acquiesce to a similar level of transparency of their own actions' (Lupton, 2015:142). As expressed by Bauman (2012), post-Panoptical power 'has become truly *exterritorial*, no longer bound, not even slowed down, by the resistance of space' (p. 11). *Safe* attempts to reveal the hidden character of 'algorithmic-veillance' as described above. To do so, it focuses on how different personal and public devices could be connected by algorithms to report on and even incriminate an individual.

This particular focus draws on the notion of the 'Internet of Things'. The Internet of Things' refers to the growing interconnection between different objects, and especially the growing communication of 'smart' objects via the Internet, allowing, for example, a person to remotely turn on the heat in their house through their smart phone. This marks a potentially invasive path that could involve an element of

tracking and monitoring, raising questions about the power of those for whom the data is gathered through these devices, and how these data could be and actually are used. For example, Apple recently apologised for allowing Siri to listen in on their users conversations (Hern, 2019). In practice, these questions are notoriously difficult to answer because the specific algorithms used by each manufacturer are treated as trade secrets and remain hidden under legal protection (Nield, 2016).

In *Safe*, the devices linked to the ‘Internet of Things’ speak about their subject.

***Excerpt 12. Dialogue where the objects inform on the subject.***

- The stovetop is worried.
- You let the popcorn pop and burn.
- The bin doesn't think you ate a thing.
- And you've let the milk go off again.
- The fridge doesn't like that. Gives its whole interior a putrid stink.

Rather than creating characters, the lines spoken are preceded by the symbol ‘-’ in order to place the focus on the spoken predictions, rather than on the algorithm’s own characteristics. This places the focus on the subject under surveillance, addressed as ‘you’, rather than on the voices speaking. This artistic choice is inspired by practices used by Martin Crimp in *Attempt on Her Life* (1997), and the second act of *In the Republic of Happiness* (2012). In these plays, focus is shifted from characterisation and individuality, to the text itself, challenging ‘the idea of socio-psychological causation’ (Grochala, 2017:20), and destabilizing attempts at interpretation (Luckhurst, 2003:51), forcing both the artistic team and the audience to become active in the process of sense making.

In the actual workings of an algorithm, the predictions (which are spoken in the podplay) would be generated almost instantaneously, since the computer is able to operate at a high speed, offering results without accounting for the journey that led to them. However, by slowing down the tempo and dramatizing the communication between these systems, the way in which they operate according to inbuilt judgements and conclusions is illuminated. Hence, the aim of this dramaturgy is to make the hidden nature of surveillance algorithms visible, in order for the audience to experience how the algorithms collect information and generate answers. This may, conceivably, result in a more critical approach to the usage of the Internet of Things, where, for example, the listener may enquire into privacy settings before linking their smart phone to the thermostat of their home. This objective is supported by a hidden code within the ‘Terms and Conditions’ (discussed in section 5.8.2 below), which draws attention to the importance of understanding what one agrees to.

Similar to the endings of *High Risk*, *FitChip* and both *Trapped and Safe* presents a veiled relationship between the subject and the biopolitical force implementing control. The listener is not made aware of *whom* is directing the algorithms or, indeed, inscribing values within them. Rather, they are only shown how one may be subjected to its logic. This generates a ‘liquid dramaturgy’ (Grochala, 2017) where the veiled power relationship becomes a reflection of the type of ‘liquid modernity’ described by Bauman (2012), where uncertainty becomes ‘*the only* certainty’ (p. viii) within contemporary society.

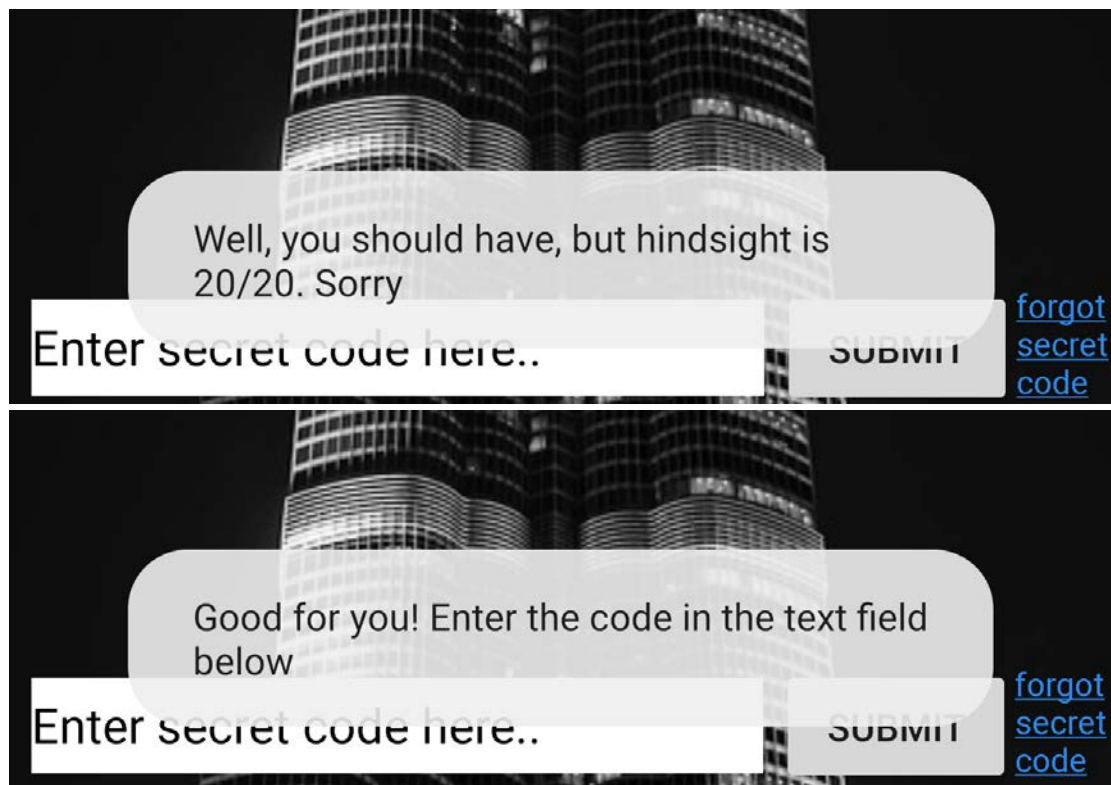
Rather than recording *Safe* in one take, I chose to make both group and individual recordings, using the voices of the 11 actors who had participated in the previous podplays. The goal was to create a non-naturalistic sound quality where voices appear out of sync, using different intonations and volume, similar to that of an automated voice guiding you through a telephone cue. The type of rhythm mimicked through this process of copying and pasting, is described by Causey (2016) as one of the ‘keystroke patterns that constitute the signature aesthetic and cerebral organization of the postdigital’ (2016: 434). It resulted in a sound experience that is somewhat computerised, copied and pasted, rather than spoken in unison. Time is disrupted and chopped, instead of recorded in the linearity of real-time.

### 5.8.2 *Visual and side effects*

In order for the app to comply with security and privacy regulations, the user has to agree to detailed ‘terms and conditions’ before playing the app. Hidden within the terms and conditions of the app, one will find the sentences: ‘By the way, here is a code you can use later: 3xtraPod. Please write it down.’ After having played through the experience, the listener is taken to a menu page where they are asked to enter the code. If the listener fails to do so, they have the option to click the blue text, ‘forgot secret code’. This produces a text window asking them whether or not they read the terms and conditions. If they click ‘No’, they are told that they should have done so. If they click ‘Yes’, they are, again, asked for the code (See Figure 35). Through this interaction, the listener is shown how easy it is to overlook the content of the terms

and conditions. They are also given an experience of how this can lead to unforeseen circumstances

*Figure 35. 'Praise/reprimand regarding the secret code'.*



In summary, *Safe* aims to show how the Internet of Things can be used as a tool of control, by giving voice to a cast of 'smart objects' and allowing them to speak their observations. Hiding a code within the terms and conditions, that unlocks the extra podplay, helps draw attention to the importance of reading through and understanding what one agrees to. It is through the experience, of either reading or failing to read (and, perhaps, deleting and re-uploading to gain renewed access to the terms and conditions), that the potential dangers of giving access to these objects are made more apparent.

## 6. Extra podplays

In addition to the podplays mentioned above, there were drafts and ideas for podplays that didn't make it into the final piece (i.e. *Dysconnect*). Two of these, *Ulysses 2.0* and *Connected*, offer some insight into the possibilities and difficulties of making algorithmic power visible.

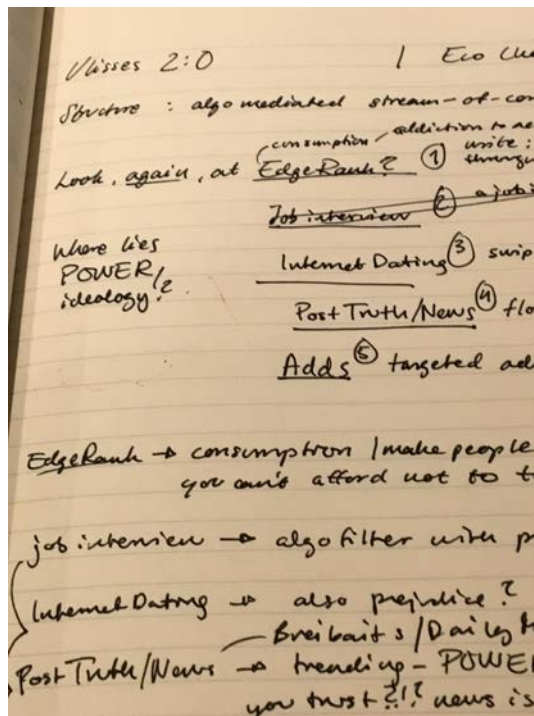
### 6.1 *Ulysses 2.0*

*Ulysses 2.0* (see Appendix K for script) was written in an attempt to make visible how echo chambers limit people's exposure to opposition and diverse knowledge. The terms 'Echo Chamber' and 'Filter Bubble', popularized by Eli Pariser in his book *The Filter Bubble* (2011), allude to the way in which online news and social interactions, mediated by algorithms, provide the user with information that reaffirms their own beliefs. The Echo Chamber, what it includes and excludes, has hence become part of what shapes people's stream of consciousness online, steering their thoughts and interactions on sites such as Facebook and Google.

I also wanted to explore how people are themselves complicit in the limitation, by becoming comfortable within their own 'bubbles'. In order to do so, I chose to create a monologue spoken by the character Anya, consisting of several overlapping audible online forums; Facebook status updates, targeted adverts, weather updates, a chat room conversation, a Tinder interaction, and a phone call. The micro-dramaturgy follows Anya's stream of consciousness, which is both mediated and prompted by the

digital platforms she is engaging with. An extract from my diary can be seen in the image on the left (Figure 36), where I am attempting to plot out this structure.

**Figure 36. Diary extract - Ulysses 2.0**



By incorporating the structure and strategies of the digital in an attempt to expose how algorithmic control is executed, the dramaturgy of *Ulysses 2.0* can be understood as a postdigital dramaturgy. Rather than telling a narrative through digital platforms such as Facebook or Twitter, it draws on the complex connectivity and networked nature that has become part of how we

live our lives today, allowing for that to shape the narrative. It is an example of what Causey (2016) refers to as ‘*thinking digitally*’, where the structures and strategies of the digital, its discourse and ideologies, are incorporated within the work in order ‘to resist, or at least understand, the systems of electronic and computational control’ (Causey, 2016: 432).

Another attempt to follow the structure of the digital was made through the incorporation of targeted advertisements, which appear as ‘breaks’ or pauses in the main narrative, at seemingly random times. This reflects the way in which algorithms collect information about individuals online and then use this information in order to target each individual with personalised adverts. These adverts can reflect online

searches done by the subject a month prior to the moment in which they appear, creating a kind of time lag between an expressed interest and an advert relating to it.

*Figure 37. Extract from Ulysses 2.0 (play script)*



The times when they appear are not necessarily prompted by the actions of the user in that specific moment, but are instead prompted by a computational logic. This creates a nonlinear dramaturgy, where the focus switches abruptly, as the narrative is injected with algorithmically prompted adverts and accomplishes two things. Firstly, it reflects the nature of online behaviour and demonstrates how a user is constantly put under surveillance, targeted by companies with adverts in order to sell them products. Secondly, these ‘breaks’ become dramaturgical tools that can be used in order to offer the audience information regarding the character. The adverts which Anya receives reflect her previous searches, meaning that concepts such as ‘organic food’ and ‘Guardian Soulmates’ are not random pieces of information, but help inform the listener about Anya’s character.



However, following the recording of the piece, we played it a small to a number of people, who commented that even though they understood what was happening, in the sense that Anya was flicking through her phone, the presence of algorithms and how they were controlling her stream of consciousness, was lost. Another problem was the difficulty in making Anya's filter bubble interesting to a listener. Our filter bubbles, it seemed, are mainly interesting to ourselves since they reflect our own interests. Of course, this could be solved by choosing a different protagonist, perhaps someone with a more sensationalist stream of consciousness, but it was questionable whether this would actually reveal the algorithm at play, or simply create a more interesting character. A more promising solution would be to create a piece that somehow incorporated the listener's own filter bubble within the piece and demonstrated how limited this was. Given the funding constraints, this was an idea that I was unable to pursue further, but there would be future scope in investigating how a personal narrative could be woven into a podplay in order to make visible how algorithmically filtered echo chambers can effect and even steer our stream of conscious.

## 6.2 *Connected*

The podplay *Connected* (See Appendix L) was not included within *Dysconnect* simply because there was neither enough time nor sufficient resources (i.e. funding) to create visual and digital side effect for the piece. That said, there may be some insights that can be drawn from the development detailed below.

*Connected* consists of four overlapping monologues, spoken by the characters James, Nea, Sergei and Linn. They are all connected to the ‘gig economy’ and, in one way or another, subjected to ‘algorithmic management’ through these connections.

The gig economy refers to a labour market made up of short-term contracts or freelance work, as opposed to permanent jobs. People are paid for a particular task, or ‘gig’, instead of receiving a wage (Wilson, 2017). This form of work can be viewed as positive in that it offers flexibility, in terms of commitment to working hours. On the other hand, it can be considered negative, since workers may not have protection against unfair dismissal, right to sick or holiday pay, or the right to receive the national minimum wage.

Algorithmic management refers to the type of software algorithms that take on managerial functions, through the implementation of institutional devices that support the algorithms in practice (Kyung Lee *et al.*, 2015:1603), and it is one of the core innovations that make the Gig Economy possible. The company Uber and its use of algorithmic management, serves as an interesting example of how power becomes inscribed within these algorithms. Uber is a San Francisco-based company, which offers a service where drivers are matched with customers looking for a ride, through an app on a smartphone. The app uses GPS-trackers to match the customers with a driver who is located close to them. According to Uber, quoted in Kyung Lee *et al.*, (2015) ‘the closest driver to that rider automatically receives the trip request with a 15 second window to accept it [42]’ (2015: 1604). This is followed by a process whereby quantified metrics, collected through the app, are used to evaluate the driver, based on

the amount of requests accepted and the rating given to the driver by the passengers. Drivers with a low average passenger rating and acceptance rate may be subject to review, or immediate deactivation from the ride-sharing platform (Kyung Lee *et al.*, 2015:1604). On the other hand, if they do well, they may be rewarded with a higher role within the company, such as a mentoring role (Matias, 2015). Through this type of algorithmic management, Uber is able to automatically implement company policies on the behaviour and practices of Uber drivers.

The characters in *Connected* tell individual stories of algorithmic management and the Gig Economy. James is based on a series of profiles taken from the website of the company HomeTouch, which allows customers to browse through a database with profiles of carers, accessing their biographies, skills, expertise, education and price per hour/week. Similarly, Nea works within the gig economy as a courier for Deliveroo, a food delivery company that connects couriers with food customers, using a similar model to that of Uber. Sergei has left a large tech company to go freelance and is a great believer in algorithmic management, while Linn is an employee in a store selling food and drinks. Her performance is constantly measured in order to produce a 'true productivity score', a number indicating when she is at her most effective.

The listener encounters these monologues through a networked connectivity, that draws on the kind of stream of consciousness developed in *Ulysses 2.0*. Instead of the characters delivering their texts one by one, they happen simultaneously, with



Connections between the monologues appear when words or phrases overlap, marked above in bold. These overlaps happen organically within each monologue, meaning that the words/phrases sit within distinctive narratives, except for one instance when an advert for ‘Swedish massage’ appears and is spoken simultaneously. In the end, the podplay changes and becomes an investigation of freedom in relation to the gig economy and algorithmic connectivity. These lines are not spoken simultaneously, but instead they overlap, leaving room for the others to be heard. It starts with the line: ‘we are free to roam each others consciousness’ and goes on to detail things that become possible due to an algorithmically generated connectivity, such as ‘know where our friends are’, ‘free with nothing to hide’, ‘free to browse’, ‘free to click agree’.

The style of this ending was inspired by the second act of Martin Crimp’s play *In the Republic of Happiness* (Royal Court Theatre, 2012). It is entitled ‘The five essential freedoms of the individual’, there are no characters but instead a series or statements preceded by a line, as shown in the extract below:

- Protect me. Terrorise me. Then protect me again.
- Protect me. Save me. Fuck me.
- Fuck me, scan me, then fuck me again. Satisfy me one hundred per cent. If I’m not one hundred per cent satisfied, return my money. (Crimp, 2012:55)

Crimp engages in ‘a fluid narrative and dialogical mode that blurs boundaries between different voices’ (Angelaki, 2017:143), veering away from naturalism towards the absurd. Crimp, quoted in Angelaki (2017), states that this type of open

narrative facilitates an active interpretation by the audience, one that ‘invite[s] us into a process of thinking and questioning without tying us to a rigid formal structure’ (2017:146). This idea of open narratives, where form and content become somewhat disorienting and absurd in order to generate questions, inspired the ending of *Connected*. In contrast to Crimp’s ‘I’, I chose to use the address ‘we’, in order to implicate the listener within the narrative. ‘We are free to roam each other’s consciousness. We are free to connect and disconnect.’ Including the listener within this ‘we’ is an attempt at making them actively positioning themselves within the statements made by the voices.

Recorded sounds from Euston Station in London are used as background. This sets the scene at the start of the podplay, disappears with the introduction of the second voice and reappears when the monologue changes form and begins the address ‘we are free’. I imagined this as a journey where the listener is first placed at a train station, taken into the stream of consciousness of the character and led back to the station, where they are eventually left. The sound seeks to open up the narrative in the end, hinting towards the fact that we are all having these types of inner conversations, connected to one another through algorithms. The power of these types of systems hence lies in their ability to connect us with each other, with products, with desires and work, steering our minds, interactions and abilities.

To summarize, *Connected* incorporates three main ideas within the podplay. In terms of content, it investigates algorithmic management and the gig economy, where people are automatically managed and connected to work. It employs a networked

dramaturgy, aimed at making the listener engage in a process of pattern recognition, making them ‘think digitally’, drawing connections between the overlapping dialogue and its individual content. This creates the kind of postdigital dramaturgy articulated by Causey (2016), namely one that mirrors a reality where the virtual and the real are made increasingly indistinguishable. We are connected and made into ‘content’, without our knowledge. Hence *Connected* attempts to make this controlling power of algorithms, turning us into patterns and connections, visible through allowing the audience to mimic their behaviour. It tries to give them an active experience of connectivity and pattern recognition, aiming to generate increased understanding regarding algorithmic operation, which, ultimately, may lead to increased agency. As stated in the Introduction, we cannot hold to account that which we know nothing of. It is only through making algorithmic operation visible, tangible, that we may begin to question their power affects. The larger aim of *Connected* is therefore to generate a deeper understanding of algorithmic connections, so that the listener is able to recognise when these occur. Such recognition could, for example, make them aware of when algorithms target them with adverts connected to their interests or filter Facebook posts and information according to their shown preferences.

### 6.3 Chapter summary

The aim of this chapter was to provide commentary and analysis on the practices involved in creating the *Dysconnect* app. The objective was to describe the underlying intentions behind the two main artistic dimensions (the text/audio and the supporting visual and side effects), while relating those artistic choices to the research

context. In short, it has set out both what was done, in practice, and why. A consistent theme across the seven plays was an attempt to combine the subject matter, dramaturgical form and side effects, in such a way as to challenge algorithmic power.



## **Part V: Discussion and Conclusions**

### **7. Dysconnect as Digital Political Dramaturgy**

#### 7.1 Introduction

The objective of this final chapter of the thesis is to set out the main insights that have emerged from the research enquiry. It does so by presenting *Dysconnect* as an instance of a ‘digital political dramaturgy’, which in turn is presented as a conceptual model for how dramaturgical practice can challenge algorithmic power. It also provides an evaluation of the individual podplays in terms of their relative success in deploying dramaturgical tools to challenge algorithmic power. It is by setting out those insights that knowledge embedded in and derived from practices becomes a form of knowledge that can be shared and evaluated within an audience of fellow researchers and practitioners (Nelson, 2014).

#### 7.2 The components of a ‘digital political dramaturgy’

This thesis began by asking how theatre might respond in the face of a technological power that is largely invisible and incomprehensible in its raw form. More specifically, through a process of practice-as-research (PaR), a research enquiry has been undertaken that focuses on understanding how computerised algorithms in everyday life exert power over citizens and how, in turn, dramaturgical practices could be used to counteract such power effects. As suggested above, there are two main outcomes of the research enquiry, both of which afford unique insights. The first

is the creation of the *Dysconnect* app, which stands as a concrete example of how dramaturgical practice can challenge algorithmic power. The second is the notion of a ‘digital political dramaturgy’, which sets out both the conceptual and theoretical basis of *Dysconnect*, along with a more general expression of what was deemed dramaturgically efficacious in contesting algorithmic power. The focus of this section is to summarize the conceptual basis of a ‘digital political dramaturgy’, and to offer an evaluation of how successfully the concept was instantiated in *Dysconnect*. Before proceeding, it is worth restating that the concept of a ‘digital political dramaturgy’ is offered as *one way* in which algorithmic power can be challenged through the tools of dramaturgy. Today, the tools of ‘new dramaturgy’ are so rich and varied that many alternative approaches could conceivably be taken (Trencsényi and Cochrane, 2013).

The first step in the research enquiry was to provide a basis for understanding the nature of ‘algorithmic power’. Drawing on a range of theorists, including Hardt and Negri (2001), Lash (2007), and Beer (2009), ‘algorithmic power’ was conceptualized as networked and multiple, and yet largely invisible. It is a force that surreptitiously orders social life within and through a dense tapestry of technological devices, from CCTV surveillance systems to insurance calculations; and from smart fridges to mobile phones. The result is that algorithms are deeply embedded in the ‘production, dissemination and consumption of culture’ (Beer, 2013:66). That is why Galloway (2011) asserts that ‘the point of power today resides in networks, computers, algorithms, information and data’ (2011:95). Crucially, however, neither their presence in technological devices nor their ordering effects are announced to their

users. They typically operate in what Thrift (2005) terms the ‘technological unconscious’.

The above conceptualization of ‘algorithmic power’ helped establish the nature of the challenge for a theatre practice aimed at rendering more perceptible this seemingly ‘unrepresentable’ force (Galloway, 2011:95). Drawing on the work of Causey (2006, 2016) and Grochala (2017), the thesis then argued that artists seeking to expose and challenge ‘algorithmic power’, so conceived, would need to find a dramaturgical form that could transcend the representation of a single powerful algorithm so as to enter into the networks and structures where algorithmic power is actually manifested (discussed in Chapter 2.2 and 2.4). It would necessitate going beyond a ‘politics of content’ to also experiment with a ‘politics of structure’ (Grochala, 2017). Doing so, however, would involve the exploration and creation of new dramaturgical forms.

### *7.2.1 ‘Dispersed dramaturgy’ and a ‘dramaturgy of visibility’*

The major outcome of the first phase of research was the insight that the ‘matrix-like’ character of algorithmic power calls for a dramaturgical form that reaches into the mundane yet multitudinous spaces of the contemporary digital landscape at several key sites where algorithms have been shown to operate. This was the objective associated with the concept of a ‘dispersed dramaturgy’, which was adopted as the core structural form. A ‘dispersed dramaturgy’ involves a deliberate movement away from the relatively contained focus of traditional dramaturgy (Trencsényi and Cochrane, 2014). By creating several disjointed yet connected scripts, a ‘dispersed

dramaturgy’ would more accurately portray the character of ‘algorithmic power’ *per se*, and provide a stronger basis for contestation (compared to providing a representation of a single powerful algorithm). Each script would focus on one manifestation of algorithmic power, without attempting to connect each to the other through character or the smooth continuation of a narrative arc. Instead, there would be a thematic connection around algorithms and power. It was envisaged that a ‘dispersed dramaturgy’, in the form of several scripts, could be effectively realised through the medium of audio, allowing the performance to take place within a smart phone. This is consistent with Todorut’s observation that, ‘social media and portable networked devices create not only new performative modes, but leave imprints on traditional dramatic practices, such as playwriting’ (2016:497). Additionally, locating the performance within a smart phone allowed for a ‘strategic penetration’ of contemporary power, as the performance occupied the same contested space as that within which algorithmic power operates.

Having established a ‘dispersed dramaturgy’ as the first requirement of a dramaturgical form aimed at challenging algorithmic power, the research enquiry proceeded to an examination of relevant research and theatre practice. A systematic literature review of theatre and algorithms (Chapter 2.3 *Algorithms and theatre*) revealed a lack of literature on the subject and demonstrated how this remains an underdeveloped area of theatre research. Theatre practice was shown to have engaged more directly with algorithms, but not in a way that challenged algorithmic power. More specifically, it showed that while practices such as Dorsen’s ‘algorithmic theatre’ and Rimini Protokoll’s *100% City*, successfully embed algorithms within a

dramaturgical structure, they neither take sufficient account of, nor challenge, the complex ways in which algorithms execute power.

On that evidence, it was judged that a dramaturgy aiming to challenge algorithmic power would need to be more than mere ‘algorithmic theatre’. There would need to be a clear political component. This suggested that, alongside a ‘dispersed dramaturgy’, which itself entailed a ‘politics of structure’, an overtly political content continued to have a valuable role to play. Specifically, making algorithmic power visible through the content of the scripts was judged to be important to increasing awareness of the presence of algorithms and exposing the power effects of their operation. This ‘dramaturgy of visibility’ was deemed necessary because algorithms are widely acknowledged as operating without public awareness (Beer, 2009, 2013; Galloway, 2011). Indeed, when some measure of algorithmic power is seen as stemming from their sheer invisibility (Mackenzie, 2006), then an effective form of contestation is to frame algorithms, not as abstract lines of code, but as operations flowing into everyday life through concrete technologies. A dramaturgy of visibility, therefore, helps locate algorithms in the social settings where they are embedded in routines and processes.

It is on that basis that the decision was taken that algorithms would form an element of the content of all the scripts within *Dysconnect*, though with varying degrees of specificity and/or explicitness. For example, *Drowning* is essentially about the effects of search algorithms such as Google. *Falling* refers directly to the Flash Crash and algorithmic feed-back loops. *High Risk* outlines criminal justice algorithms, while

*FitChip* details how algorithms generate the data of a FitChip. In contrast, while *Let's Google it!* is clearly about the Google autocomplete algorithm, the algorithm *per se* is not explicitly referenced (the characters simply Google answers). Similarly, *Safe* lacks a direct reference to the 'Internet of things', while *Trapped* problematizes digital connectivity rather than a specific algorithm. The three latter podplays are, therefore, less explicit in implementing a dramaturgy of visibility, with the result that the algorithm is perhaps less exposed. For example, in the case of *Safe*, the listener may gain a sense of objects reporting on a subject, but not of how this relates to algorithms. *Let's Google it!* assumes that the listener will recognise the way in which Google autocomplete generates answers, an assumption that may or may not be accurate. *Trapped* takes on larger questions of connectivity, which could be seen as less effective than actually exposing specific algorithms. For those reasons, it could be argued that the most successful pieces (successful in terms of rendering algorithmic power visible) were those that honed in on a specific algorithm, explicitly mentioning it within the script and then allowing it to either become part of the dramaturgical structure and/or the digital side effect.

### 7.2.2 *Generating political agency through 'digital side effects'*

Returning to Beer's (2009) thesis that a central danger of algorithmic power is the consequent loss of *human* agency (2009), the concept of 'political agency' was added as a crucial component (alongside 'dispersed dramaturgy' and a 'dramaturgy of visibility') for the dramaturgical form, since this would help enable the audience to act against (e.g. resisting and contesting) algorithmic power. To this end, an

additional insight, derived from the review of existing research, was the potentially important role that conflict and provocation could play in rendering algorithmic power more visible. Rather than telling the listener about the issues of networked power and control, a dramaturgy that harnessed the power of conflict and provocation, would provide a more *experiential* sense of algorithmic power.

Existing theatre practice and research has shown that conflict and provocation can be generated successfully through a process of digital immersion. These themes were further explored in Chapter 2.4 (*Agency: uncomfortable interactions, strategic penetration and embeddedness*), where interactivity was established as a key concern of new media dramaturgies (Eckersall, Grehan, and Scheer 2016:375, Todorut; 2016:499); especially those that demand a response from the audience through direct confrontation or involuntary involvement (Malzacher, 2015:21). Furthermore, ‘uncomfortable interactions’ (Benford et. al, 2012) were analysed and implemented as an artistic strategy employed towards provoking reflection. The concepts of ‘hactivism’ (Giannachi, 2007) and ‘embeddedness’ (Causey, 2006) were explored as strategies able to provoke ‘uncomfortable interactions’, where digital hacks embedded within a performance could be utilized to expose digital power in a discomfoting and even provocative way. Rimini Protocol’s *Bubble Jam* (2018-19) and Headlong’s app *Digital Double* (2014), in conjunction with their stage performance *1984* (2013), served as examples of performances that employed ‘digital hacks’ and/or algorithmic interactivity.

At this juncture in the research enquiry, a conviction formed around the view that algorithmic power could be most effectively challenged through a dramaturgical form that combined a ‘dispersed dramaturgy’, and a ‘dramaturgy of visibility’, with digitised interaction and dramatization, where some form of digital hack created live engagement with that which was simultaneously communicated through the performance. For example, the political potentiality of Headlong’s app *Digital Double* did not reside solely within the apps ability to relate the loss of digital privacy to the audience member. Crucially, it was realised in conjunction with the stage performance that dramatized the same issue.

This realisation led to the decision to harness the power of digital technology so as to embed interactivity within scripted content. This combination, or three-pronged attack, was deemed to offer the best prospect of creating the preconditions for political agency. More specifically, drawing on these practices and returning to the ideas of ‘dispersed dramaturgy’ and a ‘dramaturgy of visibility’, I decided to create a performance that was not only delivered through a smart phone but could *only* be delivered through a smart phone, since the technology embedded therein, as is the case with algorithmic power, is what permits the ‘hacks’ to function. This form of delivery also allowed the piece to occupy the same space as that in which algorithms operate. Such a dramaturgy confronts the matrix of algorithmic power at one of its central nodes (the modern smart phone) and transforms the digital space into one of artistic resistance (Hardt and Negri, 2001). This decision was also informed by failed attempts at making verbatim theatre and interactive listening stations (discussed in



detail in Part III, *The PaR Process*), which proved limiting in terms of subject matter and/or distracting in terms of audience experience.

In practice, implementing the performance within an app was realised through the creation of a series of ‘podplays’, a term defined in Chapter 2.5 (*Podplays vs. Radio Drama*) as short pieces of dialogue-based audio theatre, free from institutional constraints facing traditional radio drama (e.g. strict time slots and play lengths). An investigation into current theatre apps in Chapter 2.6 (*Theatre and mobile apps*) sought to reveal how an app might create digital effects that aimed at generating political agency. *Floodwatch* (2014), *Polluted Selfie* (2017), *Karen* (2015), and *Digital Double* (2014) all served as examples of apps that used personal data to make visible online profiling and advertising, environmental concerns and online tracking. Taking inspiration from these practices, I developed the concept of ‘digital side effects’ (henceforth shortened to ‘side effect’).

Each podplay, when played, would automatically trigger a ‘side effect’ that related to the content explored in that specific podplay. It is in this way, that a ‘dispersed dramaturgy’ and a ‘dramaturgy of visibility’ become combined with embedded ‘hacks’, where the discomfiting or intrusive quality of a hack becomes a defining feature of the side effect. Through this process, algorithmic power becomes *experienced* as well as *described*.

The digital side effects seek to generate a direct experience of the algorithm explored within the content. *Drowning* created a popup in the notification; *FitChip* only played

when the listener was moving; *Trapped* displayed the location of the listener on the screen; *Falling* made the phone vibrate in a temporal pattern that matched the increasing tension in the dialogue, and sent an email with further information; *Let's Google it!* encouraged the user to Google answers while reprimanding them when they did so; *High Risk* sent a text message detailing the listener's risk of becoming a criminal; while unlocking *Safe* drew attention to the importance of reading through terms and conditions. Through these side effects, the experience was personalised and extended across different digital platforms and time in a dispersed dramaturgy.

### 7.2.3 Provoking reflection through 'political dramaturgies'

A final component of the digital political dramaturgy, as exemplified in *Dysconnect*, was the adoption of a variety of existing 'political dramaturgies' at the level of the individual podplays. Specifically, three political dramaturgies were used in the creation of the micro dramaturgies of the podplays. The objective, in each case, was to create play texts that provoke critical reflection regarding algorithmic power and our relationship to and use of digital technology. These included Sarah Grochala's concept of a *liquid dramaturgy* (Chapter 3.2 *Rethinking dramaturgical structures*), Causey's postdigital performance aesthetics (Chapter 3.3 *Postdigital Performamnce*) and Tönnies conceptualisation of absurdist dystopias (3.3 *Absurdist Dystopias*).

*Drowning* contained elements of a 'liquid dramaturgy', since the way in which search algorithms execute power becomes visible through its *structure*. Similarly, *Let's Google it!* implemented a dramaturgy prompted and warped by the incorporation of

algorithmically generated content, rendering the influence of Google autocomplete algorithm visible through the structure. *High Risk* incorporated an unresolved ending, where the audience was left unsure as to the destiny of the protagonist and, in consequence, needed to actively make sense of the play. Similarly, the podplays *FitChip*, *Trapped* and *Safe* presented a veiled relationship between the subject and the biopolitical force implementing control over them, leaving the listener to imagine for themselves what happens in the end. These dramaturgical moves can be considered elements of a ‘liquid dramaturgy’, reflective of the type of liquid modernity described by Bauman, where uncertainty within contemporary society becomes the ‘*the only certainty*’ (2012:viii). *Falling* also created such uncertainty through the change of character position, where the character, Joe, starts expressing the viewpoints of his interlocutor, Alec, following ‘the crash’. This created a sense of something being altered, without spelling out what and how, allowing the listener to potentially actively make sense of what has changed and why.

Additionally, Tönnies’ conceptualisation of absurdist dystopias was implemented in *FitChip*, *High Risk* and *Trapped*, where fitness trackers, predictive policing and algorithmic tracking were taken to their extreme in order to generate an absurd dystopian projection of the future, one that would give the audience an opportunity to actively make sense of the events. More specifically, *Trapped* sought to encourage the listener to re-evaluate their current digital dependencies by demonstrating what such usages could lead to in a near future. *High Risk* and *FitChip* created similar projections, where the listener was invited to consider future repercussions of current behaviour.

Finally, Causey's 'postdigital aesthetics' was used to implement digital characteristics within the podplays, in order to make their operation visible and accountable. In *High Risk*, *FitChip* and *Trapped*, postdigital aesthetics, such as jarring sounds, repetition, glitches and un-naturalistic character responses, were used to expose effects of algorithmic control. *Let's Google it!* implemented digital aesthetics through a process of copying-and-pasting algorithmically generated results. Drawing on algorithmically generated run-away systems, the dialogue in *Falling* looped around in increasingly tighter loops towards a crash that rebounded, after which the characters had switched places with each other.

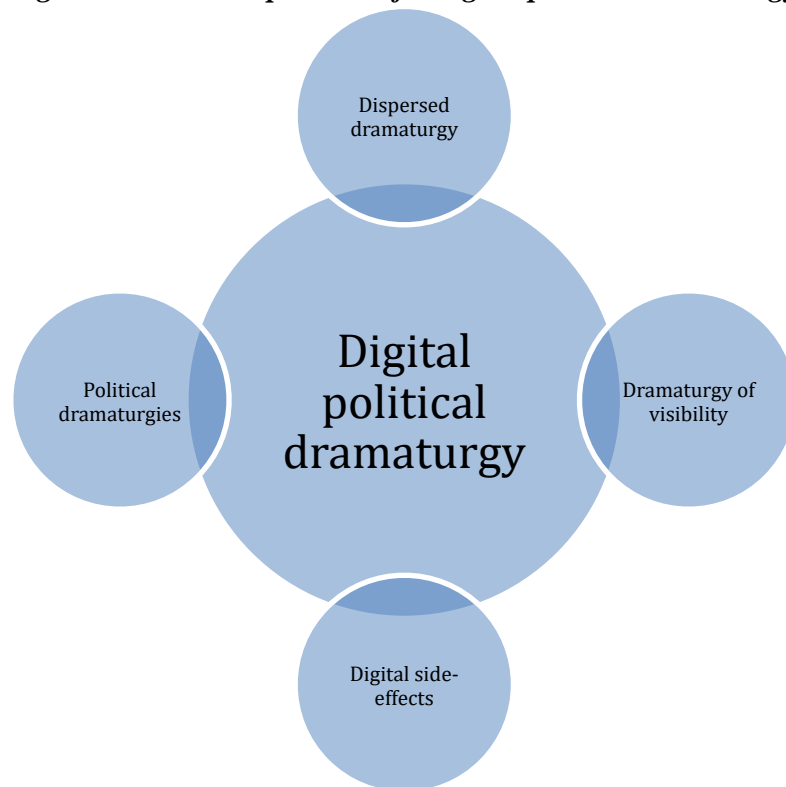
From developing these seven podplays, I would argue that the most effective political dramaturgies (effective in terms of generating an experiential knowledge of algorithmic power) were those that took on some structural characteristics of the algorithm(s) explored in the content. In *Drowning*, for example, the potential for recognising the operation of a search algorithm emerges from the structure of the narrative. This is also the case for *Falling*, *Let's Google it!* and *Safe*, where the dramaturgy of the dialogue reflects and, in doing so, illuminates the particular algorithm explored. In contrast, *Trapped*, *FitChip* and *HighRisk* employ a more naturalistic narrative structure, albeit with elements of postdigital and absurdist aesthetics. This means that the algorithm within these plays remains described, rather than experienced through the dramaturgy.

Through the implementation of liquid dramaturgies, absurdist dystopias and postdigital aesthetics, the audience were encouraged to become active in making sense of the events and characters, recognising patterns and drawing parallels between the present and predicted reality. Rather than following a preconceived political message, they were invited to construct meaning and, through this interpretative process, become active in a process of reflection and interpretation.

### 7.3 Challenging algorithmic power by combining the components.

Taken in sum, the insights emergent from the research and practice described above, can be assembled to form the concept of a ‘digital political dramaturgy’. The main components of ‘digital political dramaturgy’, as conceived in this thesis, are ‘dispersed dramaturgy’, ‘dramaturgy of visibility’, ‘digital side effects’ and ‘political dramaturgies’ (see also Figure 39 below). When instantiated in practice, as is the case in *Dysconnect*, a ‘digital political dramaturgy’ constitutes one way in which dramaturgical practices can be used to counter algorithmic power.

*Figure 39. The components of a digital political dramaturgy*



Among the central insights to emerge are the following. Firstly, when the nature of power being contested has a dispersed, matrix-like character, which gains power from its sheer expanse and interconnections, there is value in an overarching dramaturgical structure that allows those characteristics to be both portrayed and challenged at the key nodal positions. That is what a ‘dispersed dramaturgy’, realised in the form of several podplays embedded within a mobile phone, has sought to achieve. Secondly, given the complexity and hidden nature of algorithms in society, the concrete manifestation of algorithmic power calls for relatively explicit signalling within the subject matter. In short, it requires a ‘dramaturgy of visibility’. Thirdly, the effectiveness of a dramaturgy of visibility is consolidated by elements of ‘political dramaturgy’ that portray, through its structure, the functioning of a specific algorithm.

This combination (a politics of content and structure) serves to render algorithmic power more visible. Fourthly, the digital side effect creates a direct engagement with the algorithm explored, allowing the listener to experience directly its power effects.

When these four components of a digital political dramaturgy are combined, algorithmic power can be both *experienced* in an uncomfortable way as well as *described* in an informative way.

#### 7.4 Contribution to knowledge defined

As demonstrated above, the digital political dramaturgy contributes to knowledge by providing a dramaturgical practice able to challenge the ‘power of algorithms’ and facilitate political agency. *Dysconnect* and its detailed development presents a new form of app theatre and digital practice. In addition, the thesis provides a mapping of the yet uncharted territory of theatre and algorithms, providing a detailed analysis of the current field. It also analyses and defines the term ‘podplay’ as a new way of practicing audio theatre.

#### 7.5 Closing reflections: The future shape of algorithmic power and ‘digital political dramaturgy’

In the course of writing this thesis, the social influence of algorithms has shifted from a topic of somewhat narrow academic interest to one that is increasingly part of public discourse. As well-researched articles on specific algorithms appear with greater frequency in mainstream news, public awareness of algorithms will also begin to

increase. As that awareness grows, the task of a digital political dramaturgy may also begin to change. In particular, the importance of a ‘dramaturgy of visibility’ may gradually decline as audiences start from a position of greater awareness, personal experience and even knowledge of algorithms *per se*. However, we must also expect that algorithmic power will not only increase but also change. It is likely to grow both in terms of the breadth of its reach across the technological spectrum and also the depth of its reach into our private lives. As algorithmic power takes on new and multifaceted forms, digital dramaturgies will need to evolve to contest those developments. The conclusions drawn from my practice are, therefore, not intended as timeless truths. Rather, they serve as inspiration and provocation for future developments.

One final point concerns the institutional capacity of theatre to meet this challenge. A major feature in the production of *Dysconnect* was the sheer extent of computer programming time and expertise required to create the digital side effects. The sophistication of these side effects were, in every instance, limited by the time and resources available. It is not insignificant that the same skills used to create the digital side effects are those that are bought by companies, like Facebook, to develop their algorithms. Few theatre practitioners will be able to go to the labour market to purchase those skills. In the context of this thesis, it was possible to draw on sufficient technical expertise only through a degree of institutional innovation. Specifically, a collaboration was established with a computer science programme at another university (Karlstad University, Sweden). Projecting into the future, this suggests that successfully contesting algorithmic power through a digital political



dramaturgy, will require similar collaborations between artists and programmers. In any case, as the nature of power changes, practitioners and researcher must find new ways of engaging with audiences and further push the boundaries of what we think of as 'theatre' today. *Dysconnect* has attempted to do precisely that.

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## **9. Appendices:**

Appendix A: Drowning (Final script)

# **Drowning**

*Characters:*

IZZY

ALI

WAITER

CUSTOMER

*Settings: A café. Daytime.*

SFX: The screech of an old computer connecting to Internet.

IZZY

Likes barbeque/episodic drama/the long read/hats/the holiday home in France/whistle blowers/running/sourdough toast/personal development/wants to publish/economize/find hope/learn more/meet the one before he turns 30/

SFX: Café.

ALI

Didn't know words could be boring.

IZZY

Of course they can. Paradiastole. Ecumenism. Derivatives. Algorithms.

ALI

Right.

IZZY

You have to be an expert to be interested.

ALI

I'm not an expert.

IZZY

Or a nerd.

ALI

Maybe I am a bit of a nerd.

IZZY

But you look so normal.

ALI

Normal?

IZZY

Average.

ALI

Average?

IZZY

You could be anyone. Except for the hair.

ALI  
Right.

IZZY  
Could I interest you in meat?

ALI  
Meat?

IZZY  
Pulled pork. Double glazed ribs.

ALI  
No, thanks I'm/more

IZZY  
/More of a beef man?

CUSTOMER  
I'm sorry, is this seat taken?

IZZY  
/More of a beef man?

ALI  
No, I'll just move that...

IZZY  
/More of a beef man?

SFX: ALI moves his backpack from the seat opposite him.

CUSTOMER  
Thanks.

IZZY  
/More of a beef man?

ALI  
Like I said, I really just want some information about  
algorithms.

IZZY  
'A process or set of rules to be followed in  
calculations or other problem-solving operations,  
especially by a computer'.

ALI



Ehm, well, that's very/general

IZZY

/Mind numbing, I agree. There's a new season out of The Educated. Let's watch the trailer!

ALI

No, /I...

SFX: Trailer begins with a sudden loud scream: Please, no, please.

ALI

Shit! (SFX: ALI quickly turns off the volume) Sorry. Look, I just want to find out a bit more/ about

IZZY

/Algorithms. The word originates from the late 17<sup>th</sup> century.

ALI

I was hoping we could focus on the now.

IZZY

But everything has a history.

ALI

Yes/ but

IZZY

/History is context.

ALI

Sure/but

IZZY

/Without context there can be no true meaning.

ALI

No/but

IZZY

/The word itself is a variant of Middle Eastern alorism, influenced by the Greek arithmos, 'number', via Old French */(Ali interrupts and the following conversation runs over Izzy's description)* from medieval Latin algorismus. The Arabic source, al-Ḳwārizmī 'the man of Ḳwārizm' (now Khiva), was a name given to the 9th-century

mathematician Abū Ja'far Muhammad ibn Mūsa, author of widely translated works on algebra and arithmetic.

ALI

This isn't really/what I want to know.

IZZY

/Mind numbing, I agree. Let's watch the first episode!

SFX: Trailer starts again.

ALI

No look, what I want is to know more about is our access to information online.

IZZY

I thought you were interested in algorithms?

ALI

I am. At least I think so. They determine what shows up when we search for something, right?

IZZY

I've only just started on the 9th-century.

ALI

And because it's math, people seem to trust the results.

IZZY

You're skipping ahead.

ALI

But what I want to know is if a company would be able to trick the algorithms into producing the answers they want them to show.

IZZY

Algorithms don't simply produce *one* answer, they customize. For example, that guy votes left, so his information is filtered towards the left. It keeps us happy.

ALI

Sure, but what if there was something I didn't want anyone to know about? Something I wanted to hide.

IZZY

Like what?

ALI

I don't know. Say that I... sexually harassed someone.

IZZY

Why would you do that?

ALI

Just hypothetically.

IZZY

That is a terrible thing to do.

ALI

I agree.

IZZY

What's the backstory?

ALI

Just say that it happened.

IZZY

Without context there can be no true meaning.

ALI

It's just an example.

IZZY

Then you will be prosecuted.

ALI

Sure, but cases are settled out of court all the time.

IZZY

That is a good thing.

ALI

Yes, but the information about what happened should still be there and it isn't. Companies seem to be able to trick the algorithms somehow.

IZZY

I could help you with that, point you in the right direction.

ALI

That's all I'm asking for!

IZZY

A make over.

WAITER

Do you mind if I clear that off the table?

IZZY

A make over.

ALI

No, I'm still drinking this.

IZZY

A make over.

WAITER

Oh, okay. Sorry.

IZZY

A make over.

ALI

What?

IZZY

You could have hundreds of hits within minutes, if we used the right lighting and stated popular topics.

ALI

Popular topics?

IZZY

Meat. Flat whites. Property. Light politics.

ALI

Light?

IZZY

The sex scandals. The choice of words. Leave immigration out of it.

ALI

Right.

IZZY

You have potential. Don't waste it.

ALI  
Well/

IZZY  
/Are you seeing anyone?

ALI  
Kind of.

IZZY  
That means no.

ALI  
No.

IZZY  
No?

ALI  
No. It's complicated.

IZZY  
It should be simple. You need a haircut.

ALI  
You think?

IZZY  
From behind, you look like a girl.

ALI  
Look/I

IZZY  
It is statistically proven. Women prefer men with short hair, men prefer women with long hair. It may not be p.c., but it's a fact. And brown isn't your colour anymore.

ALI  
No?

IZZY  
No. You should go grey. Embrace it.

ALI  
I don't wanna talk about my hair.

IZZY

Do you not want a family?

ALI  
Well/ I

IZZY  
See the woman over there? She wants to flat share indefinitely and have awkward sex with strangers. Some people are like that. Are you?

ALI  
No. I want a family.

IZZY  
I thought so!

ALI  
Some day.

IZZY  
Set a date or you'll miss it. The ponytail is holding you back.

ALI  
Sure.

IZZY  
Pulled pork. I'm telling you, it's divine.

ALI  
Yeah, I'll think about that, but... All I want right now is information.

IZZY  
I am giving you information.

ALI  
About the algorithms.

IZZY  
/The word itself is a variant of Middle Eastern alorism, /(*Ali interrupts and the following conversation runs over Izzy's description*) influenced by the Greek arithmos, 'number', via Old French from medieval Latin algorismus. The Arabic source, al-Ḳwārizmī 'the man of Ḳwārizm' (now Khiva), was a name given to the 9th-century mathematician Abū Ja'far Muhammad ibn Mūsa, author of widely translated works on algebra and arithmetic.

ALI

No, look, for example, when I search for MBU, there is no mention of the fire.

IZZY  
Fire?

ALI

Yes, there was a fire. I had a friend who worked there - they said it was arson.

IZZY  
Arson?

ALI

A revenge thing, after an employee had a charge against the company dropped.

IZZY  
Never heard about it.

ALI/ IZZY  
(*simultaneously*)

That's my point/Without context there can be no true meaning.

IZZY  
MBU are world leading in promoting green energy.

ALI

Yes, but there was a fire! And yet there's no information about it available.

IZZY  
I am giving you information.

ALI

About the fire! I'm thinking they must have tricked the algorithms some how?

*Beat.*

ALI

Could they do that? Could they flood the Internet with, say, new positive information in order to drown out the bad stuff?

IZZY

That is not advisable. The information is always there.  
Just keep scrolling.

ALI

No one has time to read through 100 pages.

IZZY

That is a matter of priority.

ALI

But they're intentionally hiding information!

IZZY

They?

ALI

MBU. ACF. Maybe they're all at it.

IZZY

This is exactly the sort of thing that will devalue your  
profile.

ALI

What?

IZZY

Trust me. It's cute to have a passion, like playing the  
guitar. There's even a niche market for extremists and  
pessimists, but if you want my advice, I'd stick with the  
nerd card and subtly mention the house in France.

ALI

What?

IZZY

You have potential. Don't waste it. This will increase  
your chances of becoming a father within two years.

ALI

A father?

IZZY

That is the plan, yes?

WAITER

Could I get you anything else?

ALI

No, thank you.



IZZY  
That is the plan, yes?

ALI  
Oh, maybe some tap water.

WAITER  
Some tap water?

IZZY  
That is the plan, yes?

ALI  
With ice, please.

WAITER  
Right. Okay.

IZZY  
That is the plan, yes?

ALI  
Yes.

IZZY  
YumYum84 - passionate, artistic, articulate, probably  
fertile - she would be a perfect match for you!

ALI  
Sure/ but

IZZY  
/She's got ten people watching her profile, I know.  
Better act quickly.

ALI  
Yeah/ but

IZZY  
What's your opening gambit?

ALI  
My what?

IZZY  
A standard? An instant feeler? It is a numbers game after  
all.

ALI  
I don't follow.

IZZY  
Look. You won't have time to write individual letters to every woman you're going to contact. Better to start with a general one and then get personal *if* there's a spark.

ALI  
Isn't that/ a bit

IZZY  
That guy over there, also a nerd, hacked the system so that his own profile showed up as trending. He was inundated with responses and the standard letter saved him.

ALI  
That doesn't sound right to me.

IZZY  
Today he's married. Has a daughter.

ALI  
Still.

IZZY  
Beautiful little girl.

ALI  
Right.

IZZY  
They named her Hope.

ALI  
Well/ I guess

IZZY  
/There are templates you can buy, of course. Just fill in the blanks with your own personal information. We should do it right now, before someone else snaffles her.

ALI  
Her?

IZZY  
The YumYum84! I can get you a deal if you like?

ALI  
What?

IZZY  
On the template!

ALI  
I don't know.

IZZY  
What is wrong with you? Seriously? Do you not wanna be  
happy?

ALI  
I do, I/just don't

IZZY  
Do you not wanna have a little boy with curly black hair,  
look up at you and say, 'I love you Daddy'?

ALI  
I/

IZZY  
Do you not wanna send out cards thanking your friends for  
sharing your special day?

ALI  
I/

IZZY  
Do you not wanna live in a nice house with a BBQ? Serve  
sirloin steak, lamb kebab, grilled pulled pork.

ALI  
I/

IZZY  
Do you not wanna get ready for Beach 2017?

ALI  
I/

IZZY  
Learn how to bake your own sourdough?

ALI  
I/

IZZY

Grind your own coffee beans?

ALI

I/

IZZY

Squeeze your own orange juice?

ALI

I/

IZZY

Breakfast is the most important meal of the day!

ALI

Well/I

IZZY

Do you not wanna grow as a person?

ALI

I/

IZZY

Get a tattoo?

ALI

I/

IZZY

Learn another language?

ALI

I/

IZZY

Self publish?

ALI

I/

IZZY

Do you not wanna reconnect with your true self?

ALI

I/

IZZY

Get two for the price of one?

ALI

I/

IZZY

Do you not wanna bring a friend?

ALI

I/

IZZY

Do you not wanna sign up?

ALI

I/

Izzy

Do you not wanna find out more information? Reload, open, close?

ALI

I/

IZZY

Do you not wanna become a member?

ALI

I/

IZZY

Do you not wanna be completely free to chose from a wide range of options?

ALI

I/

IZZY

Do you not want to have hot steaming erotic sex whenever you want?

ALI

Yes! Yes, I do.

IZZY

Great! The world is full of opportunities if you just keep scrolling down.

ALI

I guess.

IZZY

That is a fact. So, shall we order the template?

ALI

Eh, yeah. Sure. What do I need to/do?

IZZY

/Nothing! I will do everything for you.

## **FitChip**

*Characters:*

SHARON

SARAH

KIM

*Setting: Sarah's living room.*



SFX: Coffee is brewing in a percolator. KIM pours the coffee.

KIM  
You take milk in your coffee, Sharon?

SHARON  
Yes. Thanks, Kim.

KIM  
Sugar?

*KIM and SHARON laugh.*

SFX: Pouring milk. Sets down a cup of coffee on the table.

KIM  
Sarah?

SARAH  
Yes, thank's mum.

SFX: Pouring coffee. Sets down another cup of coffee on the table.

SHARON  
So. I understand you ordered a pizza?

SARAH  
Yeah.

SHARON  
With...?

SARAH  
With Tom?

KIM  
No, your choice of topping, sweetie.

SARAH  
Oh, right... Ehm, ham.

KIM  
Yes.

SHARON  
And?

SARAH  
Cheese?

SHARON  
Of course. And?

SARAH  
Tomato sauce.

SHARON  
What else?

SARAH  
Beef.

SHARON  
And?

SARAH  
Bacon.

SHARON  
And?

SARAH  
Chicken.

SHARON  
And?

SARAH  
That was it. Oh, pepperonis. But I don't really like those.

KIM  
I am going to open a window.

SFX: KIM walks across the kitchen and opens a window. We hear birds singing outside.

SHARON  
I'm surprised you didn't order your favourite?

SARAH  
I did. That is my favourite.

SHARON  
What about the cheesy crust?

SARAH  
Yeah. I said cheese.

SHARON  
Oh, you did. My apologies.

KIM  
And did you rinse it down with a bottle of Scottish  
spring water?

SARAH  
No.

KIM  
No?

SHARON  
Tap water, with some ice?

KIM  
A slice of cucumber!

SARAH  
I had a beer, okay?

SHARON  
One?

SARAH  
I probably had two.

KIM  
Two?

SARAH  
Maybe three. The bottles were small though.

KIM  
Were you... celebrating something?

SARAH  
I just fancied a beer.

SHARON  
On a Thursday?

KIM  
Was it organic?

SARAH  
I don't think so.

KIM  
Low fat?

SARAH  
It was just a regular beer.

SHARON  
*Three* regular beers.

SARAH  
Yes.

SHARON  
What about dessert?

SARAH  
I think I had some chocolate.

KIM  
A few squares?

SARAH  
Some cake.

KIM  
A small slice?

SARAH  
Yeah. It was left over from Tom's birthday party.

SHARON  
Tom is?

SARAH  
My boyfriend.

SHARON  
Great. How big would you say the slice was?

SARAH  
I don't know.

SHARON  
Do you mind showing us? It's just that 'a slice' is such  
a vague quantity.

SARAH  
Right. Like... This maybe?

KIM  
Oh.

SHARON  
That is quite a generous slice.

SARAH  
I guess.

SHARON  
And did you count how many calories were in it?

SARAH  
I don't obsess over food.

SHARON  
Keeping count is not obsessing.

KIM  
The device isn't there to judge you, honey. It's just there to offer an accurate reading of risk.

SHARON  
Yes. It measures the acceleration of your body, allowing the algorithms to convert the raw data into useful information about your daily life, such as calories burned, steps, distance and sleep quality.

KIM  
With the FitChip, you can keep track without having to think about it. Isn't that great?

SHARON  
Let's put it this way. Life is about making choices.

KIM  
It is.

SHARON  
For example, you chose to order that pizza.

KIM  
Which you are entitled to do.

SHARON

Of course she is.

KIM  
I love a good pizza.

SHARON  
But you do keep track of the cheese.

KIM  
I do.

SHARON  
Account for the bits of chicken.

KIM  
And the olives.

SHARON  
And the tomato sauce. A lot of oil goes into it that  
people don't account for.

KIM  
The asparagus.

SHARON  
The smoked bacon.

KIM  
The peperoni. You say that you don't like it Sarah, but  
you still eat it.

SHARON  
We're not saying that you shouldn't.

KIM  
No, no, no.

SHARON  
But you have to earn it.

KIM  
Just like you pay for the pizza.

SHARON  
That's right.

KIM  
With the device, you can keep track without having to  
think about it.

SHARON

You don't expect someone to just come up to you on the street and offer you a random slice, now do you?

*Pause.*

KIM

Sarah? Sharon asked you a question.

SARAH

I guess not.

SHARON

Good guess.

KIM

To be honest, I was upset when I saw that her gym membership had expired.

SHARON

You have a history of obesity in your family.

KIM

It's the sad truth.

SARAH

So?

SHARON

It makes you high risk.

KIM

2 to 8 times higher than the average. We have been through this.

SARAH

My health score is fine!

KIM

That is exactly the kind of aggression you could burn off in the gym.

SHARON

Sarah. Do you not see how a person's health is related to the wellbeing of society? Given all her qualifications, I expected more.

KIM

It's the lack of yoga.

SARAH  
I do yoga.

KIM  
No honey, you stretch. She hasn't been able to reach her  
toes in years.

SHARON  
Let me ask you this, Sarah. If everyone thought the way  
you do, what would the world look like?

*Pause.*

SARAH  
I don't know.

KIM  
Try.

SHARON  
Imagine it. We are in Sarah-land. What is it like?

SARAH  
I guess... It would be quite a relaxed place?

KIM (to SHARON)  
I told you.

SHARON  
Okay. If I were you Sarah, I would consider today a wake  
up call.

KIM  
I'm just trying to help you.

SHARON  
We know that it's difficult for us all to coexist. We are  
a strain on this earth and our numbers are growing.

KIM  
But of course we have a right to be here.

SHARON  
Of course, we have a right to be here and express our own  
individuality and unique qualities.

KIM



We have a right to buy what we want.

SHARON

To consume what we desire.

KIM

To fulfil our own unique potentials.

SHARON

And yet, wouldn't you agree that we need to take responsibility for our actions?

KIM

Yes.

SHARON

We need to deal with the consequences of our choices.

KIM

Yes.

SHARON

When you chose to gorge on cheesy crust without accounting for the calories, who do you think will end up having to pay for it?

*Beat.*

SARAH

I don't know.

SHARON

Well, let me tell you, honey. We will. Me. Your mother. All of us will have to pay for the consultations.

KIM

For the blood tests that will, undoubtedly, follow.

SHARON

The unpleasant urine sample.

KIM

The scan.

SHARON

The extra opinion.

KIM

The insulin.

SHARON  
The team of nurses.

KIM  
The cleaning staff.

SHARON  
The food provided.

KIM  
The drugs and the needles.

SHARON  
The operation.

KIM  
The check ups.

SHARON  
The resubmission.

KIM  
The amputations.

SHARON  
The sick pay.

KIM  
And what really breaks my heart is that we could so easily have avoided all of this.

SHARON  
Yes. Stop lying to yourself.

KIM  
It wasn't Tom's birthday cake.

SHARON  
That guy is not your boyfriend.

KIM  
You bought it for yourself.

SHARON  
And you finished the whole thing. Because, let's face it, you are selfish.

KIM

It's okay, sweetie.

SHARON

Of course it's okay, but we are trying to help you become a better human being here. A better Sarah.

KIM

A content Sarah.

SHARON

A healthy Sarah. Your mum is really worried about you.

KIM

You just haven't been your self lately.

SARAH

What?

HARRY

Gaining weight can do that to a person.

KIM

With the device you can keep track without having to think about it

SHARON

The FitChip will instruct you on what to do and what not to do.

SFX: Sipping open a bag.

KIM

It really is super easy!

SHARON

And then you will find that you are in control over your own body. You are in control. Not your mum. Not me. Not them. You.

KIM

People are cruel when they think someone is being dishonest.

SHARON

Colleagues assume you are unreliable.

KIM

Friends suspect the worst.

SARAH

But, I think/that I

KIM

With the device you can keep track without having to think about it.

SHARON

All we're doing here is offering you the chance to look in the mirror and be proud of what you see.

KIM

Healthy Sarah.

SHARON

Strong Sarah.

KIM

Slim Sarah.

SHARON

Independent Sarah.

KIM

Powerful Sarah.

SHARON

And you can collect points! (to Kim) We should have started with that.

KIM

Yes! You can sign up and compete with all your friends.

SHARON

And there are rewards.

KIM

Trophies. We're launching a national award as we speak.

SHARON

It's a trial before we go global. Kimmy here is destined to win.

KIM

I do take my health very seriously.

SHARON

And it shows! You look absolutely stunning.

KIM  
Thank you.

SHARON  
Radiant!

KIM  
I feel great.

SHARON  
You look great! Doesn't she look great?

SARAH/KIM  
Yeah/ Oh stop it!

SHARON  
You should go on the one year-trial, Sarah.

SARAH  
The one year trial?

KIM  
With the device you can keep track without having to  
think about it.

SHARON  
Did I hear a yes?

SARAH  
I guess everyone else seems to be doing it/ so...

SHARON  
Are you right or left handed?

SARAH/KIM  
Right.

SHARON  
I'll go left then. There can sometimes be a bit of  
swelling. Should disappear after a few days.

SFX: More equipment being taken out of a bag.

KIM  
Our bodies are so adaptable.

SARAH  
Wait. Don't I need to sign a consent form or something?

SHARON

Your verbal consent was recorded.

SFX: Clinking of metal, maybe fingers flicking at a  
needle.

KIM

Have to save the trees, don't we sweetie?

SHARON

Roll up your sleeve for me please?

KIM

With the device you can keep track without having to  
think about it.

SARAH

What?

SHARON

*(injects Sarah with a sedative)* This will calm her down.

KIM

You don't want to end up like your uncle Bob.

SHARON

Bob the Blob. Such a tragedy.

KIM

The coffin had to be costume made. It was awful.

SHARON

Brace yourself Sarah. The second one may sting a little.

**Scene # The Making of a Fly  
(Early draft of *Falling*)**

*The faint, almost indistinguishable, sound of a heart monitor, bleeping in rhythm with a healthy heartbeat.*

ALEX

People are beginning to express their concern.

JO

People are always concerned.

ALEX

Sure. But this time we believe they have some... shall we call it grounds?

JO

Let's not.

ALEX

Right. Well, the talk among people is that we are losing control over the market.

JO

The market is always out of control.

ALEX

Not like this. Last week we experienced another crash.

JO

Propaganda.

ALEX

That's not my department.

JO

It sounds like it should be. Give Jeff a ring. I'm sure he'd love to take you under his wing.

ALEX

Don't make this personal.

JO

Everything is personal.

ALEX

It was the third crash this week.

JO

So?



ALEX

So. We're beginning to see the ripple effects.

JO

Sounds exciting.

ALEX

Volatile, that's what it is. People are frightened. And I'm not just talking about people in my department, I'm talking about people in the streets.

JO

You talk to people in the streets?

ALEX

My people do.

JO

You mean you read the statistics.

ALEX

Yes.

JO

That's a one-sided narrative.

ALEX

When people's futures fluctuate, they get nervous. Then, they get angry.

JO

Anger is energizing.

ALEX

If you are not prepared to take this seriously, I need to talk to someone who will.

JO

I'm afraid you're stuck with me. And I'm a great believer in the market.

ALEX

Even when it threatens to wipe out peoples pensions and savings?

JO

They get what they voted for. If they don't like it, they can stage a revolution. Power to the people.

ALEX  
Be serious!

JO  
I am. The market needs to have free range in order to  
function.

ALEX  
Even when the algorithms are running wild?

JO  
Forever so dramatic!

ALEX  
My people/

JO  
/are scaremongering!

ALEX  
My people are providing you with facts and yet you refuse  
to act!

JO  
People have always taken advantage of the market. Played  
it, tricked it. It's part of the game.

ALEX  
That's not what it was set up to do.

JO  
It's an organic system. If you try and stem the growth it  
will cripple and die.

ALEX  
But these crashes are threatening to disturb world order.  
This on-going loop of algorithms set to buy and sell  
without any relation to real life events or values, it's,  
it's, it's causing uncontrollable escalations, it's...  
The Sonda stock dropped 25 per cent for crying out loud!

JO  
It rebound again within a minute.

ALEX  
Exactly!

JO  
So what's your point?

ALEX

My point is that if you sold within that minute you made huge losses, all because of a bunch of rouge algos driving down the price.

JO

Is that what you did?

ALEX

This isn't about me! It's about lack of balance. It's about value being grounded in reality, not just in numbers.

JO

The stock market was always a numbers game! You want too much control.

ALEX

You want no control! And we need it, or we'll end up with crash after crash until one of them destroys our economy.

JO

You are not a very happy person.

ALEX

What?

JO

You need to let your hair down.

ALEX

Seriously? This is how you talk to me?

JO

It is, yes.

ALEX

I guess they were right about you.

JO

How is that?

ALEX

You fester on other people.

JO

I fester?

ALEX

Like a fly. Spreading nothing but chaos. Thriving on  
shit.

JO

Did you just say 'thriving on shit'?

ALEX

Yes. You think people like you, but they don't.

JO

Right.

ALEX

You think you're this relaxed easy-going person, but the  
truth is you're scared of investing in anything  
sustainable.

JO

I do believe in global warming, if that's what you're  
getting at.

ALEX

I'm getting at the fact that you're an asshole. Is it  
because your Dad left?

JO

What?

ALEX

You're Mum had attachment problems. That's what they  
called it, right?

JO

That's enough.

ALEX

Frozties for dinner, extra blankets when the windows  
froze over?

JO

I said/

ALEX

/Is that why you hate sugar? I heard you banned the  
'automaterna' from your floor.

JO

One more word and you'll regret it.

ALEX

Oh?

JO

Your wife might not make it home for dinner.

ALEX

What?

JO

Your daughter might find her self out of breath.

ALEX

Are you threatening my family?

JO

Things happen.

ALEX

You're out of control.

JO

Maybe.

ALEX

I have connections.

JO

Not like mine.

ALEX

I could make your life a living hell!

JO

I could make your life not worth living.

ALEX

I could make your life painful.

JO

I could make your life short.

ALEX

I could make your life tedious.

JO

Tedious?

ALEX

I could make your life bland, like chewing on a piece of cardboard.

JO

Who does that?

ALEX

What?

JO

Chew on cardboard?

ALEX

It's just an expression.

JO

Since when!?

ALEX

Isn't it?

JO

I've never heard it.

ALEX

Well, it is now. Do you think I should get a patent on it?

JO

Why not?

ALEX

Would you use it?

JO

Maybe. Depends on what it'll cost me.

ALEX

An arm and a leg. That is an expression, right?

JO

Yeah. You'll not get a patent for that one.

ALEX

That's a shame. Do you have any coffee?

JO

I was just going to offer you some. Do you take milk?

ALEX  
Just a splash.

JO  
A splash it is. I'm afraid I have nothing sweet to go  
with it.

ALEX  
Not to worry. I'm on the 5:2 diet.

JO  
Why?

ALEX  
To see what the buzz is about.

JO  
And what is it about?

ALEX  
You basically starve yourself two days a week.

JO  
Right.

ALEX  
It's surprisingly refreshing.

JO  
You should try relaxing.

ALEX  
I am relaxed.

JO  
You're obsessed with control.

ALEX  
We need control. Without it, we'll end up with crash  
after crash until one of them destroys our economy for  
good.

JO  
You don't seem happy.

ALEX

I am happy! All I'm saying is that we cannot have an economy based on an automated feedback loop, set to escalate indefinitely.

JO  
You should take a holiday.

ALEX  
Seriously?

JO  
Have sex, do yoga, break the speed limit.

ALEX  
You are an asshole. Is it because your Dad left?

JO  
Don't go there.

ALEX  
You're Mum had attachment problems.

JO  
Enough.

ALEX  
Is that why you hate sugar?

JO  
One more word and/

ALEX  
What!?

JO  
Your wife might not make it home for dinner.

ALEX  
Are you threatening my family?

JO  
I'm just saying things happen.

ALEX  
You're out of control.

JO  
Maybe.



ALEX  
I have connections.

JO  
Not like mine.

ALEX  
I could make your life painful.

JO  
How's the coffee?

ALEX  
Cold.

JO  
You still drank it.

ALEX  
It's caffeine.

JO  
Maybe I put something in it?

ALEX  
Like milk?

JO  
Something to make your brain stop spinning.

ALEX  
You wouldn't.

JO  
I did.

*Beat.*

JO  
Joke. I'm joking.

ALEX  
Funny.

JO  
I thought so.

ALEX  
Tasted fine.

JO

Good. Want more? I can make a fresh pot.

ALEX

I'm okay. What I'd like is a serious conversation about what's going on.

JO

I'm afraid I'm a great believer in the market.

ALEX

But there is no balance.

JO

You're obsessed with control.

ALEX

We need control. Without it, we will keep repeating the same crash after crash until one of them destroys us.

JO

You don't seem happy.

ALEX

I am happy! All I'm saying is that we cannot have this situation escalating indefinitely.

JO

You should have sex, do yoga, break the speed limit.

ALEX

Is this because your Mum had attachment problems?

JO

One more word and/

ALEX

Are you threatening my family?

JO

I'm just saying things happen.

ALEX

You're out of control.

JO

I could make your life not worth living.

ALEX

I could make your life painful.

JO

How's the coffee?

ALEX

Finished.

JO

I put poison in milk. Early symptoms include headache, dizziness and shortness of breath, followed by seizures and loss of consciousness.

ALEX

You put milk in your own damn coffee.

JO

Then I guess we're both doomed.

ALEX

We are if you don't stop this.

JO

You're obsessed with control.

ALEX

Without it, we will keep repeating the same crash after crash until one of them destroys us.

JO

Just break the speed limit for God sake!

ALEX

You're out of control.

JO

I could make your life not worth living.

ALEX

I could make your life painful.

JO

How's the coffee?

ALEX

Finished.

JO

Then I guess we're both doomed.

ALEX  
Seizures, loss of consciousness, and then what?

JO  
You're obsessed with control.

ALEX  
Without it, we will keep repeating/

JO  
Just break the speed limit!

ALEX  
You're out of control.

JO  
How's the coffee?

ALEX  
Finished.

JO  
Then we're both doomed.

ALEX  
Loss of consciousness, and then what?

JO  
Cardiac arrest.

*Sound of the heart monitor flatlining.*

## **Falling**

*Characters:*

*JOE*

*ALEC*

*PHIL*

*Setting: Pub, evening.*

SFX: Sound of a pub. Gentle chatting, drinks being poured from the bar.

JOE

*(swallowing, setting down a glass)* And this happened on Amazon?

SFX: The ping of a mobile phone.

ALEC

Yes. One algorithm was set to sell the book at 0,9 percent more than their competitor. Meanwhile, the competitor's algorithm was set to sell at 1,3 percent more than them, which, of course, meant that the price just kept automatically escalating.

JOE

*(texting)* That's the world though, isn't it?

ALEC

That's the world? 24 million dollars, for a book about flies?

JOE

*(sending the text)* It was a glitch, right?

ALEC

No, it was engineered to/do what it did

SUE *(shouting from across the bar)*

Joe Simson!

JOE

Phil Callahan! *(SFX: Hugging)* I haven't seen you in ages!

PHIL

I've been working too much.

JOE

That's not good!

PHIL

I can't help it!

JOE

You should join us for a drink!

PHIL  
I'd love to, but I'm kind of here on a date...

JOE  
Oh, nice.

PHIL  
Yeah, well. We'll see about that. I might join you later.

JOE  
Yes, please do. Give me a call either way!

PHIL  
Will do!

SFX: PHIL leaves.

JOE  
Ah, Phil! You know Phil, right?

ALEC  
No.

JOE  
Sure you do.

ALEC  
No.

JOE  
I thought you did.

ALEC  
Nope.

JOE  
She also works in banking.

ALEC  
I don't work in banking.

JOE  
No?

ALEC  
No. I *used* to work in financial trading.

JOE  
You lost your job?



SFX: Ping of mobile phone.

ALEC  
No. I quit.

JOE  
*texting*  
Mm-hm.

ALEC  
After the crash.

JOE  
*still texting*  
Right.

ALEC  
The Flash Crash.

JOE  
*still texting*  
Right.

ALEC  
I told you. Mortgages, savings, pensions, it could all be  
gone (*clicks fingers*)- just like that!

JOE  
*texting*  
Don't click your fingers! It's like doing air quotations,  
/makes my skin crawl.

ALEC  
I was on the high frequency trading floor the day it  
happened. I looked up and saw that the Dow Jones had  
dropped another 100 points, and I said to myself, okay  
Alec, take it easy. I go on working and a minute later,  
it had dropped another 100 points. Now, everyone around  
me are getting panicky, they don't know what's going on,  
everything is going crazy, market drops another 100  
points, the CEO of the firm comes running out onto the  
floor, screaming: 'pull everything, pull everything',  
people are hitting buttons, turning everything off.

(SFX: Siren passing outside on the street.)

And so we end up just watching the market, this one  
screen with numbers representing people who are willing  
to buy and people who are willing to sell, and the  
numbers, they start drifting, like orders are being

cancelled, and they drift more and more until they go off the screen and they're gone. *Beat.* For seconds, the market was just gone. *Beat.* And I thought, this is the end, you know, an atomic bomb, World War III, something so horrible has happened that it has wiped out the entire stock market. *Beat.* And then, it just bounced back again. The numbers just reappeared, climbed back up, I don't know now, it just happened, automatically, like some sort of magic chain reaction. And then, everyone just kept going. And I was standing there wondering if I was the only one who saw what had just happened. *Beat.* Are you listening to me?

JOE

*(Sends text)* Yes. You're saying that the stock market crashed.

ALEC

Yes.

JOE

And then, it bounced back again.

ALEC

Yes. This on-going loop of algorithms is programmed to buy and sell automatically and it's causing wild escalations. One triggers another, which triggers another and humans have no control over it! The system is so complex that no one understands what the hell is going on. The regulators are dumbstruck.

*Beat.*

SFX: Sound of glasses clinking.

JOE

I take it the nightmares are back?

ALEC

No. I'm fine.

JOE

Because Mum said that aunty Sue had mentioned/ that you

ALEC

What!?! You and aunty Carol are talking about me/now?

JOE

No, not about you specifically,/ she just mentioned

ALEC

You guys get together and /gossip about me

JOE

Just forget I said anything, okay!

ALEC

Right. Well, when we saw aunty Carol at Easter, she told Mum, who told me, about your last relationship.

JOE

What?

ALEC

Trust issues. Carol thinks it has to do with uncle Jim.

JOE

Don't go there.

ALEC

How he used to promise/that he would

JOE

Just stop it!

ALEC

Come around, Christmas, /Birthdays

JOE

I said/stop it!

ALEC

She thinks that's why you can't commit.

JOE

Shut up, or I swear to God/I will

SFX: Sound of a siren speeding past.

ALEC

What!?

JOE

Maybe you'll slip on the floor.

ALEC

What?

JOE  
Knock your head on the bar.

ALEC  
You and your threats.

JOE  
Just saying. Wet floor slips are the most common accidents in pubs.

ALEC  
You've always been out of control.

JOE  
Whatever.

ALEC  
Maybe I should tell aunty Carol about what you used to do on the beach.

JOE  
Maybe I should tell aunty Sue about her missing necklace.

ALEC  
Maybe I should tell her about/the summer when you

JOE  
Maybe I should punch you in the fucking face, how about that?

SFX: Ping of a text message.

ALEC  
Aggression. That was always your answer.

JOE  
(*Texting*) Whatever.

ALEC  
You need to take what I'm saying seriously.

JOE  
I don't know why you're telling me this shit!?

ALEC  
Because it's about your future.

JOE  
But there is nothing I can do about it!

ALEC

You can engage/, you can

JOE

You're like one of those people who watches the news just so that they can name drop famines and war zones and talk about the refugee crisis over a glass of wine, 'Isn't it terrible!?! Those poor children!' And I mean, for what? Seriously? What is the point of knowing when you can do fuck all about it?

ALEC

You're unbelievable.

JOE

What you need to do is stop thinking about the world and start thinking about yourself.

SFX: Joe pours drinks from a wine bottle.

ALEC

But it's the same thing! If we have an economic system based on an algorithmic feedback-loop/then we will all

*(1st loop)*

SFX: Sound of glasses clinking.

JOE

The nightmares are back.

ALEC

No, I'm fine.

JOE

Because aunty Sue did mention/that you haven't

ALEC

And Carol mentioned your trust issues.

JOE

Don't.

ALEC

How Daddy used to promise/that he would

JOE

Shut up, or I swear to God/I will

SFX: Sound of a siren speeding past.

ALEC  
What!?

JOE  
Knock your head on the bar.

ALEC  
Are you threatening me?

JOE  
Wet floor slips happen all the time.

ALEC  
You're out of control.

JOE  
Maybe.

ALEC  
Maybe I should tell /aunty Carol about the time

JOE  
Maybe I should punch you in the fucking face!?

ALEC  
Aggression, as always.

JOE  
Remember the white flowers, growing in the field behind  
Gran's house?

ALEC  
Sure. Hemlocks.

SFX: Ping of a text message.

JOE  
Remember how easy it was to squeeze the juice out of the  
stems?

ALEC  
She used to say it was poisonous.

JOE  
That's right, it is. I see you enjoyed that drink.

ALEC  
What? *Beat*. You wouldn't do something like that.

JOE  
Why not?

*Short pause.*

JOE  
I'm joking!

ALEC  
Funny.

JOE  
The look on your face!

ALEC  
It tasted fine.

JOE  
Good. Want a top up?

SFX: JOE topping up their glasses.

ALEC  
What I want is for you to listen to me.

JOE  
I am. You're saying that the stock market crashed and then bounced back again.

ALEC  
Yes, but we have no control/over this system.

SFX: Someone laughing.

JOE  
What's the point of knowing when you can do fuck all about it?

ALEC  
Well, maybe we can/ if enough people

*(3d loop.)*

SFX: Sound of glasses clinking.

JOE

The nightmares are back.

ALEC

No, I'm fine,/ I

JOE

Because Sue mentioned/that you haven't

ALEC

And Carol mentioned how Daddy used to/ promise that he  
would

JOE

Shut up, or I swear to God/I will

SFX: Sound of a siren speeding past.

ALEC

What!?

JOE

Knock your head on the bar.

ALEC

Are you threatening me?

JOE

Symptoms of hemlock poisoning include muscle weakness and  
paralyses, leading to /respiratory failure.

SFX: Ping of a text message.

ALEC

You had the same damn drink.

JOE

Then I guess we're both doomed.

SFX: Someone laughing.

ALEC

We are if you don't stop this.

JOE

I'm just making conversation!

ALEC

Without control, we will keep repeating the same crash  
after crash.



JOE  
You need to start thinking about yourself!

ALEC  
But it's all connected!

*(4th loop)*

SFX: Sound of glasses clinking.

JOE  
The nightmares are back.

ALEC  
No, /I'm fine

JOE  
Because Sue /mentioned

ALEC  
Because Daddy/ used to promise

JOE  
Shut up/or I swear to God

SFX: Sound of a siren speeding past.

ALEC  
Are you threatening me?

JOE  
How is you drink?

ALEC  
You're out of control.

JOE  
Muscle weakness, paralyses,/ respiratory failure.

SFX: Ping of a text message.

ALEC  
You had the same drink.

JOE  
Then we're doomed.

SFX: Someone laughing.

ALEC  
We are if you don't stop this.

JOE  
I'm just/making conversation.

ALEC  
Without control/ this loop will keep

JOE  
Just stop thinking/about the world

ALEC  
But it's all/ connected!

*(5th loop)*

SFX: Sound of glasses clinking.

JOE  
The nightmares/ are back.

ALEC  
No, /I'm fine

JOE  
Because Sue /mentioned

ALEC  
Because Daddy/ used to promise

JOE  
Shut up/or I swear to God

SFX: Sound of a siren speeding past.

ALEC  
Are you /threatening me?

JOE  
Muscle weakness, /paralyses.

SFX: Ping of a text message.

ALEC  
We had the same/ drink.

JOE  
Then we're both doomed.

SFX: Someone laughing.

ALEC  
We are if you don't / stop this  
(6<sup>th</sup> loop)

SFX: Sound of glasses clinking.

JOE  
The nightmares/are back

ALEC  
No, because Daddy/ used to

JOE  
Shut up/or I swear

SFX: Sound of a siren speeding past.

ALEC  
Are you /threatening me

JOE  
Muscle weakness

SFX: Ping of a text message.

ALEC  
The same/drink

JOE  
We're doomed.

SFX: Someone laughing.

ALEC  
Paralyses, and then/

JOE  
Cardiac arrest!

SFX: Sound of glass against glass shattering and a heart monitor flat lining.

**Scene 2. Rebound.**

SFX: The heart begins to beat again. The soundscape from the pub returns with a laugh.

ALEC

*(inhales deeply)* Cardiac arrest?

JOE

Paralyses?

ALEC

Respiratory failure?

JOE

I think you are perhaps out of control?

ALEC

*(happy)* And I think you need to think more about yourself?

JOE

But, without control, we might just be repeating the same situation/ over and over

ALEC

Muscle weakness, paralyses, who gives a shit?

JOE

I feel like something is wrong.

ALEC

Nothing's wrong.

JOE

Something is different.

ALEC

Nothing is different! We had a small accident.

JOE

Is that a threat?

ALEC

All I am saying is that it/ would be good for you to

JOE

All I am saying is that we can't have an algorithmic feedback loop /set to escalate indefinitely.

ALEC

But Joe! What do you want me to do about it?

JOE

I just... I feel like we're falling.

ALEC

We always bounce back again!

JOE

But we keep repeating/the same situation

ALEC

*(texting)* Wet floor slips are the most common accidents  
in pubs.

JOE

What?

ALEC

Are you having nightmares?

JOE

No, I'm fine. I'm just worried that we have no control over this situation. Next time the stock market crashes it could wipe out everything, or it could change things, change people, create ripple effects of, of, of... I mean, no one seems to understand what the hell is going on!

ALEC

*(sends text)* But there is nothing we can do about it, Jo!  
You need to stop thinking about the world and start thinking about yourself. Here! Have another drink.

SFX: Pouring of drinks. The sound of the pouring and the beating heart gets louder and louder, until it takes over the audio.

# Trapped

*Characters:*

ANNA

SIMON

*Setting: The park/interrogation room.*

SFX: Sounds from the park. A bird singing. Someone passing on a bike. A child laughing in the distance.

ANNA

You enjoy reading.

SIMON

You prefer browsing.

ANNA

You love walking your dog.

SIMON

You insist on drinking decaf.

ANNA

You loiter in public spaces.

SIMON

You comment on the use of contraception.

ANNA

You argue for stricter boarder control.

SIMON

So do you, Anna.

ANNA

Don't we all?

SIMON

There are some that don't.

ANNA

That is just irresponsible. Everyone can see that if we provide them with food and healthcare, more will come.

SIMON

I know. It's a disgrace.

*Pause.*

ANNA

You looked tired on your last post.

SIMON



I'm a vegan. I'm battling an iron deficiency.

ANNA

Simon! You have to take your supplements.

SIMON

They make me constipated.

ANNA

Since when?

SIMON

Since a few months back.

ANNA

Right. Well, you also didn't sleep at home last night.

SIMON

No.

ANNA

You didn't sleep at all.

SIMON

No.

ANNA

Why *did* you go into the river?

SIMON

I like the water.

ANNA

It's filthy.

SIMON

I like the sound of it.

ANNA

There was no wind.

SIMON

There's always movement. And I like the view.

ANNA

There was no view.

SIMON

There is always a view.

ANNA  
It was dark.

SIMON  
There were lights.

ANNA  
Where?

SIMON  
There was a boat passing.

ANNA  
With its lights turned off.

SIMON  
There was a candle inside. The light reflected in the  
water.

ANNA  
There is no record of that.

SIMON  
Maybe the angle was wrong.

ANNA  
All I'm saying is that you should get some sleep.

SIMON  
I will.

*Pause.*

SIMON  
I was sad to hear about your son.

ANNA  
It happens.

SIMON  
Still. I'm sorry that it did.

ANNA  
He's a big boy. He'll learn.

SIMON  
Your partner doesn't agree.

ANNA

We don't always see eye to eye.

SIMON

The Christmas party.

ANNA

Among other things.

SIMON

The trip to Marbella.

ANNA

That was a long time ago.

SIMON

Still. You called it a mistake.

ANNA

We all make mistakes.

SIMON

Sure. Like the time you peed in public.

ANNA

That was years ago.

SIMON

I remember it vividly.

ANNA

It was a bet. Tom's a twat.

SIMON

Was. He died.

ANNA

I know.

SIMON

Cardiac arrest.

ANNA

He was too young.

SIMON

You spoke at the funeral.

ANNA

I owed him that much.

SIMON

People were moved.

ANNA

I'm a good public speaker.

SIMON

Like the time in the square?

*Pause.*

ANNA

I saw you ran into Rufus?

SIMON

I did, yeah.

ANNA

And how is he, after the...?

SIMON

Good, he's good.

ANNA

It was a nasty looking rash.

SIMON

Mosquito bite. He's allergic.

ANNA

Since when?

SIMON

Since the mission in the Caribbean. He had an allergic shock to seafood.

ANNA

He should have seen a doctor about it!

SIMON

He felt better in the morning. Called it a hangover.

ANNA

Why would he do that?

SIMON

You know what he's like.

ANNA

Still. Seems a bit odd.

SIMON

He is a bit odd. Not very articulate.

ANNA

I guess not. *Beat*. It must have been around the time you went to Alaska?

SIMON

About that time, yeah.

ANNA

I could find out exactly when.

SIMON

You should.

ANNA

You are fascinated by snow.

SIMON

I find it exotic, yes.

ANNA

Sure. Although, ultimately, we like what we know.

SIMON

Maybe.

ANNA

No, it's a fact. We prefer the familiar.

SIMON

I was curious. To see if the cold would make me appreciate the heat even more.

ANNA

That doesn't make sense to me.

SIMON

No?

ANNA

Statistics show that *likes* are created when we have our beliefs reinforced, not challenged.

SIMON

Right. Do you mind turning this off?

ANNA

I thought you enjoyed the park?

SIMON

I don't feel like it today.

ANNA

Fine. (*SFX: ANNIE knocks on a stained glass window.*)  
Harry, could you turn the Mood off for me please? (*SFX:  
The sound of the park stops. We are now in a small  
confined room.*)  
Is that better?

SIMON

Yes.

ANNA

Good. (*SFX: ANNA pours water into a glass.*) You were  
telling me about Alaska.

SIMON

Yes. (*ANNA offers him a drink*) No, thank you. Actually,  
the whole thing was a bet.

ANNA

A bet?

SIMON

Sophie didn't think I'd stand a month.

ANNA

She never mentioned it.

SIMON

She doesn't like to admit defeat.

ANNA

Right. And you... went fishing?

SIMON

No! I don't eat fish.

ANNA

Of course not.

SIMON

I was camping.

ANNA

You saw a grizzly bear up close.

SIMON

Not that close. I zoomed in.

ANNA

And then you went... quiet.

SIMON

From lack of reception. Yes.

ANNA

Strange.

SIMON

It was. Surreal, really.

ANNA

Strange to imagine that there are still places in the world without reception.

SIMON

Only a few.

ANNA

And you found one.

SIMON

I found myself *trapped* in one.

ANNA

And you decided to stay?

SIMON

I sprained my ankle.

ANNA

That's right.

SIMON

Trying to cross the river.

ANNA

Did you go in for a swim?

SIMON

No. I was trying to find reception.

ANNA

Yes. And so... you had to turn back?

SIMON

I hobbled ashore. Barely made it.

ANNA

How did you pass the time?

SIMON

I read.

ANNA

'A Farewell to Arms'.

SIMON

It's a classic.

ANNA

You're making your way through the Nobel Prize winners.

SIMON

It's been a dream of mine/ since I was

ANNA

Your 17<sup>th</sup> birthday.

SIMON

Longer, actually.

ANNA

But that was when you started reading.

SIMON

Yes.

ANNA

And so... You decided to stay on and read.

SIMON

My ankle was black from the bruising. The pain was so intense that it was difficult to focus on the story line. I had to read it three times.

*Beat.*

ANNA



What was it like?

SIMON

Depressing. The love of his life dies, together with their newborn child.

ANNA

No. The time you spent there. In the camp, completely disconnected.

SIMON

I don't really remember.

ANNA

I find that hard to believe.

SIMON

That is your entitlement.

ANNA

Sure. You didn't exactly rush back though, did you?

SIMON

Like I said. The snow took me by surprise.

ANNA

No. Afterwards, in the village. You didn't update until days later.

SIMON

I was fatigued.

ANNA

From pain?

SIMON

It's difficult to find enough nutrients in the wild. Especially when you're a vegan.

ANNA

What did you eat?

SIMON

Super food powder, /frozen algae

ANNA

No. In the bar, in the village. What did you order?

SIMON

Chips.

ANNA  
Nothing else?

SIMON  
Ketchup.

ANNA  
But you don't like ketchup.

SIMON  
I needed vitamin C.

ANNA  
What did you drink?

SIMON  
Guinness. For the iron.

ANNA  
You didn't look malnourished when you came back.

SIMON  
You don't burn calories reading.

ANNA  
You looked muscular.

SIMON  
I cleared a patch in the snow and did pushups. Sit-ups.  
High jumps.

ANNA  
Oh?

SIMON  
And I was carrying a few extra pounds before I left.

ANNA  
Really?

SIMON  
I went through an intense peanut butter-phase.

ANNA  
I didn't noticed.

SIMON

I carry fat well.

ANNA

Yes.

SIMON

It goes everywhere, like a soft coating.

ANNA

Of course. Horrible experience for you though, to be trapped in a black zone like that. I imagine your mind must have become completely blank after a while, wiped clean of content, deprived of answers and information. It must have been torture, being so utterly disconnected. It must have driven you mad, your sense of self shrinking, hearing nothing but the humming and the shrieking and the freezing and the dripping, your veins clogged with silence, your heart deflated from lack of stimulation. I cannot imagine the strain.

SIMON

I was fine.

ANNA

No.

SIMON

I just kept reading.

ANNA

You have suppressed the bad memories.

SIMON

Maybe.

ANNA

That is what happens when there is no record. We forget the truth.

SIMON

You're right.

ANNA

A dangerous situation.

SIMON

Yes. Terrible.

*Pause.*

ANNA  
Just so we're clear, I'm not implying that it shouldn't  
be allowed.

SIMON  
Of course not.

ANNA  
Freedom is paramount.

SIMON  
That goes without saying.

ANNA  
Still. Sometimes, it's good to say it.

SIMON  
I say it all the time.

ANNA  
I know you do.

*Pause.*

ANNA  
Say it.

SIMON  
What?

ANNA  
Let me hear you say it.

*Beat.*

SIMON  
Freedom. Is. Paramount.

*Beat.*

ANNA  
You have such a beautiful voice. I really missed you when  
you disappeared.

SIMON  
It wasn't a choice.

ANNA

But it happened.

SIMON

By accident. Sometimes things go wrong.

ANNA

Not very often. At least not anymore.

SIMON

But they do. Like the time you misplaced the register.

ANNA

That has been deleted.

SIMON

There's always a trace.

ANNA

Not this time.

SIMON

Maybe not.

ANNA

No. That's a fact.

SIMON

You're being very liberal with your facts.

ANNA

I'm in the business of stating them. It's part of my new job description.

SIMON

Right... *Beat*. Is that why we're meeting in the Green Wing?

ANNA

I was promoted over Christmas. I assumed you knew.

SIMON

Yes, of course. Congratulations.

ANNA

Thank you.

SIMON

So. This conversation is it... part of your new job?

ANNA

You know you have nothing to fear, as long as you have nothing to hide.

SIMON

You're quoting scripture now?

ANNA

Comes with the promotion, I guess.

SIMON

You weren't always like this, Anna.

ANNA

I was.

SIMON

No. There were times when you made real mistakes.

ANNA

People change for the better. The world changes for the better.

SIMON

Do you really think it is? Better?

ANNA

Statistics show that people are more content now than they have ever been. You should know, you signed the report.

SIMON

You can make statistics say anything, if you angle the questions right.

ANNA

No. Numbers don't lie.

SIMON

Don't they?

ANNA

Look. If it's danger you want, or risk, or surprise, you know we can make it part of your profile. It is easily arranged.

SIMON

That's not what I want.

ANNA

What do you want?

SIMON

I... I don't know.

ANNA

Don't worry, Simon. We'll figure it out. For a start, I think you would be more comfortable in the park. (*SFX: Knocks on the glass.*) Harry?

SFX: Sounds from the park return.

ANNA

There. Isn't that better? *Beat.* You can almost smell the grass.

**Infinity  $\infty$ . Google it!  
(Early draft of Let's Google  
it!)**



*In the following dialogue, every hesitation or question without an answer is googled, and the answer produced redirects the conversation. The tempo becomes quicker and quicker as the googling intensifies. Being without an answer or linger in hesitation is unthinkable.*

*Note: the Chorus should, ideally, be made up of the voices of the actors playing Ali and Janice - but prerecorded, so that it sounds as if the voices are coming from a different place.*

Ali

I thought there'd be more people here.

Janice

Me too. I heard that there were over 500 applicants.

Ali

Where did you hear that?

Janice

Just around.

Ali

Right. They may be in other rooms.

Janice

True. At other times.

Ali

Yeah. So, are you currently...

Chorus

Google it!

Ali

Are you currently in Australia and want to extend your stay?

Janice

No, not currently, no. I did go once, after University.

Ali  
Right.

Janice  
Yes. It was kind of a holiday slash research trip.

Ali  
Interesting.

Janice  
It was. It was...

Chorus  
Google it!

Janice  
It wasn't me.

Ali  
No?

Janice  
I mean that I've grown so much since then.

Ali  
It's important to always evolve.

Janice  
I couldn't agree more. Things can always be improved.

Ali  
Yes. In my last position I was in charge of innovation.

Janice  
Were you?

Chorus  
Google it!

Janice  
Were you though?

Ali  
Yeah, I was.

Janice  
But you aren't now?

Ali

Aren't what?

Chorus  
Google it!

Janice  
Things are not always what they seem.

Ali  
I agree. I have brought references though.

Janice  
What, on a hard copy?

Ali  
No, no, no, numbers. Names.

Janice  
Aha. So have I. Who wouldn't?

Chorus  
Google it!

Janice  
Who wouldn't bust a grape in a fruit fight?

Ali  
I guess I would?

Janice  
You're not sure though?

Ali  
I haven't thought about it.

Janice  
I think about every eventuality. That way I'm prepared  
for anything.

Ali  
Yes. I improvise.

Chorus  
Google it!

Janice  
I can't improvise on guitar.

Ali

That's very defeatist. I would try.

Janice

Well, it's not a skill that can be transformed into a managerial quality.

Ali

I disagree. Coordination, focus, understanding of tempo, these are all valid skills. These are all, ehm....

Chorus

Google it!

Ali

These are all the little things that make me smile.

Janice

Yes. It is important to smile.

Ali

Yes.

Janice

Keep a positive attitude.

Ali

I smile all the time.

Janice

Really?

Ali

Not like a freak, just...

Chorus

Google it!

Ali

Just needs infinity.

Janice

Infinity?

Chorus

Google it!

Janice

Infinity is an abstract concept describing something without any bound or larger than any number.

Ali  
I'm good with numbers.

Janice  
So am I.

Ali  
Not just counting, but conceptual forward thinking.

Janice  
Sure. Could you give me an example?

Ali  
Ehm...

Chorus  
Google it!

Ali  
Could you give me an example of working in a team?

Janice  
Of course. In my last position I managed a research team of 10. What we developed is classified, but I can say that I made the team a huge success, both professionally and personally.

Ali  
Right.

Janice  
Two of the professors are married today.

Ali  
Great.

Janice  
I always get results.

Ali  
Just great. I always...

Chorus  
Google it!

Ali  
I always feel like somebody's watching me

*Beat.*

Janice  
Well... We have to assume that they are?

Ali  
Of course. I don't mind being watched. In fact, I like  
it.

Janice  
Me to.

Ali  
It makes me better.

Janice  
It makes me...

Chorus  
Google it!

Janice  
Me hace feliz.

Ali  
Yeah. I just said that.

Janice  
I just...

Chorus  
Google it!

Janice  
I just want to be happy.

Ali  
Getting this job would make me happy.

Janice  
Getting this job would...

Chorus  
Google it!

Janice  
Getting this job would suit me.

Ali

Why?

Chorus  
Google it!

Janice  
Porque.

Ali  
Porque?

Chorus  
Google it!

Ali  
Porque no.

Janice  
No reason. It's all...

Chorus  
Google it!

Janice  
It's all gone pete tong.

Ali  
Well, I think...

Chorus  
Google it!

Ali  
I think my Dad's gone crazy.

Janice  
Oh, that's...

Chorus  
Google it!

Janice  
That's nice.

*Here, the volume starts going down until there is nothing  
but sparking electric silence.*

Ali  
What?

Chorus  
Google it!

Ali  
What is my ip?

Janice  
Ehm, I wasn't aware that...

Chorus  
Google it!

Janice  
I wasn't aware that was something a person could do.

Ali  
You mean..?

Chorus  
Google it!

Ali  
You mean the world to me.

Janice  
Oh, I don't...

Chorus  
Google it!

Janice  
Oh, I don't know my name.

Ali  
Your name is...

Chorus  
Google it!

Ali  
Your name is unknown your deed is immortal.

Chorus  
Google it!

Janice  
My deed is done.



# **Let's Google it!**

*Characters:*

KAY

HELEN

STANLEY

*Setting: A fancy dress party - themed 'The Jungle'*

SFX: The jungle; buzzing, humming, maybe a monkey calling out.

KAY

I like your panther costume.

HELEN

I'm a jaguar.

KAY

Right, sorry. It's really nice.

HELEN

And you are?

KAY

I'm a poison dart frog.

HELEN

Oh.

KAY

It's one of the most toxic animals on earth. Apparently, one frog has enough poison to kill 10 grown men.

*(Beat.)*

I love orange.

HELEN

Right. What keeps the... inflated thingy...?

KAY

The vocal pouch? A balloon.

HELEN

Right.

KAY

I had it taped to my throat.

HELEN

Wow.

KAY

Yeah.

*Short Pause.*

KAY

How do you know Tom?

HELEN

I don't. I know Abdul. They work together.

KAY

Right.

*Short pause.*

KAY

These appetizers are really good.

HELEN

Yeah.

KAY

What do you call this?

HELEN

I'm not sure.

KAY

I'll Google it! What do you call... an alligator in a vest. What do you call a fake noodle. What do you call a black guy with half a brain.

*Beat.*

KAY

Ehm. So... How do you know Tom?

HELEN

I don't.

KAY

That's right. You said.

HELEN

Yeah.

KAY

Sorry.

*Beat.*

KAY

I like this soundtrack.

HELEN

Yeah.

KAY

Reminds me of that guy...

HELEN

What guy?

KAY

You know; white. Glasses. Bald. I'll Google it! (*Googles 'white', 'glasses', 'bald'.*) What sunglasses look good on bald guys?

HELEN

I don't know.

KAY

Here. Look at the pictures.

HELEN

Yeah. They're all white. And bald. With glasses.

KAY

Yeah...*(Beat)* What were you...

HELEN

Thinking?

KAY

Doing?

HELEN

Saying?

KAY

In a past life.

HELEN

Google knows.

KAY

Google knows about you.

HELEN

Google knows where I have been.

KAY

Google predicts your age.

HELEN  
Google knows where you've been.

KAY  
Google predicts flu.

HELEN  
Google predicts the future.

KAY  
Google tells me my computer is infected.

HELEN  
Google tells me to kayak.

KAY  
Google Maps tells me to swim.

*(Short pause)*

KAY  
Great party.

HELEN  
Yeah. This party is... I'll just Google it. This party is  
whack.

KAY  
This party is off the hook

HELEN  
This party is McDonalds

KAY  
What?

HELEN  
McDonald's is...

KAY  
...bad

HELEN  
McDonalds is good for you

KAY  
McDonald's is healthy

HELEN  
McDonalds is getting healthier

KAY  
Big Mac is healthy

HELEN  
Big Mac is small

KAY  
Big Mac is the best burger

HELEN  
Big Mac is getting smaller

*(Stanley arrives)*

STANLEY *(to Helen)*  
You wouldn't believe the queue to the bar!

HELEN  
Did they not have any red?

STANLEY  
No. Do you not want it?

HELEN  
It's fine. *Beat.* This is...

KAY  
Kay.

STANLEY  
Hi.

KAY  
Hi. I like your zebra costume.

STANLEY  
I'm a tiger.

KAY  
Oh. Right, I just though... with the white/ and black

STANLEY  
/It's yellow. Yellow and black.

KAY  
Of course! I'm so sorry! I'm a poison dart frog.

STANLEY  
A what?

KAY  
It's one of the most toxic animals on earth. One frog has  
enough poison to kill 10 grown men.

*Beat.*

How do you know Tom?

STANLEY  
I don't. She does.

HELEN  
No, I know Abdul.

KAY  
Of course, you said.

HELEN  
This tastes weird.

STANLEY  
Some sort of hybrid between a beer and a cider.

KAY  
What's it called?

STANLEY  
I didn't ask.

KAY  
Let's Google it. What's the name of/

STANLEY  
/the song.

HELEN  
The movie.

The period leading up to Christmas.

STANLEY  
The name of the game.

KAY  
Cyber!



HELEN  
What?

KAY  
Cider + Beer. It makes sense!

HELEN  
Right.

*Beat.*

KAY  
This was... not part of the master plan

STANLEY  
This was not a boating accident

HELEN  
This was not your dream but you always believed in me

KAY  
This was not the case

HELEN  
I'm tired all the time

KAY  
I'm tired of using technology

STANLEY  
I'm tired of loving

HELEN  
Let's dance

KAY  
Lets deal

HELEN  
Let's dance Alex

STANLEY  
Lets sing it

KAY  
Who's Alex?

HELEN

Alex is the man

KAY

I've had enough

STANLEY

I've had the time of my life

HELEN

I've had it with these

STANLEY

Let's end this relationship

KAY

Let's end this meeting on a high note

STANLEY

In the end, it's not the years in your life that count.  
It's the life in your years. Abraham Lincoln.

HELEN

What are you trying to say to me?

KAY

What are you trying to accomplish?

STANLEY

What are you trying to imply?

KAY

Life is just a dream

HELEN

Life is just one damned thing after another

KAY

Still. It was great seeing you

STANLEY

It was great meeting you

HELEN

It was great seeing you too

STANLEY

Thank you for the music

HELEN

Thank you for smoking

KAY

Thank you for the demon

HELEN

Thank you for loving me

STANLEY

Thank you in advance

KAY

I'll see you in my dreams

HELEN

I'll see you again

KAY

Take care of my cat

HELEN

Take care of yourself

STANLEY

Take care of your hair

HELEN

Goodbye my lover

STANLEY

Goodbye horses

KAY

Goodbye Lenin

HELEN

I will

KAY

I will always love you

HELEN

I will survive

STANLEY

I will wait

KAY

I will follow you into the dark

HELEN  
If I had a heart

STANLEY  
If I had a hammer

KAY  
If I had you

HELEN  
If I had a gun

STANLEY  
I would be so happy

HELEN  
I would be so lucky

KAY  
I would be so pleased

STANLEY  
That's life

KAY  
That's racist

STANLEY  
That's my boy

HELEN  
That's amore

KAY  
And this is the stuffing

STANLEY  
And this is the way we crash the party

HELEN  
And this is the part where the curtain falls

KAY  
And this is the red orange yellow flicker beat

STANLEY  
It's the final countdown

HELEN

It's the freaking weekend

KAY

It's the falling in love

STANLEY

It's the never-ending story

HELEN

It's the never knowing that keeps this going

KAY

It's the never-ending song

STANLEY

It's never the right time to say goodbye.

HELEN

It's never the same

STANLEY

It's never the network

KAY

It's never the victim's fault

HELEN

It's never the end.

STANLEY

The end justifies the means.

KAY

The end of the world.

HELEN

This is the end. Watch online.

*Pause.*

KAY

There's Tom! (*calling*) Tom! I'm gonna go say hello.

## **High Risk**

*Characters:*

EMMA

OFFICER 1

OFFICER 2

*Setting: The Maternity Ward. An outdoor birthday party.*

**SCENE 1. The Maternity Ward**

SFX: A hospital, the maternity ward. Private room. 'Hair dryer' is playing, a sound track played through an app, designed to help a baby sleep. EMMA is sitting in a hospital bed, with her baby sleeping in a cot beside her. OFFICER 1 and OFFICER 2 are standing by the bed.

OFFICER 1

And what *is* your five-year plan, dear?

EMMA

I... I take every day as it comes.

OFFICER 2

You live in the moment.

EMMA

Yes.

OFFICER 1

Yes. What about tomorrow?

EMMA

I... They want to keep me overnight. For observation. I lost quite a lot of blood.

OFFICER 2

Poor Emma.

OFFICER 1

The midwife said you did great.

OFFICER 2

Loosing blood is normal. (*Passes Emma a glass of water.*)  
Here you go.

EMMA

Thank you.

OFFICER 2

You need your fluids.

SFX: Emma drinks.

OFFICER 2



*(Takes the empty glass back from Emma and places it on a table.)* That's a good girl.

EMMA  
Thanks.

OFFICER 1  
What about tomorrow?

EMMA  
What?

OFFICER 1  
Tomorrow?

OFFICER 2  
Your plan for tomorrow, love?

EMMA  
I... I am going to my Mum's.

OFFICER 2  
The proud Granny!

OFFICER 1  
You get on well with your Mother?

EMMA  
Yeah. Well enough.

OFFICER 1  
You left home at 16.

EMMA  
Well, we... had some issues.

OFFICER 2  
Parents can be a real pain.

EMMA  
Yeah.

OFFICER 1  
But you are going to live with her?

EMMA  
Sure. For now.

OFFICER 2  
She has your old room prepared?

EMMA  
She has a one bed flat/ but

OFFICER 2  
How generous! To give up her own bedroom for you and the baby.

SFX: The background changes to 'traffic'; sounds of cars passing on a highway at night.

EMMA  
It's on a shuffle.

OFFICER 1  
A shuffle?

EMMA  
It's an app. You know, with sounds specifically designed to help babies sleep.

OFFICER 2  
That can be very effective.

EMMA  
Yes.

OFFICER 2  
They hear sounds in the womb, you know.

OFFICER 1  
They do.

OFFICER 2  
The familiarity creates a sense of safety.

EMMA  
Sure.

*Beat.*

OFFICER 1  
I take it she is?

EMMA  
What?

OFFICER 1  
What?

OFFICER 2  
Your Mother.

EMMA  
What?

OFFICER 1  
Is she?

EMMA  
I'm not sure I...

OFFICER 2  
She is asking you, sweetie, if you can confirm that your Mother is giving up her bedroom? For you and the baby?

EMMA  
Oh. Yes. Or, she has a couch in the living room.

OFFICER 1  
A couch?

SFX: The traffic becomes heavier.

OFFICER 1  
You are not suggesting co-sleeping, are you?

EMMA  
No.

OFFICER 2  
You could - you could - you could - you could -

OFFICER 1  
You could roll over the baby.

EMMA  
Yes, no. She will sleep in a cot.

OFFICER 2  
(*whispers to the baby*) Hello precious.

OFFICER 1  
Good.

OFFICER 2

*(singing in a whisper)* When the bough breaks

OFFICER 1

Where did you buy it?

OFFICER 2

*(singing)* The cradle will fall.

EMMA

I am going to.

OFFICER 2

*(singing)* Down tumbles Baby,

OFFICER 1

Tomorrow?

OFFICER 2

*(singing)* Cradle and all.

OFFICER 1

Is that your plan for tomorrow, Emma?

EMMA

Maybe. I didn't want to buy a lot of baby stuff, in case things didn't go well.

OFFICER 2

Why would things not go well?

SFX: Traffic increases.

EMMA

You never know, do you? *Beat.* She can sleep in the buggy for one night.

OFFICER 2

What kind of buggy do you have?

EMMA

What kind?

OFFICER 1

What brand?

OFFICER 2

What colour?

EMMA

Blue. I think. A friend gave it to me.

OFFICER 1

Second hand then.

EMMA

Yes. Is that a problem?

OFFICER 2

To the contrary! It is the environmentally friendly option.

OFFICER 1

Is that something you think about?

EMMA

What?

SFX: Traffic becomes chaotic, honking, roaring.

OFFICER 1

Carbon footprints?

OFFICER 2

Global warming?

OFFICER 1

Increased knife crime?

OFFICER 2

Drug related violence?

OFFICER 1

Is that something you think about?

EMMA

I... Yeah. Sure.

OFFICER 1

We have to, right? It is our children's future.

EMMA

Yes.

OFFICER 2

Which brings us to why we are here.

SFX: Baby whimpers.

EMMA

I don't think she likes this track.

SFX: EMMA changes the track to 'beach', the sound of waves gently rolling in. Short pause.

EMMA

Do you two have children?

OFFICER 2

What?

OFFICER 1

We are not a couple.

OFFICER 2

I am still exploring.

*Beat.*

OFFICER 1

I plan to have children.

OFFICER 2

So do I.

OFFICER 1

Henry, Jude and Olivia.

OFFICER 2

Little Theo and Zackary. Two years apart.

OFFICER 1

When the time is right.

OFFICER 2

When the time is right.

OFFICER 1

Did you?

EMMA

Did I..?

OFFICER 2

Wait, dear.

Officer 1

Until the time was right?

EMMA

No, I... I'm not sure there is such a thing as a perfect time to/do anything

SFX: The weather begins to change, becoming increasingly aggressive, building towards a storm.

OFFICER 1

There is good timing and bad timing. You cannot contest that.

OFFICER 2

We are not here to judge you, Emma.

OFFICER 1

No.

OFFICER 2

We are here to help you.

OFFICER 1

What is the name of the baby?

EMMA

I'm thinking about Anna.

OFFICER 2

Anna! Lovely.

EMMA

Or Annie.

OFFICER 2

Annie?

OFFICER 1

Annie, ...

OFFICER 2

Oh.

OFFICER 1

Yeah.

EMMA

What?

OFFICER 1  
Go with Anna.

EMMA  
Why?

OFFICER 2  
Annie has - Annie has - Annie has - Annie has -

OFFICER 1  
Annie has bullying potential.

EMMA  
Bullying?

OFFICER 2  
Rhyming wise.

OFFICER 1  
It rolls of the tongue.

OFFICER 2  
It springs to mind.

OFFICER 1  
You have to be watchful of any genital connotations.

OFFICER 2  
We met a mother last week, who wanted to name her  
daughter A. B. C. D. E.

OFFICER 1  
It's pronounced Ab-ceh-dee, apparently.

OFFICER 2  
'Rhymes with rhapsody'.

OFFICER 1  
Damaging.

OFFICER 2  
It's the hormones.

OFFICER 1  
That is why we have regulations.

EMMA  
Sure. Look, I am really, really tired/ and I think



SFX: Waves come crashing in against rocks.

OFFICER 1

You do look exhausted. (To OFFICER 2) Sometimes you get caught up in making conversation.

OFFICER 2

I'm sorry. It's the pleasantries. They're addictive.

OFFICER 1

The weather has been lovely.

OFFICER 2

Warmest Spring since -55!

OFFICER 1

We are here because Anna got a high 70 per cent on her risk assessment.

OFFICER 2

The criminal justice algorithms flag everyone above 60.

OFFICER 1

As I am sure you are aware, this is an evidenced-based method taking into account variables such as marital status, age, education, finances, neighbourhood and family background.

OFFICER 2

You have probably been expecting us?

SFX: Short pause. The storm increases.

OFFICER 1

Emma?

EMMA

I...

OFFICER 2

The sun is in her eyes.

EMMA

No / I'm just not...

OFFICER 2

Let me draw the curtain.

SFX: OFFICER 2 walks across the room to the window and draws the curtain.

OFFICER 1  
Did you?

EMMA  
Did I?

SFX: OFFICER 2 walks back to standing beside EMMA's bed.

OFFICER 1  
*Did you!?*

EMMA  
What..?

OFFICER 2  
Surprise, is it?

EMMA  
The sun?

OFFICER 1  
What?!

EMMA  
I'm sorry?

OFFICER 2  
There is a pattern in your family.

EMMA  
What do you mean?

OFFICER 1  
Your Mother left home young.

OFFICER 2  
Didn't get along with your Grandmother?

*Beat.*

EMMA  
No.

OFFICER 1  
Why?

EMMA  
She... She was abusive.

OFFICER 2  
Tragic.

OFFICER 1  
So she left home.

EMMA  
My mum never even slapped me.

OFFICER 2  
No.

OFFICER 1  
But you left as well.

EMMA  
Yes.

OFFICER 1  
Why?

EMMA  
Like I said, we didn't get along. I wanted to do my own thing and she...

OFFICER 2  
She insulted you.

OFFICER 1  
Called you a dirty little C-word.

OFFICER 2  
A stupid F-n B-word.

EMMA  
No, it was... She had a very clear idea of how she wanted things to be. I guess... I guess I just got sick of disappointing her.

OFFICER 1  
So you left?

EMMA  
Yes.

OFFICER 2

Did she not - did she not - did she not - did she not -

OFFICER 1

Did she not find that disappointing?

EMMA

I was 16.

OFFICER 2

You didn't think it through?

OFFICER 1

Make a five-year plan?

EMMA

No, I just left. This track, it's...

SFX: EMMA changes the track. The sound of a beating heart, and the whooshing sound from inside a shell. It is the same heartbeat as in 'Falling.' Short pause.

OFFICER 1

You have an impulsive personality?

EMMA

No. I don't know.

OFFICER 2

You never met your Father?

OFFICER 2

He sent her letters.

OFFICER 1

One every Christmas.

OFFICER 2

You never replied.

EMMA

I/

OFFICER 2

Your Father is a drug addict?

EMMA

I don't even know if he is still alive.

OFFICER 2

Oh, he's alive.

OFFICER 1

Hangs around the docks, mainly.

OFFICER 2

Writes poetry. Would you like to hear a verse?

EMMA

I/

OFFICER 2

*Waves*

*Caress of loss*

*Scales under my fingernails*

*Bones and death, under my breath.*

*Beat.*

OFFICER 1

What about Anna's Father?

EMMA

I/

OFFICER 1

Does he also write poetry?

EMMA

No!

OFFICER 2

You claim that he will be there for Anna.

EMMA

Yes!

OFFICER 1

For Christmas?

EMMA

Yes.

OFFICER 2

Weekends?

EMMA

Both.

OFFICER 2  
Both.

EMMA  
I hope.

OFFICER 1  
You hope?

EMMA  
He said he will.

OFFICER 1  
She doesn't trust him.

OFFICER 2  
Do you find it difficult to trust people?

EMMA  
Maybe. Look, I really want to try and get some sleep now.

OFFICER 1  
Of course!

OFFICER 2  
Let me see what else there is...

SFX: OFFICER 2 changes the background to the park. It is the same park as in 'Trapped'.

OFFICER 2  
(*Deep breath in.*) Ah, Spring is in the air!

Officer 1  
You like running?

EMMA  
Ehm, yes. Or/I did, before I

OFFICER 1  
Can you appreciate the correlation between exercising and good health?

SFX: Baby whimpers.

OFFICER 2  
She's fine.

EMMA  
(to ANNA) Shy...

OFFICER 1  
It's just wind.

OFFICER 2  
An innocent nightmare.

OFFICER 1  
Do you?

EMMA  
What?

OFFICER 1  
Do you?

EMMA  
I don't/know

OFFICER 2  
No?

EMMA  
No?

OFFICER 1  
Is that a no?

EMMA  
No!

OFFICER 1  
No?

EMMA  
No! I...

OFFICER 2  
Is it or isn't it?

EMMA  
No! I don't know.

OFFICER 1  
Can you or can you not appreciate the correlation between  
exercising and good health?

EMMA

Yes. Of course.

OFFICER 2

Great!

OFFICER 1

And even though you are currently healthy, you still continue to run.

EMMA

Yes.

OFFICER 1

As a *preventative* measure?

EMMA

I guess you could call it that.

OFFICER 2

You run, not because you are unwell, but in order to prevent future health-related complications.

OFFICER 1

Prevent the cause of an illness before it infects.

OFFICER 2

Prevention is more effective than aftercare.

SFX: The wind starts blowing. A bicycle goes past, ringing it's bell.

OFFICER 2

That principle - that principle - that principle -

OFFICER 1

That principle is part and partial of the work we do.

OFFICER 2

Did you know that children living in disruptive or broken families have a much higher risk score?

SFX: A child starts crying in the distance, calling for Mummy.

OFFICER 1

Your Mother's area is classified as 'socially deprived'. That is an example, of high risk.



OFFICER 2

Children of parents with impulsive personalities, are at risk.

OFFICER 1

Children of parents with a suspicious nature, are at risk.

OFFICER 2

Inability to maintain close relationships.

OFFICER 1

Lack of empathy.

OFFICER 2

Pessimistic tendencies.

SFX: A siren speeds towards them.

OFFICER 1

According to the criminal justice algorithms, there is a 78 per cent risk that Anna will become an offender by the time she turns 18.

OFFICER 2

Theft.

OFFICER 1

Trespassing.

OFFICER 2

Battering.

OFFICER 1

Most likely drug-related.

OFFICER 2

It is simple math.

OFFICER 1

A family pattern.

OFFICER 2

A worrying prediction.

OFFICER 2

The good news is that we can add (SFX: Birds start singing) and subtract. (SFX: the wind, siren, and crying stops).

Beat.

OFFICER 2  
Starting with your living situation.

OFFICER 1  
We have a range of accommodation options.

OFFICER 2  
Safe cots are provided.

OFFICER 1  
A five-year plan is implemented.

EMMA  
Okay, but /I don't think...

OFFICER 2  
It's a program designed to see people like your daughter excel.

OFFICER 1  
(SFX: Overlap with the same line from page 7.) It is our children's future.

EMMA  
Yes, but I don't think/this is

OFFICER 1  
Don't you mean 'we'?

EMMA  
Wh-what?

OFFICER 1  
You keep referring to yourself in singular.

OFFICER 2  
Even though motherhood generates a natural plurality.

OFFICER 1  
You have used the word 'I' 42 times in the past 10 minutes. (SFX: All the 'I's EMMA has spoken edited together and played at high speed.) This is excessive, Emma.

OFFICER 2  
A sign of post partum depression.

EMMA

But I... we, /we could

OFFICER 1

You have a problem with commitment.

OFFICER 2

That is high risk.

EMMA

I, no/ we...

OFFICER 1

The program is mandatory.

OFFICER 2

Show her the brochure.

OFFICER 1

This is the Mother and Baby Centre.

OFFICER 2

Go to page five. It's such a cute photo!

## **SCENE 2. The Birthday Party**

SFX: Five years later. Children play in the garden, laughing, chasing, bouncing on a trampoline. Water is splashing as they jump into a play pool. Adults are chatting, drinks are poured.

OFFICER 2

Come over here, sweetie! Look what Mummy's got for you!

EMMA

*(Enters the garden carrying a cake)* Happy Birthday to you.

ALL

Happy birthday to you. Happy birthday dear Anna, Happy birthday to you!

EMMA

Go on, honey! Blow out the candles!

OFFICER 2

*(teary)* I cannot believe she is five already!

OFFICER 1

I know. Time flies...

SFX: ANNA blows out the candles. The sound grows into the  
a whirlwind, a dessert storm, building and roaring.

Appendix I: Safe (Early draft of script)

**Safe.**

Third Draft. 19/10/17

*Characters:*

*The voices are made up of all the actors used for the other pieces. Sometimes lines are spoken together, other times they are delivered in isolation.*

*In the background, the same dialogue is spoken in numerous different languages; Spanish, Swedish, Hindu, Japanese, Welsh, Ukrainian etc.*

*Listening instruction: Listen to in bed, before falling asleep.*

*Voices at super speed - we are unable to make out words, as the dialogue rushes ahead. Then suddenly, it slows, as if we've put a magnifying glass over the sound file, which enables us to listen.*

- You waste time thinking about your nose.
- Thinking your grey skin and mousy hair would have made you less visible, if it wasn't for/
- /That's your Daddy's nose, your mother spat like a curse, holding up her three middle fingers in a thick line across your face.
- Framed on the mantle piece it looked like the second before a slap; your eyes diluted, your mother grinning, your nose pressed tight against her knuckles.
- She thought it was hilarious.

*Beat.*

- Top left,
- Top right,
- Two behind you, linking identity cards and shopping to your Fitchip,
- to your profile,
- to your interactions.
- Age: 32, occupation: Free Choice Officer, pets: none dislikes: dolls, broccoli, the ocean
- Take those long calming breaths that DR Ammar prescribed. He will know if you didn't, just like he knew you skipped breakfast at the weekend.
- How do you expect to recover without fuel?
- Going running in the dark,
- losing reception.
- You need to find a new route.

- The forest isn't safe.

*Beat.*

- Stop fidgeting.

- The bracelet is a girl's best friend.

- Remember the feeling when you finally fit into those old jeans from Uni? Hold on to that feeling.

- Slowly take a raisin out of the pack and place it in your mouth.

- 2 calories flashing by under your skin.

- Let the taste accentuate this unique moment.

- You're alive. Savour it.

*Beat.*

- Step off the escalator and keep the pace steady through the tunnel.

- The crowd forms a perfect pattern around you.

- Except for the man strumming his guitar with his stump. You drop a coin in his hat because *Somewhere Over the Rainbow* reminds you of Granny.

- Your Mother hates that song.

- Hated having her hair platted so tight against her skull that her lips were forced into a constant Christmas card-smile, but you loved it. Made you feel safe.

*Beat.*

- Another camera calculates your average commuter score.

- There's a signal failure ahead, take the northbound two stops and then get bus 203.

- You're welcome.

- Ads along the walls tell you to enjoy swimming in exotic waters.



- You never have.
- Never liked the feel of the sand, never cared for the sound of the waves.
- Made you think of death.
- Seaweed in his hair, his little body pail and bloated.
- That's how you imagine it.
- Slightly distorted, but limbs still intact.
- Not the way it was described online.
- Not the way he appears in your dreams.
- You should try skiing.
- No one's ever drowned in snow.
- Enjoy the thrill of coming to a stop mid-slope.
- You would love it.

*Beat.*

- Yippee! You've now walked 20,000 steps today! That puts you in the lead at your department.
- Brad will be gutted.
- You look tired though.
- Why?
- DR Ammar has you down as pending.
- Nothing connects the lack of appetite,
- the rash,
- the high levels of stress hormone,
- not with the amount of running that you do.
- Not with the sudden spike of happiness shown in your Mood log. No one likes a conundrum.

- Don't worry. The data will stack up and you will get well.

*Beat.*

- Have a raisin.

- Follow the pattern.

- Grind it to a pulp/

- /Don't linger in the shade/

- /2 calories/

- /Don't dash across the street/

- /370 left today/

- /You know you loose points when you go off grid.

- Embrace the smell of the world like DR Ammar taught you.

- Sour armpits,

- Raw onion breath,

- Calvin Klein's Deep Euphoria failing to hide what she did last night.

- No. Don't picture it.

- Don't think about the burning sensation.

- Don't think about the past. It was an ugly place.

- No, stop thinking about your mother. She is not thinking about you.

*Beat.*

- There is a camera shaped like an eyeball in the ceiling where the tunnel ends. Like the one that caught Rufus loosing control.

- The bruises stretched from his wrist up to his collarbone.

- Fingerprints to match your black eye.
- He deserved all 25.
- Could have been worse.
- The Rapid Response Unit saved your life that night.
- His neighbours saw it coming, but you were caught off guard.
- Rest assured that wouldn't happen today. Today you'd be safe.

*Beat.*

- Keep walking. Don't worry about the Snickers you devoured, you're making up for it today.
- Happiness always adds up.
- Every corner covered, getting the angles needed for DR Ammar to assess.
- *Chewing raisins. Heartbeat steady. Eyes clear. Core activated.*
- Masses of people forming safe shapes, waiting at the platform.
- Startle and you're screwed.
- Makes you an anomaly.
- Rufus learned that the hard way.

*Beat.*

- Have a raisin.
- Have two.
- 4 calories, 366 to go.
- Far left, top right.
- Enjoy the rush.

- Don't stare at the floor.
- You are difficult to read at an angle.
- Makes the features distorted, odd.
- Alarmingly shaded. As if you're hiding something.
- We're working on it.

*Beat. Sound of train approaching.*

- Beginning?
- Automation, biometrics, tax benefits,
- Don't search for a beginning.
- Universal implementation.
- Nothing really begins.
- Things seep into the creases of other things until it consumes the total, nibble by nibble.
- Until it's normal.
- Part of life.
- Part of who you are.
- Like moving.
- Like breathing.
- Like eating.
- Like loving.
- Like watching.
- Like listening.
- Like sleeping.

*This mantra continues in different languages and the sound speeds up again. Then, slowly, the voices begin to fade and we hear, in the background, how the sounds of a*

*tube station begin to take president; until all we're  
left with is the mundane sound of a station.*

Appendix J: Safe (Final script)

**Safe**

SFX: The sound of a moving train.

- The bathroom mirror says you waste time thinking about your nose.

- Thinking your grey skin and mousy hair would have made you less visible, if it wasn't for/

- /That's your Daddy's nose, your mother spat like a curse, holding up her three middle fingers in a thick line across your face.

- Framed on the mantle piece, it looks like the second before a slap; your eyes diluted, your mother grinning, your nose neatly hidden behind her sharp knuckles.

- She loves that photo.

- Rates it among her top five.

*Beat.*

- The stovetop is worried.

- You let the popcorn pop and burn.

- The bin doesn't think you ate a thing.

- And you've let the milk go off again.

- The fridge doesn't like that. Gives its whole interior a putrid stink.

- Makes the carrots taste kind of funky.

- Dislikes updated: dolls, the ocean, carrots

- The bed said you've been hyperventilating.

- Why don't you take those long calming breaths that DR Ammar prescribed?

- The balcony knows you skipped breakfast at the weekend.

- How do you expect to recover without fuel?

- Going running in the dark,
- Loosing reception.
- You need to find a new route.
- The forest isn't safe.

*Beat.*

- Stop fidgeting.
- The FitChip is a girl's best friend.
- Remember the feeling when you finally got into those old jeans from Uni? Hold on to that feeling.
- Slowly take a raisin out of the pack and place it in your mouth.
- 2 calories flashing by under your skin.
- Let the taste accentuate this unique moment.
- You're alive. Savour it.

*Beat.*

- Step off the escalator and keep the pace steady through the tunnel.
- The crowd forms a perfect pattern around you.
- Except for the man strumming his guitar with his stump. You drop a coin in his hat because *Somewhere Over the Rainbow* reminds you of Granny.
- Your Mother hates that song.
- Hated having her hair platted so tight against her skull that her lips were forced into a constant Christmas card-smile, but you loved it. Made you feel safe.

*Beat.*

- Your commuter score is still below average.
- There's a signal failure ahead, take the northbound two stops and then get bus 203.



- You're welcome.
- The ads along the walls tell you to enjoy swimming in exotic waters.
- You never have.
- Never liked the feel of the sand, never cared for the sound of the waves.
- Made you think of death.
- Seaweed in his hair, his little body pale and bloated.
- That's how you imagine it.
- Slightly distorted, but limbs still intact.
- Not the way it was described online.
- Not the way he appears to you in your dreams.
- You should try skiing.
- No one's ever drowned in snow.
- Enjoy the thrill of coming to a stop mid-slope.
- You would love it.

*Beat.*

- Yippee! You've now walked 20,000 steps today! That puts you in the lead at your department.
- Brad will be gutted.
- You look tired though.
- Why?
- DR Ammar has you down as pending.
- Nothing connects the lack of appetite,
- the rash,
- the high levels of stress hormone,

- not with the amount of running that you do.
- Not with the sudden spike of happiness shown in your Mood log. No one likes a conundrum.
- Don't worry. The data will stack up.

*Beat.*

- Have a raisin.
- Follow the pattern.
- Grind it to a pulp/
- Don't linger in the shade/
- 2 calories/
- Don't dash across the street/
- 370 left to enjoy today/
- You know you loose points when you go off grid.
- Hold on! The train thinks you're about to faint.
- Focus.
- Centre yourself.
- Smooth out those wrinkles of worry. Your reflection in the window wines about those creases all the time.
- Says it adds 10 years to your appearance.
- No. Don't make it worse.
- Don't think about the burning sensation.
- Don't think about the past. It was an ugly place.
- No, stop thinking about your mother. She is not thinking about you.

*Beat.*

- The sensor in the ceiling where the tunnel ends still remembers Rufus losing control.
- The bruises stretching from his wrist all the way up to his collarbone.
- Fingerprints to match your black eye.
- Could have been worse.
- The Rapid Response Unit saved your life that night.
- His keyboard saw it coming, but you were caught off guard.
- Rest assured that wouldn't happen today. Today you'd be safe.

*Beat.*

- Keep listening to your favourite track.
- Don't worry about the dips and the brooding.
- Your home is smart enough to figure you out.
- Report your doubts.
- Your sleepless nights.
- Don't worry.
- The couch will find your sweet spot and press it.
- The bath will drown your worries in bubbles and steam.
- The plate will let you gorge.
- The bottle will let you binge.
- The coffee cup will kiss you better in the morning.

*Beat.*

- Have a raisin.
- Have two.
- 4 calories, 366 to go.

- The platform thinks you look lovely today.
- Enjoy the rush.
- Don't stare at the floor though.
- The ceiling reports a difficult angle.
- Makes your features distorted, odd.
- Alarmingly shaded. As if you're hiding something.

*Beat.*

- Beginning?
- Automation, biometrics, tax benefits,
- Don't search for a beginning.
- Universal implementation.
- Nothing really begins.
- Things seep into the creases of other things until it consumes the total, nibble by nibble.
- Until it's normal.
- Part of life.
- Part of who we are.
- Like moving.
- Like breathing.
- Like eating.
- Like loving.
- Like watching.
- Like texting.
- Like listening.
- Like sleeping.

- Like being.

SFX: The lines above repeat, overlap and slowly fade out.

Appendix K: Ulysses 2.0 (Incomplete draft script)

## **Ulysses 2.0**

Blue: Facebook - the stalker, whispering, stake out, outside at night.  
Brown: Instagram - red carpet camera snapping.  
Purple: Twitter - twitter of birds, hectic.  
Green: Weather reporter - sound of rain on an umbrella  
Red: Tinder - sound of porn  
Black: News reports: News reporter, newsroom  
Orange: Adds - work out video-style, chirpy and over the top  
Yellow: Guardian add: seductive, offering something good.  
Purple: Phone call

*Background: perhaps classical music playing, on low.*

SFX: ANYA opens the door to a public bathroom. She walks across the tiled floor. She opens the door to a cubical, recoils.

ANYA

Ah, that's disgusting. Jesus!

She opens the next cubicle door. She walks in and closes it behind her. She un-zips her trousers and sits down on the toilet. She takes her smart phone from her pocket. Sound of peeing. She taps on her phone.

ANYA

You're pushing your son on the swing, smiling. But you know what? He looks nothing like you.

Salmon tartar framed by a turquoise plate#delish life@remy's

Your wife says; *my husband is amazing*. 87 of your friends like it. Kit too.

That guy's fit. Swipe right.

Fucking Kit. He looks fat. Old.

Breaking news. We are told experts draw links between high obesity and unpleasant personalities.

(SFX: Ping) Best way to loose that stomach fat? Tone those thighs? Please, follow the link and take action!

SFX: Poo hits the water.

Ugly T-Shirt. Swipe left.

Breaking news. Research shows that a high percentage of people with ugly T-Shirts, are addicted to marijuana.

Divorced, with kids!?! Left.

Research show divorcees are more likely to drink-drive.

A Tory? Left!

Breaking news. Conservative minster convicted of theft.

#wanker#hanghim#democracysucks, re-tweet



He needs to loose weight. Left.

(SFX: Ping.) Best way to loose that stomach fat? Tone those thighs? Follow the link and take action!

Breaking news. Deviant gene found in people with a high BMI, linked to increased knife crime.

SFX: Poo hits the water.

Nice shoes. Swipe right.

Research draws parallels between high IQ and expensive taste in slippers.

Wait. Is that the hat that *I* bought for you?

Mainly overcast skies are expected with occasional rain or drizzle during the day. We advice our citizens to carry an umbrella and wear a hat. It may feel chilly in the breeze.

Online algorithms found to generate online filter bubbles#democracysucks#echochambers, re-tweet

What!? You named your child after your mother!?!

SFX: Sound of toilet paper being ripped. Wiping.  
(mumbling) I cannot believe you did that.

The long read: How mothers smother their sons.

You used to hate that name.

A true story about motherly control and abuse.

SFX: Sound of toilet paper being ripped. Wiping.  
(mumbling) Fine. She was a bitch anyway.

(Ping.) Find your Guardian soul mate online.

Today, science proves that unhealthy parental attachment increases risk of overeating and nose bleeding.

Since when is your hairline receding?

To leave an anonymous tip on partial baldness, just look sad.

SFX: Sound of toilet paper being ripped. Wiping.

You look like your Dad now. Your profiles are literally  
the same.

Leaked documents reveal, that all men are to blame.

*(Phone rings. The sound echo in the space, and when Anya answers, in a half whisper, her voice carries the same sort of echo, as if bouncing off tiles. )*

ANYA  
Hey.

BELLA  
Hey. You still free for lunch?

ANYA  
Yep.

BELLA  
Great, I was thinking about Remy's. Apparently their Salmon tartar shines like nail polish.

ANYA  
Really?

BELLA  
Yeah, if you angle the camera just right, you can see the reflection of the sun through the skylight, in the actual flesh.

ANYA  
Well, let's do it!

BELLA  
Meet you outside in an hour?

ANYA  
Sure.

BELLA  
Great. See you soon.

ANYA  
Bye.

Research shows that consumption of salmon decreases the risk of obesity.

SFX: Sound of a toilet flushing. The end.

# Connected

LINN

My true productivity score is among the highest in the UK. It's because I have a way of knowing what people really want, deep down. A latte. A bun. Lottery tickets. They come in for chewing gum and I point them towards a coke, **according to** my sister it keeps you awake. I don't hassle people, I just read their desires. My boyfriend thinks it's a bit spooky, but I see it as a talent. Some people paint, I sell. Morning, on their way to work, that is **when I have the biggest shopper yield. In the first week the sensors calculated the volume and type of customers flowing in and out and combined that with data on the amount of sales per**

JAMES

**According to** the clients I've worked with I am considerate, friendly, professional and discrete. I am a good listener and I care about my patients' wellbeing. To me, this is more than just a job. It is a passion. It's a calling. It is **when I** really feel valued. It is a chance to have a positive impact on a person's life and on their families. Throughout my caring career, I have worked with people with

LINN (cont.)  
employee, in  
other words,  
sales  
divided by  
traffic.  
This is  
beyond  
sales. **This  
is beyond**  
efficiency.  
Before  
people feel  
guilty about  
overspending  
, over  
eating, when  
they're  
minds are  
still  
sleepy, when  
they still  
think they  
can afford  
to splurge.  
All I have  
to do is  
keep it  
going. Find  
new ways of  
falling  
asleep, the  
tablets  
haven't been  
working well  
lately.  
There was a  
time where  
masturbating  
helped, but  
now my mind  
keeps  
**looking for**  
answers to  
what ever  
questions  
I've been  
asking  
myself  
during the  
day.  
Insomnia  
runs in my  
family, my  
mum used to  
redecorate  
at night,  
her Dad went  
running. It  
really takes  
**skills**

JAMES (cont.)  
different  
diagnosis,  
including  
mental  
health,  
stroke,  
dementia,  
MS and  
**beyond**. I  
can also  
provide you  
with  
cooking,  
cleaning,  
laundry and  
companionshi  
p. I love  
traveling to  
new places  
and  
countries. I  
am really  
social and  
enjoy  
spending  
time with  
friends. I  
have young  
children and  
I love to  
play and  
explore in  
the  
outdoors.  
I am also  
passionate  
about  
gardening  
and reading.  
I am  
currently  
**looking for**  
part time  
engagements,  
mainly in  
the evenings  
and at  
night.  
Please get  
in touch if  
you're  
interested  
in my  
profile, I'd  
be happy to  
meet you to  
discuss your  
medical  
needs.  
**Skills:**

SERGEI  
  
**This is  
beyond  
cutting  
costs. This  
is  
algorithmic  
management  
at the top  
of its game.**  
New  
employment  
opportunitie  
s, better  
and cheaper  
consumer  
services,  
transparency  
and fairness  
in parts of  
the labour  
market. This  
algorithm  
won't judge  
you on who  
you have a  
drink with  
or whether  
you're  
attractive  
or not. It  
will focus  
on the  
skills that  
employees  
are **looking  
for**. It will  
see you for  
what you do,  
how you  
perform and  
nothing  
else. It  
will give  
you the  
hours you  
deserve, at  
the most  
opportune  
time for you  
and the  
company.  
Your unique  
**skills** will

NEA

**Skills.**

LINN (cont.)  
 to trick  
 my mind into  
 turning off.  
 One morning  
 I didn't  
 fall asleep  
 until 3.45,  
 and then the  
 alarm rang  
 at 5.30. **It  
 wasn't a  
 good day,  
 very  
 damaging for  
 my true  
productivity  
score. I  
 can't afford  
 many  
 mornings  
 like that.  
 Take a photo  
 of my  
 perfect  
 cappuccino,  
 type; ~~pub~~  
 break time.  
 Can't mess  
 up, this **gig**  
 is too  
 important.  
 It's not  
 just about  
 me now, and  
 even though  
 I'm **highly  
 qualified,**  
 (Quickly)  
 some-times  
 it's like I  
 can't  
 breathe,  
 I... (can't  
 breathe)  
 -  
 -  
 -  
 -  
 -  
 -  
 -  
**What I need**  
 to do is  
 breath like  
 Dr. Ammar  
 taught me.  
 There is **no**  
 point  
 focusing on**

JAMES (cont.)  
 Administrati  
 on,  
 Cleaning,  
 Dressing,  
 Undressing,  
 Personal  
 Grooming and  
 Hygiene,  
 Assistance  
 Medication  
 Prompting,  
 Cooking,  
 Personal  
 Assistance,  
 Toileting  
 Doing  
 Errands  
 For example  
 Shopping,  
  
**Highly  
 qualified**  
 Gardener,  
 Eating and  
 Drinking  
 Assistance,  
 Catheter/  
 Continence  
 Management,  
 Dressing  
 Wounds  
 Laundry,  
 Conversation  
 s

SERGEI (cont.)  
 )  
 be accounted  
 for. Too  
 technical?  
 Maybe I  
 should begin  
 by talking  
 about myself  
 instead. I  
 used to be  
 in fulltime  
 employment  
 but left to  
 go solo. I  
 love the  
 flexibility,  
 the  
 diversity. I  
 would never  
 go back to  
 slaving for  
 someone  
 else. Now I  
 plan my own  
 time.  
 Linn's hav-  
 ing a coffee  
 and **I like  
 it**. From  
 gig to **gig**.  
 It's a  
 perfect  
 system.  
**Rings.**  
 Sorry, I  
 have to take  
 this. **Hi**. It  
 is, yes,  
 thanks for  
 getting back  
 to me.  
 Listen while  
**I flick  
 through the  
 news; death,  
 drought,  
 celeb  
 wedding  
 cancelled,  
 dog rescuing  
 infant from  
 burning  
 building.**  
**What?**  
 But...  
  
**No.**

Yes.  
 NEA (cont.)  
**That's  
 what it  
 takes. To  
 multitask,  
 to be on  
 top, to stay  
 cool.**  
**Speeding  
 along Upper  
 Street. It  
 isn't a good  
 day** today.  
 Overtake the  
 Lollipop  
 Lady, what's  
 the hold up?  
 I hate the  
 school run,  
 kids have no  
 concept of  
 rush. Check  
 my phone;  
 photos of  
 babies,  
 cats,  
 coffees.  
**I like it.**  
 Enjoy the  
**gig** Nea,  
 thighs  
 burning.  
 Fried  
 broccoli and  
 kale with  
 garlic,  
 cumin and  
 lime; roast  
 sweet  
 potatoes  
 with miso  
 glaze. **I  
 flick  
 through the  
 news,** flick  
 through the  
 comments,  
 smell of  
 coriander,  
 people with  
 money are  
 obsessed  
 with eating  
**whatever**  
 sounds  
 complicated.  
 Ah well, I  
 guess it's

**no use**  
**complaining**  
**when it pays**  
LINN (cont.)  
the  
negative.  
The glass  
will keep on  
filling, if  
I believe it  
it will  
happen. My  
mother  
taught me  
that it is  
all about  
attitude. We  
are our own  
worst  
enemies in a  
world of  
opportunities. So  
instead of  
trying to  
breathe I  
should focus  
on meeting  
my targets.  
On  
surpassing  
them, I am  
known for  
making my  
co-workers  
look  
inadequate  
by  
comparison.  
I love the  
competition  
and the  
**flexibility**.  
It really  
doesn't  
matter **where**  
you are from  
or who you  
know. You  
are judged  
on  
performance,  
**no strings**  
**attached**.  
That is the  
meaning of  
**freedom**.  
That to me  
is true  
**innovation**.  
I have to

calm down,  
sometimes  
when I get  
JAMES (cont.)  
Wheelchair  
Interests:  
Swimming  
Travelling  
Reading.  
Good food.  
Gardening.  
Reviews:  
James is  
such a  
lovely  
person;  
charismatic,  
warm and  
punctual.  
He looked  
after my  
husband who  
was  
suffering  
from  
dementia and  
it was such  
a relief to  
have someone  
that I could  
call on the  
day.  
James is a  
**flexible**  
considerate  
and  
professional  
career. **What**  
ever my Dad  
needed,  
James was  
there to  
help,  
**no strings**  
**attached**,  
which gave  
us the  
welcome  
**opportunity**  
to use  
James'  
services if

and when  
needed. This  
helped us  
SERGEI (cont.)  
)  
Yes, but  
according to  
my  
**estimations/**  
I...  
Okay.  
Yes, but...  
Yes.  
I  
understand.  
Okay.  
**Thank you**.  
Bye.  
Mortgage  
adviser.  
Cunt.  
Claims I  
don't fit  
the format.  
You have to  
sign a  
contract,  
commit to  
full-time  
employment,  
tie yourself  
to a desk.  
Banks need  
to evolve or  
soon they  
will have no  
one to lend  
to. Because  
people don't  
want to be  
limited to  
one company.  
They want  
**flexibility**.  
They want to  
choose **when**,  
**where** and  
**what**. What  
to start up.  
Where to  
build. When  
to walk  
away.  
**No strings**  
**attached**.  
It's a  
future of  
**freedom** and  
**opportunity**.  
Boundless  
**innovation**

and **profit**.  
We're all  
winners. The  
data so far  
NEA (cont.)  
the bills,  
most months  
anyway.  
**'Estimated**  
time of  
arrival,  
minus 3.1  
minutes  
compared to  
your average  
score'.  
**Thanks** for  
that.  
I have to  
speed up.  
Overtake.  
Cut in  
front.  
Ignore the  
blinking.  
Ignore the  
honking.  
Ignore the  
fingers.  
Focus on the  
route. Sing  
along to the  
radio. Hum  
along to the  
beat of the  
city. Dream  
about the  
first pint  
tonight.  
This is a  
great gig  
and I do  
love the  
**flexibility**.  
I can come  
and go **when**  
I want to.  
It keeps me  
fit, gives  
me fresh  
air. Or air  
at least.  
There are  
**no strings**  
**attached**, I  
like that.  
Fuck. Still  
below my  
average  
score. I  
need to make



a **profit**  
today but  
I'm stuck  
behind a  
LINN (cont.)  
Excited I  
can't breath  
and... Think  
about a  
flower,  
swaying in  
the wind.  
Back and  
forth. In  
and out.  
Breaths.

-  
-  
-  
-  
-  
-  
-  
-  
-  
-  
-  
-  
-  
-  
-

**Ping.**  
**Sign up**  
**today and**  
**get a**  
**complementar**  
**y Swedish**  
**massage.**  
Always  
wondered if  
that was  
code for sex  
**Flick**  
**through the**  
**news; flick**  
**through war,**  
**hunger,**  
**rape,**  
**recession,**  
**flick**  
**through**  
Hanna's  
delicious  
breakfast,  
**like, Joe's**

baby twins,  
**like, flick**  
through the  
weather  
JAMES (cont.)  
keep costs  
down without  
compromising  
on the Care.

I would  
highly  
recommend  
James. He  
cared for  
our  
daughter,  
who suffers  
from anxiety  
and panic  
attacks,  
when my  
husband and  
I were away  
for a few  
nights. It  
was great  
that we were  
able to book  
him on the  
day, for a  
short period  
of time. He  
supplied  
**services of**  
**the highest**  
**quality.**

**Ping.**  
**Sign up**  
**today and**  
**get a**  
**complementar**  
**y Swedish**  
**massage.**

SERGEI (cont.)  
)  
**suggest**  
**algorithmic**  
**management**  
**can boost**  
**sales by 10**  
**to 30 per**  
**cent. If**  
**that's not**  
**mortgageable**  
,  
I don't know  
**what** is.  
I'll find  
another  
bank.  
Another  
company. A  
start-up,  
I'm sure  
there is  
someone out  
there  
filling the  
whole in the  
market.  
If not now,  
then soon.  
Regulation  
will change.  
Minds will  
catch up.  
It's  
progress.  
**Sign up**  
**today and**  
**get a**  
**complementar**  
**y Swedish**  
**massage.** I  
already have  
my monthly  
fix, home  
service.  
**Flick**  
**through the**  
**news;**  
(Yawn.....  
.....  
.....),  
**flick**  
**through**  
Kevin's  
birthday  
party,

**like, Jane's**  
**cleavage,**  
**like, Tim**  
**shares**  
**research**  
NEA (cont.)  
Sainsbury's  
van and I  
can't  
overtake.  
This is a  
disaster. I  
should have  
defied the  
satnav and  
gone via  
allies.  
**What's this?**  
The email  
reads: "Your  
average time  
to customer  
is less than  
our  
estimate. If  
this  
continues,  
we may have  
to terminate  
your  
account. We  
have a no  
slack policy  
and promise  
customers  
**services of**  
**the highest**  
**quality."**  
Fuck.  
**Sign up**  
**today and**  
**get a**  
**complementar**  
**y Swedish**  
**massage.**  
I should, I  
totally  
deserve a  
treat.  
**Flick**  
**through the**  
**news; lights**  
**turn, go.**  
Faster.  
Honk.  
Indicate,  
for the love  
of God.  
Yelling.  
Peddling.

Heart  
throbbing.  
Red light.  
Pedestrians  
like a wall  
of delay.  
LINN (cont.)  
Report and  
See that it  
is due to  
rain on my  
birthday.  
Type in the  
event - look  
guys, the  
weather is  
letting me  
down so  
maybe meet  
in a pub  
instead?  
Love how  
**we are all  
free to  
connect and  
disconnect.**

(1)Free to  
know where  
we are,

(4) what  
they think,

(7) what's  
highly rated

(9)what's  
borderline  
terrorism,

(12) free  
with the  
choice to  
work when  
ever

(15) free to  
know it all,

(18) free to  
browse

(21) free to  
cancel the  
order,

(24) **Free to  
click yes.  
(26)Free to  
click agree**

SERGEI (cont.)  
) **claiming  
that stress  
leads to  
cancer, and  
I love the  
feeling of  
being  
connected,  
the fact  
that we are  
all free to  
roam each  
other's  
consciousnes  
s,  
We are all  
free to** make  
our own  
choices,

(3)why  
they're  
late,

(5) what's  
too much,

(10)We're  
free with  
responsibili  
ty,

(13) Free to  
set our own  
times and  
write our  
own scripts.

(16) free to  
update for  
free,

(19) free to  
reserve,

(22) free to  
re-mortgage

(24) **Free to  
click no.  
(26)Free to  
click agree**

NEA (cont.)  
I like  
Dana's new  
haircut, I  
like Hiroko  
saying that  
it rains in  
Tokyo, and I  
comment how  
I love  
**that we are  
all free to  
roam each  
other's  
consciousnes  
s,  
We are all  
free to care  
or not give  
a fuck.**

(2) where  
our friends  
are,

(6) what's  
not enough,

(8) what's  
on offer

(11) free  
with nothing  
to hide,

(14) free to  
be healthy,

(17) Free to  
choose  
between this  
or that

(20) free to  
buy,

(23) free not  
to worry

(24) Free to  
flick.  
(27) Free to  
disagree.